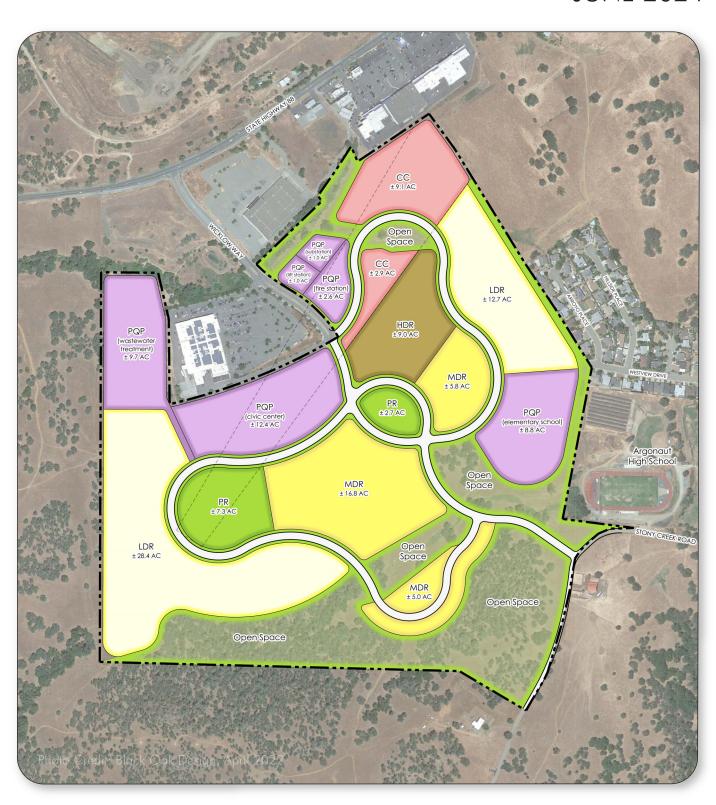
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ENVIRONMENTAL IMPACT REPORT

WICKLOW WAY SPECIFIC PLAN PROJECT JUNE 2024



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ENVIRONMENTAL IMPACT REPORT

WICKLOW WAY SPECIFIC PLAN PROJECT SCH# 2023010563

JUNE 2024

PREPARED FOR: Amador County 810 Court St Jackson, CA 95642



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ACRONYMS

The following is a list of acronyms found within this document's text:

AB Assembly Bill

AAD Amador Air District

ACES Amador County Environmental Services

ACF advanced clean fleets

ACFPD Amador County Fire Prevention District
ACHP Advisory Council on Historic Preservation

ACL Amador County Library

ACMC Amador County Code Municipal Code
ACRA Amador County Recreation Agency

ACTC Amador County Transportation Commission
ACUSD Amador County Unified School District

ADA Americans with Disabilities Act

ADU accessory dwelling units

AF acre-feet

AFY acre-feet per year

AFPD Amador Fire Protection District

AG Agricultural General
AIA airport influence area

AIDS acquired immunodeficiency syndrome

ALUC Airport Land Use Commission

ALUCP Airport Land Use Compatibility Plan

AMI area median income

APCO Association of Public Safety Communications Officials

APE Area of Potential Effects
APN assessor parcel number

ASCE American Society of Civil Engineers

AT Agricultural Transition

ATCM Airborne Toxic Control Measures

ATC Authority to Construct
AWA Amador Water Agency

BACT best available control technology

BMP best management practice

BO biological opinion

CAA Federal Clean Air Act

CAAQS California Ambient Air Quality Standards

CAFE Corporate average fuel economy

CalARP California Accidental Release Prevention

CalEEMod California Emissions Estimator Model

Cal EPA California Environmental Protection Agency

CALFire California Department of Forestry and Fire Protection

CalGreen California's Green Building Standards

CalOSHA California Occupational Safety and Health Administration

CalRecycle Department of Resources Recycling and Recovery
Caltrans California State Department of Transportation

CAP criteria air pollutants

CARB California Air Resources Board
CAS Climate Adaptation Strategy
CBC California Building Code
CC community commercial
CCAA California Clean Air Act

CCR California Code of Regulations

CDE California Department of Education

CDFW California Department of Fish and Wildlife
CDPH California Department of Public Health

CDTFA California Department of Tax and Fee Administration

CEC California Energy Commission

CEMA California Emergency Management Agency

CEQA California Environmental Quality Act

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CESA California Endangered Species Act

CFC California Fire Code

CFR Code of Federal Regulations

cfs cubic feet per second

CGS California Geological Survey
CHP California Highway Patrol
CIP Capital Improvement Program

CNDDB California Natural Diversity Database
CNEL Community Noise Equivalent Level
CNPS California Native Plant Society

CO carbon monoxide CO₂ carbon dioxide

CPUC California Public Utilities Commission
CRHR California Register of Historical Resources

CRLF California red-legged frog

CRHR California Register of Historical Resources

CRPR California Rare Plant Rank
CSD Community Services District

CSNC California Sensitive Natural Communities

CUPA Certified Unified Program Agency

CVC California Vehicle Code

CWA Clean Water Act

DA **Development Agreement**

dB decibel

dBA A-weighted decibel **DBH** diameter at breast height DPM diesel Particulate Matter

DEIR Draft Environmental Impact Report DOC California Department of Conservation

DOT **Department of Transportation** DPH Department of Public Health DPM diesel particulate matter

DPR California Department of Parks and Recreation

DS **Development Standards**

DTSC Department of Toxic Substances Control

du/ac dwelling units per acre

DWR California Department of Water Resources

EIR **Environmental Impact Report**

EFH essential fish habitat **EMF** Electromagnetic field **Executive Order** EO

EOP Emergency Operations Plan

EPA U.S. Environmental Protection Agency

EPCRA Federal Emergency Planning and Community Right to Know Act

ESA Environmental Site Assessment

°F degrees Fahrenheit

FAA **Federal Aviation Administration**

FAR floor area ratio **FCAA** Federal Clean Air Act

FEIR Final Environmental Impact Report

FEMA Federal Emergency Management Agency

FESA Federal Endangered Species Act

FHSZ Fire Hazard Severity Zone

FHWA Federal Highway Administration FIRM

Flood Insurance Rate Map

FMMP Farmland Mapping and Monitoring Program

fps feet per second

Federal Transit Administration FTA

gravity g

GHG greenhouse gas

GIS gas-insulated switches

GMP Groundwater Management Plan

GPD Gallons per day

GPD/AC gallons per day per acre GPD/DU gallons per day per dwelling unit

gpm gallons per minute

GVWR gross vehicle weight rating

GWDR general waste discharge requirement

GWh gigawatt hour

GWP global warming potential

HAP hazardous air pollutant

HCD California Department of Housing and Community Development

HCFC hydrochlorofluorocarbon
HCM Highway Capacity Manual
HCP Habitat Conservation Plan
HDR high-density residential
HEPA high efficiency particulate air

HFC hydrofluorocarbons

HFHSZ high fire hazard severity zone

HH Hold Harmless Policy

HIV human immunodeficiency virus
HMGP Hazard Mitigation Grant Programs

HRA Health Risk Assessment
HRS Hazard Ranking System
HSC Health and Safety Code

HUD U.S. Department of Housing and Urban Development

HVAC heating, ventilation, and air conditioning

Hz Hertz

IBC International Building Code
IEPR Integrated Energy Policy Report

IPCC Intergovernmental Panel on Climate Change

ISO Independent System Officer
ITL Independent Testing Laboratory
IWRP Integrated Water Resources Plan

JPA Joint Powers Authority
JFD Jackson Fire Department

kV kilo-Volt kWh kilowatt-hour

LAFCO Local Agency Formation Commission

LCFS Low Carbon Fuel Standard
Ldn Day-Night Average Noise Level

LDR low-density residential

LEA local enforcement agency

LEAP local early action planning

LED low emitting diode

LEED Leadership in Energy and Environmental Design

Leqequivalent sound levelLEVLow-Emissions VehicleLHMPLocal Hazard Mitigation PlanLIDlow-impact development

 $\begin{array}{lll} L_{max} & & maximum \ L_{eq} \\ L_{min} & & minimum \ L_{eq} \\ LOS & Level \ of \ Service \end{array}$

LPG Liquefied petroleum gas

LRTP Long Range Transportation Plan

MACT maximum available control technology

MAF million acre-feet

MBTA Migratory Bird Treaty Act
MCAB Mountain Counties Air Basin
MCFH thousand cubic feet per hour
MDD maximum day demand

MDR Medium-Density Residential

mg million gallons

 $\begin{array}{ll} \text{mgd} & \text{million gallons per day} \\ \mu\text{g/m}^3 & \text{micrograms per cubic meter} \\ \text{MLD} & \text{Most Likely Descendent} \end{array}$

μm micrometer

MMI Modified Mercalli Intensity

MMRP Mitigation Monitoring and Reporting Program

MMT million metric tons

MOU Memorandum of Understanding

mpg miles per gallon

MPO Metropolitan Planning Organizations

MRF materials recovery facility

MS4 Municipal Separate Storm Sewer System
MSAA Master Streambed Alteration Agreement

MSDS Material Safety Data Sheet

msl mean sea level
MT metric tonnes
MVA megavolt amperes

MW megawatt

MWh megawatts per hour

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

NCP National Contingency Plan

NEHRP National Earthquake Hazards Reduction Program

NEHRPA National Earthquake Hazards Reduction Program Act
NESHAP National Emission Standard for Hazardous Air Pollutants

NFIP National Flood Insurance Program
NHPA National Historic Preservation Act

NHTSA National Highway Traffic Safety Administration
NIEHS National Institute of Environmental Health Sciences

NIH National Institutes of Health
NMFS National Marine Fisheries Service

N₂O nitrous oxide

NOA naturally occurring asbestos

NOAA National Oceanic and Atmospheric Administration

NOP Notice of Preparation
NOV Notice of Violation
NO_X nitrogen oxides

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

NRCS Natural Resource Conservation Service
NRHP National Register of Historic Places
NSHMP National Seismic Hazard Mapping Project

NSLU noise impacts to sensitive land uses
NSPS new source performance standards

O₃ ozone

OBD on-board diagnostic

OES Office of Emergency Services
OHWM ordinary high-water mark

O&M Plan operations and management plan
OPR Office of Planning and Research

OS open space

OSHA Occupational Safety and Health Administration

P/QP Public/Quasi-Public

Pb Lead

PBDB Paleobiology Database
PCB polychlorinated biphenyls
PD Planned Development
PDM Pre-Disaster Mitigation

PEA Preliminary Endangerment Assessment
PERP Portable Equipment Registration Program

PFC perfluorocarbons
PG&E Pacific Gas & Electric

PGP Programmatic General Permit
PHEV plug-in hybrid electric vehicles

PHHWCF Permanent Household Hazardous Waste Collection Facility

PM particulate matter

ppm parts per million
PQ/P Public/Quasi Public
PR Parks and Recreation
PRC Public Resources Code

PRMTP Paleontological Resource Mitigation and Treatment Plan

psi pounds per square inch

psig pounds per square inch gauge

PTO Permit to Operate

PUC Public Utilities Commission
PUE Public Utility Easement
PVC polyvinyl chloride
PWWF peak wet weather flow

RAW Remedial Action Workplan

RCRA Resource Conservation and Recovery Act REC recognized environmental condition

ROC reactive organic compounds
RSC Regional Service Center
RFS renewable fuel standard

RHNA Regional Housing Needs Allocation
RHNP Regional Housing Needs Plan

RM Residential Medium

RMP Refrigerant Management Program

ROG reactive organic gas

ROW right-of-way

RPS Renewable Portfolio Standard
RSC Regional Service Center

RTMF Regional Traffic Mitigation Fee
RTP Regional Transportation Plan
RWD Report of Waste Discharge

RWQCB Regional Water Quality Control Board

SAA Streambed Alteration Agreement

SAB service area boundary

SAFE Safer Affordable Fuel Efficient
SAP Sustainability Action Plan

SARA Superfund Amendments and Reauthorization Act

SB Senate Bill

SCS Sustainable Communities Strategy

SEL Sound Exposure Levels

SEMS Standard Emergency Management System

SF₆ sulfur hexafluoride SFD single family dwelling

SGMA Sustainable Groundwater Management Act

SHPO State Historic Preservation Office

SIP State Implementation Plan

SLCP Short-Lived Climate Pollutant Strategy

 SO_2 sulfur dioxide SOI sphere of influence SORE small off-road engines

SR State Route

SRA State Responsibility Area

SRRE Source Reduction and Recycling Elements

SSC species of special interest

SSMP Sewer System Management Plan

STC sound transmission class

SVP Standard Procedures for the Assessment and Mitigation of Adverse Impacts to

Paleontological Resources

SWMM Stormwater Management Manual SWMM stormwater management model SWMP Stormwater Management Plan

SWPPP Stormwater Pollution Prevention Plan SWRCB State Water Resources Control Board

TA Transportation Analysis
TAC toxic air contaminant
TAF thousand acre-feet
TCR Tribal cultural resources

TDA Transportation Development Act

TMDL total maximum daily load
TMF traffic mitigation fee
TPZ Timber Production Zone
TSCA Toxic Substances Control Act

TSM Transportation Systems Management

UA urbanized area

UBC Uniform Building Code

UCMP University of California Museum of Paleontology

ULOP urban level of flood protection
USACE U.S. Army Corps of Engineers
U.S.C. U.S. Code of Regulations

USDA U.S. Department of Agriculture USDOE U.S. Department of Energy

USEPA United States Environmental Protection Agency

U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

UWMP Urban Water Management Plan

UWR universal waste program

v/c volume to capacity ratio

VELB Valley Elderberry Longhorn Beetle
VFMP Valley Fever Management Plan
VHFHSZ very high fire hazard severity zone

VMT vehicle miles traveled VOC volatile organic compound

WDR waste discharge requirement

WEAP Workers Environmental Awareness Program

WELO water efficient landscape ordinance

WFA water forum agreement
WRE water rights extension
WSA water supply assessment
WSP water shortage policy
WTP water treatment plant

WWMP wastewater management plan
WWSP Wicklow Way Specific Plan
WWTP wastewater treatment plant

ZEV zero emission vehicle

EXECUTIVE SUMMARY

ES.1 Introduction

This chapter provides a summary of the Draft Environmental Impact Report (DEIR) for the proposed Wicklow Way Specific Plan (WWSP or proposed Project). It includes a table summarizing the impacts of the proposed Project and, as necessary, mitigation measures intended to reduce potentially significant environmental impacts.

ES.2 DOCUMENT PURPOSE

This DEIR was prepared by the Amador County Planning Department, as lead agency, to inform decision makers and the public of potential significant environmental effects associated with the proposed Project. This DEIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Section (§) 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines; 14 CCR 15000 et seq.) published by the Natural Resources Agency of the State of California.

The purpose of this DEIR is to focus the discussion on potential effects on the environment resulting from implementation of the WWSP which the lead agency has determined may be significant. Potentially feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

ES.3 Project Location

The 201-acre WWSP site is in unincorporated Amador County, immediately west of the City of Jackson and one mile south of the City of Sutter Creek. The site is south of State Route (SR) 88 (SR-88) and approximately one mile west of the SR-88 and SR-49 intersection in an area designated as the Martell Regional Service Center. Refer to **Figure 2-1** for the regional location and **Figure 2-2** for an aerial photograph of the WWSP site and vicinity. Wicklow Way abuts the site on the northwest and provides a main entrance into the area from SR-88. Existing commercial uses are located to the north, and there are residential uses along the site's eastern boundary, which surround Argonaut High School. Open grazing land abuts the northeast, west, and south boundaries of the WWSP site.

ES.4 PROJECT UNDER REVIEW

As shown on **Figure 2-7**, the proposed WWSP land use plan consists of low, medium, and high-density residential uses; community commercial and civic uses; public/quasi-public uses; parks and recreation areas; open space; and roadways. **Table 2-1** provides a breakdown of the proposed land uses within the WWSP site, including proposed General Plan designations and Zoning Ordinance districts, acreages, and residential units by category. At buildout, the proposed Project would provide approximately 700 residential units, housing a population of approximately 1,660 persons, approximately 100,000 square feet of retail and office uses, a potential 12.4-acre site for the consolidation of County civic offices, and approximately 235 permanent jobs. The WWSP could add as much as approximately 24.5 acres of commercial and civic uses.

ES.5 PROJECT OBJECTIVES

Project objectives facilitate analysis of reasonable alternatives to the proposed Project. Reasonable alternatives must be analyzed in accordance with §15126.6 of the CEQA Guidelines. Project objectives are as follows:

- Complete Comprehensive Planning for the WWSP Site. Formulate a specific plan and related land use documents and regulatory approvals for the WWSP that provide for Amador County's share of regional land use growth, are compatible with surrounding uses, and provide both housing and economic development opportunities.
- Mix of Land Uses. Create a comprehensively planned, residential-based community with a mix
 of land uses to create a balanced community with residential, commercial, and business
 professional uses, parks, open space and supporting public/quasi-public uses.
- General Plan Consistency. Achieve characteristics reflective of the general policy direction embodied in the County's adopted General Plan, including connectivity among neighborhoods, commercial uses, schools, and parks.
- Housing Opportunities. Plan for residential units is to provide housing choices in varying
 densities to respond to a range of market segments, including opportunities for rental units and
 affordable housing, consistent with the General Plan.
- Regional Housing Needs Allocation. Aid the County in meeting its obligation to accommodate a percentage of future population growth in the region (as embodied in the Regional Housing Needs Allocation (RHNA) identified by the California Department of Housing and Community Development (HCD) by increasing the residential holding capacity.
- Community Form. Shape the physical form and character of development that are functional and create a sense of place to create a land use transition and connection to existing development.
- Organize Neighborhoods. Make gathering places, such as commercial areas, parks, and connections to schools, identifiable and walkable.
- Provide Adequate School Services. Give students generated in the WWSP area access to adequate school services.
- Area Roadways. Provide a safe and efficient circulation system that interconnects, uses, and promotes pedestrian and bicycle circulation.
- **Open Space.** Create open space preserves that provide regional benefits for habitat, natural resources, oak tree preservation, and open space amenities.
- **Fiscal Contribution.** Include a mix of land uses and facilities that are fiscally feasible and implement funding mechanisms to maintain a neutral/positive fiscal impact to the County's General Fund.
- Long-Term Growth. Plan for long-term growth to be positioned to react to market demand. The Specific Plan is intended to guide development over a 20-year horizon.

ES.6 Issues To Be Resolved and Areas of Controversy

Notice of Preparation and Scoping

In accordance with CEQA *Guidelines* §15082, the County (Lead Agency) circulated a Notice of Preparation (NOP) for this EIR on January 25, 2023. Presented in **Appendix A**, the NOP established a 30-day review period that ended on February 28, 2023. The NOP was circulated through the State Clearinghouse to the public, local, state, and federal agencies, and other known interested parties to disclose that the proposed WWSP could have significant effects on the environment and to solicit written comments concerning the proposed Project. These letters are included in **Appendix C**. A noticed public scoping meeting was held on February 14, 2023, at the County Administrative Center to provide a public presentation of the proposed Project and allow an opportunity for oral comments to be presented and submitted to the County Planning Department for consideration in preparation of the DEIR.

Areas of Controversy

Section 15123(b)(2) of the CEQA Guidelines (14 CCR 15000 et seq.) requires the Executive Summary of an EIR to disclose areas of controversy known to the lead agency that have been raised by agencies and the public. The County circulated a NOP to solicit agency and public comments on the scope and environmental analysis to be included in the DEIR. Twenty-six letters were received in response to the NOP. The NOP and the comments received by the County are included in **Appendix A** of this DEIR. CEQA-related issues of potential controversy raised in response to the NOP included concerns related to biological resources, water quality, land use, traffic, etc.

Scope of the EIR

This DEIR evaluates the WWSP's potential to result in significant environmental impacts on the following issue areas:

- Aesthetics:
- Agricultural and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;

- Mineral Resources;
- Noise:
- Population and Housing;
- Public Services:
- Recreation;
- Transportation;
- Tribal Cultural Resources:
- Public Utilities; and
- Wildfire.

ES.7 IMPACTS AND MITIGATIONS - SUMMARY TABLE

Table ES-1, Summary of Impacts and Mitigation Measures presents a summary of proposed Project impacts and recommended mitigation measures that would further avoid or minimize potential impacts. In the table, the level of significance of each impact is indicated both before and after the application of recommended mitigation measure(s). For detailed discussions of all project impacts and mitigation measures, refer to the various environmental analysis sections in **Chapter 4.0**.

Acronyms used within Table ES-1 to describe levels of significance are defined below:

- NI No impact
- LTS Less than significant
- S Significant
- SU Significant and unavoidable

TABLE ES-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
3.0 Land Us	e and Planning	T		
3.0-1	Physically divide an established community	NI	None Required	NI
3.0-2	Conflict with land use plans, policies, or regulations	S	Refer to Sections 4.1 – 4.17 for a discussion of the implementation of mitigation measures to address potential environmental impacts	SU/LTS
3.0-3	Cumulative land use and planning impacts	S	Refer to Sections 4.1 – 4.17 for a discussion of the implementation of mitigation measures to address potential environmental impacts	SU/LTS
4.1 Aesthet	ics			
4.1-1	Have a substantial adverse effect on a scenic vista	S	No Feasible Mitigation	SU
4.1-2	Damage scenic resources within a state scenic highway	NI	None Required	NI
4.1-3	Degrade visual character or public views of the site	S	No Feasible Mitigation	SU
4.1-4	Create new source of light or glare	S	No Feasible Mitigation	SU
4.1-5	Cumulative aesthetic impact	S	No Feasible Mitigation	SU
4.2 Agricult	ural Resources	<u>'</u>	<u>'</u>	
4.2-1	Convert designated farmlands to non-agricultural uses	NI	None Required	NI

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION	
4.2-2	Conflict with zoning for agricultural use of Williamson Act lands	NI	None Required	NI	
4.2-3	Convert farmland to non- agricultural uses	NI	None Required	NI	
4.2-4	Cumulative impacts from agricultural resources conversion	NI	None Required	NI	
4.3 Air Qua	lity				
4.3-1	Conflict with implementation of air quality plans	S	MM AQ-01 Construction MM AQ-02 Land Use and Building Operation MM AQ-03 Stationary and other Permitted Sources	SU	
4.3-2	Result in net increase of any criteria pollutant	S	MM AQ-01 Construction MM AQ-02 Land Use and Building Operation MM AQ-03 Stationary and other Permitted Sources	SU	
4.3-3	Expose sensitive receptors to substantial pollutants	S	MM AQ-01 Construction MM AQ-03 Stationary and other Permitted Sources MM AQ-05 Naturally Occurring Asbestos Management Plan MM AQ-06 Valley Fever Management Plan	SU	
4.3-4	Result in other emissions that could affect a substantial number of people	S	MM AQ-04 Wastewater Treatment Plant	SU	
4.3-5	Cumulative impacts to air quality	S	MM AQ-01 Construction MM AQ-02 Land Use and Building Operation MM AQ-03 Stationary and other Permitted Sources	SU	
4.4 Biological Resources					
4.4-1	Adverse effect on designated special species	S	MM BIO-1 Special-Status Plants MM BIO-2 Special-Status Mammals MM BIO-3 Special-Status Birds MM BIO-4 Special-Status Amphibians and Reptiles	LTS	

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
			MM BIO-5 Special-Status Invertebrates	
4.4-2	Adverse effect on any designated natural community	S	MM BIO-6 Aquatic Habitats MM BIO-7 Oak Woodlands MM BIO-8 Wetlands and Watercourses	LTS
4.4-3	Adverse effect on wetlands	S	MM BIO-8 Wetlands and Watercourses	LTS
4.4-4	Interfere with the movement of any wildlife species or impede use of native wildlife nursery sites	LTS	None Required	LTS
4.4-5	Conflict with the provisions of an adopted habitat conservation plan, natural conservation community plan, or other approved conservation plan	NI	None Required	NI
4.4-6	Cumulative impacts to biological resources	S	MM BIO-1 Special-Status Plants MM BIO-2 Special-Status Mammals MM BIO-3 Special-Status Birds MM BIO-4 Special-Status Amphibians and Reptiles MM BIO-5 Special-Status Invertebrates MM BIO-6 Aquatic Habitats MM BIO-7 Oak Woodlands MM BIO-8 Wetlands and Watercourses	LTS
4.5 Cultural	Resources			
4.5-1	Cause a substantial change in the significance of a historical resource	S	MM CR-1 Treatment of Known Resources	LTS
4.5-2	Cause a substantial adverse change in the significance of an archaeological resource	S	MM CR-2 Treatment of Undocumented Resources	LTS
4.5-3	Disturb human remains outside of cemeteries during construction	S	MM CR-3 Treatment of Human Remains	LTS
4.5-4	Cumulative impacts to cultural resources	S	MM CR-1 Treatment of Known Resources	LTS

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION	
			MM CR-2 Treatment of Undocumented Resources MM CR-3 Treatment of Human Remains		
4.6 Energy					
4.6-1	Result in consumption of energy or energy resources during project construction and operation	S	MM ENE-1 Energy Mitigation	LTS	
4.6-2	Conflict with or obstruct plans for renewable energy or energy efficiency	S	MM ENE-1 Energy Mitigation	LTS	
4.6-3	Cumulative energy impacts	S	MM ENE-1 Energy Mitigation	LTS	
4.7 Geology	and Soils				
4.6-1	Expose people and structures to seismic hazards	LTS	None Required	LTS	
4.6-2	Soil erosion or loss of topsoil	LTS	None Required	LTS	
4.6-3	Development of structures on unstable soils	LTS	None Required	LTS	
4.6-4	Development of structures on expansive soils or on soils with other limitations	LTS	None Required	LTS	
4.7-5	Soils incapable of supporting wastewater disposal systems	NI	None Required	NI	
4.7-6	Destroy paleontological resource site or feature	S	MM GEO-1 Survey and Monitor for Paleontological Resources, Cease Work and Consult with Qualified Paleontologist	LTS	
4.7-7	Cumulative geology and soils impacts	NI	None Required	NI	
4.7-8	Cumulative impacts to paleontological resources	S	MM GEO-1 Survey and Monitor for Paleontological Resources, Cease Work and Consult with Qualified Paleontologist	LTS	
4.8 Greenhouse Gases					
4.8-1	Generate an increase in greenhouse gas (GHG) emissions	S	MM GHG-1 Construction GHG MM GHG-2 Operation GHG	SU	

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION	
4.8-2	Conflict with a plan, policy, or regulation to reduce GHG emissions	S	S MM GHG-1 Construction GHG MM GHG-2 Operation GHG		
4.8-3	Cumulative GHG impacts	S	MM GHG-1 Construction GHG MM GHG-2 Operation GHG	SU	
4.9 Hazards	and Hazardous Materials				
4.9-1	Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials	LTS	None Required	LTS	
4.9-2	Create significant hazards to the public or environment through accident conditions involving release of hazardous materials	LTS	None Required	LTS	
4.9-3	Presence of hazardous emissions or hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LTS	None Required	LTS	
4.9-4	Located on a list of hazardous materials sites	NI	None Required	NI	
4.9-5	Result in a safety hazard or excessive noise to people within an airport land use plan	LTS	None Required	LTS	
4.9-6	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTS	None Required	LTS	
4.9-7	Expose people or structures to risk of loss, injury or death involving wildfires	LTS	None Required	LTS	
4.9-8	Cumulative impacts associated with hazards and hazardous materials	LTS	None Required	LTS	
4.10 Hydrology and Water Quality					
4.10-1	Violate water quality standards or waste discharge requirements or degrade surface or groundwater quality	LTS	None Required	LTS	

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION	
4.10-2	Decrease groundwater supplies or interfere with groundwater recharge and impede sustainable groundwater management of the basin	LTS	None Required	LTS	
4.10-3	Alter existing drainage pattern of site or area	LTS	None Required	LTS	
4.10-4	Risk release of pollutants in flood hazard, tsunami or seiche zones	LTS	None Required	LTS	
4.10-5	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	LTS	None Required	LTS	
4.10-6	Cumulative impacts to hydrology or water quality	LTS	None Required	LTS	
4.11 Noise					
4.11-1	Result in an increase in temporary or permanent ambient noise levels in excess of County standards	S	MM NOI-1 Construction Noise Control	LTS	
4.11-2	Result in excessive groundborne noise levels during construction	LTS	None Required	LTS	
4.11-3	Expose people to excessive noise from an airport located within two miles	S	MM NOI-2 Airport Land Use Compatibility Interior Noise Control	LTS	
4.11-4	Cumulative noise impacts	LTS	None Required	LTS	
4.12 Popula	ation and Housing				
4.12-1	Induce substantial unplanned population growth	S	No Feasible Mitigation	SU	
4.12-2	Cumulative population and housing impacts	S	No Feasible Mitigation	SU	
4.13 Public Services					
4.13-1	Impacts associated with new or altered government facilities, need for new or physically altered government facilities, to maintain acceptable service ratios, response times, or other performance objectives for	S	MM PS-1 Development Agreements	LTS	

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION	
	public services (Fire, Police, Schools, Parks, etc.)?				
4.13-2	Deteriorate existing neighborhood and regional parks or other recreational facilities caused by increased use	LTS	None Required	LTS	
4.13-3	Impact new or expanded recreational facilities	LTS	None Required	LTS	
4.13-4	Cumulative public services impacts	S	MM PS-1 Development Agreements	LTS	
4.14 Transp	oortation				
4.14-1	Conflict with a program, plan, ordinance, or policy addressing circulation system	LTS	None Required	LTS	
4.14-2	Conflict with CEQA Guidelines §15064.3(b)	LTS	None Required	LTS	
4.14-3	Increase hazards due to a geometric design feature	NI	None Required	NI	
4.14-4	Result in inadequate emergency access	LTS	None Required	LTS	
4.14-5	Cumulative transportation impacts	LTS	None Required	LTS	
4.15 Tribal	Cultural Resources				
4.15-1	Cause a substantial change in the significance of a tribal cultural resource (TCR)	S	MM TCR-1 Treatment of Unidentified TCR	LTS	
4.15-2	Cumulative TCR impacts	S	MM TCR-1 Treatment of Unidentified TCR	LTS	
4.16 Public Utilities					
4.16-1	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities	LTS	None Required	LTS	
4.16-2	Have sufficient water supplies available to serve the project and future development	LTS	None Required	LTS	

IMPACT NUMBER	IMPACT	SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
4.16-3	Result in determination by the wastewater treatment provider of inadequate capacity	LTS	None Required	LTS
4.16-4	Generate solid waste in excess or impair solid waste reduction goals	LTS	None Required	LTS
4.16-5	Result in non-compliance with regulations related to solid waste	LTS	None Required	LTS
4.16-6	Cumulative impacts to public utilities	LTS	None Required	LTS
4.17 Wildfi	re			·
4.17-1	Impact an adopted emergency response or evacuation plan	LTS	None Required	LTS
4.17-2	Expose people or structures to a significant risk of loss, injury or death involving wildland fires	S	WILD-1 Construction Fire Prevention Plan WILD-2 Post Fire Activities	LTS
4.17-3	Expose occupants to pollutant concentrations from a wildfire due to slope, prevailing winds, or other factors	S	WILD-1 Construction Fire Prevention Plan Wild-2 Post Fire Activities	LTS
4.17-4	Require installation or maintenance of associated infrastructure that may exacerbate fire risk or impact the environment	S	WILD-1 Construction Fire Prevention Plan	LTS
4.17-5	Expose people or structures to significant risks as a result of runoff, post-fire slope instability or drainage changes	S	WILD-2 Post Fire Activities	LTS
4.17-6	Cumulative wildfire impacts	LTS	None Required	LTS

ES.8 ALTERNATIVES

Section 15126.6(a) of the State CEQA Guidelines requires that EIRs describe "...a reasonable range of alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." Section 15126.6(f) of the State CEQA Guidelines further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice."

Alternatives to the proposed Project are evaluated in **Chapter 6.0, Alternatives**, of this DEIR. The evaluation analyzes the ability of each alternative to further reduce or avoid the significant environmental effects of the proposed Project. Each major issue area included in the impact analysis of this DEIR has been given consideration in the alternative analysis. This DEIR evaluates four alternatives to the proposed Project: No Project Alternative, Hybrid WWTP Alternative, Foothill Conservancy Site Plan Alternative and Reduced Development Alternative.

ES.8.1 Alternative 1: No Project

This Alternative consists of existing conditions at the time the State Clearinghouse confirmed receipt of the NOP for the DEIR (**Appendix A**). The purpose of this Alternative is to allow decision-makers to compare impacts of approving the proposed Project with the impacts of not approving the proposed Project. Under this alternative, no development would occur, and the site would remain in its current undeveloped condition.

ES.8.2 Alternative 2: Hybrid WWTP

This Alternative assumes that the capacity of the proposed onsite wastewater treatment plant (WWTP) would be reduced, and the existing Amador Water Agency (AWA) facility located in the City of Jackson would be expanded.

ES.8.3 Alternative 3: Foothill Conservancy Site Plan

The Foothill Conservancy proposed an alternative site layout during the NOP scoping process. This Alternative site layout would provide affordable and senior housing, preserve rural character, and preserve onsite environmental attributes by reducing traffic and public service impacts as compared to the WWSP.

ES.8.4 Alternative 4: Reduced Development

This Alternative is designed to meet County RHNA targets. This reduction in housing units allows other land uses to be scaled to meet a lower number of residences. The acreage of community commercial and public/quasi-public uses would be reduced by 50 percent, open space acreage would increase, a new fire station would be constructed, however, a new school would not be needed.

ES.9 Comparison of the Proposed Project with Alternatives

Table ES-2 Summary of Impact Findings compares potential impacts of each of the alternatives to the proposed Project. Impact determinations assume mitigation measures have been applied.

TABLE ES-2 SUMMARY OF IMPACT FINDINGS

ENVIRONMENTAL RESOURCE	PROPOSED PROJECT	ALTERNATIVE 1: NO PROJECT	ALTERNATIVE 2: HYBRID WWTP	ALTERNATIVE 3: FOOTHILL CONSERVANCY	ALTERNATIVE 4: REDUCED DEVELOPMENT
Land Use and Planning	LTS	NI	A	A	_
Aesthetics	SU	NI	_	_	▼
Agricultural	NI	NI	_	_	_
Air Quality	SU	NI	_	▼	▼
Biological	LTS	NI	_	A	▼
Cultural	LTS	NI	_	_	▼
Energy	LTS	NI	_	_	▼
Geology and Soils	LTS	NI	_	_	▼
Greenhouse Gases	SU	NI	-		▼
Hazards and Hazardous Materials	LTS	NI	-	-	•
Hydrology and Water Quality	LTS	NI	-	-	▼
Noise	LTS	NI	_	_	▼
Population and Housing	SU	NI	-	A	▼
Transportation	LTS	NI	_	_	_
Tribal Cultural Resources	LTS	NI	-	_	•
Public Services	LTS	NI	_	A	▼
Public Utilities	LTS	NI	_	A	▼
Wildfire	LTS	NI	_	A	▼

Notes:

NI = No impact

SU = Significant and unavoidable impact

LTS = Less than significant impact

- ▲ Alternative is likely to result in greater impacts to issue when compared to proposed Project.
- Alternative is likely to result in similar impacts to issue when compared to proposed Project.
- ▼ Alternative is likely to result in reduced impacts to issue when compared to proposed Project.

ES.10 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR, which is typically selected based on an ability to avoid or substantially reduce significant environmental effects associated with project implementation.

As indicated in **Table ES-2**, the No Project Alternative would result in the least environmental impacts and would be the environmentally superior Alternative because it would avoid all impacts associated with the proposed Project for all resource areas. However, §15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The proposed Project would result in significant and unavoidable impacts for aesthetics, air quality, greenhouse gases, population, and housing. For most other environmental resource topics, mitigation measures have been identified to reduce significant impacts to a less than significant level. However, while the No Project Alternative is identified as the environmentally superior alternative, it would not result in any new impacts because no development would occur. Therefore, the No Project Alternative does not meet the objectives of the proposed Project, as outlined in Section 6.0.2.

Of the remaining alternatives (not including the No Project Alternative), the following provides comparisons of the alternatives with the proposed Project.

ES.10.1 Alternative 2: Hybrid Wastewater Treatment Plant

The Hybrid Alternative proposes similar land uses and in the same configuration and densities. The only difference would be that the onsite WWTP would be reduced in size and a portion of the site's wastewater would be conveyed and treated offsite. However, for offsite treatment to occur, there would need to be upgrades, improvements, modernization and/or expansion to the existing Sutter Creek WWTP and conveyance infrastructure. This would also cause various significant environmental impacts, which could be more impactful than the proposed Project. Additionally, there would be no reduction in overall ground disturbance. The Hybrid Alternative would also achieve the proposed Project objectives.

ES.10.2 Alternative 3: Foothill Conservancy Site Plan

Overall, the Foothill Conservancy Alternative would have similar impacts as the proposed Project in relation to aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology, transportation, and TCRs. It would have less impacts in relation to air quality, noise, and wildfires. Finally, it would have greater impacts to land use and planning, agricultural resources, biological resources, population and housing, and potentially public services. However, this Alternative would not meet proposed Project objectives.

ES.10.3 Alternative 4: Reduced Development

With this Alternative's reduction in development, almost all potential impacts would be reduced. Specifically, impacts would be less for the following: construction and post-WWSP implementation air quality, GHG, and energy impacts and demand; short-term construction impacts to adjacent residences and Argonaut High School (noise, vibration, and dust); more acres of onsite oak woodlands would be protected, and result in more open space for enhanced recreational opportunities and preservation of onsite biological ecosystems. There would also be less loss of rural character; potential impacts to cultural and historic resources and impacts to geologic and paleontological resources; lower amounts of hazardous materials would be required; public service and public utility demands would be less; and wildfire impacts would be reduced. However, this Alternative would not meet Project objectives,

specifically, the provision of adequate, needed housing; however, it would comply with current RHNA commitments.

ES.10.4 Conclusion

Based on the above comparisons of the alternatives to the proposed Project, it is evident that none of the alternatives would conform with General Plan goals and policies better than the proposed Project. The following supports this conclusion:

- The proposed Project best satisfies the Project objectives.
- The alternatives do not eliminate significant environmental impacts. (See Table ES-2 for a resource-specific comparison of each Alternatives' impacts in relation to the proposed Project).
- The alternatives will continue to incur significant and unavoidable impacts for environmental resources (aesthetics, air quality, greenhouse gases, and population and housing).

However, balancing housing, conformance with RNHA numbers and environmental impacts as presented in **Table ES-2** above, it is recommended that the environmentally superior Alternative be identified as the Reduced Development Alternative. Choosing this Alternative will provide Amador County decision-makers with flexibility to consider approval of a Project that meets housing mandates, complies with General Plan policies, and limits environmental impacts as compared to the proposed Project.

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND AND OVERVIEW

This Environmental Impact Report (EIR) examines the potentially significant effects on the environment of the proposed Wicklow Way Specific Plan (WWSP or proposed Project). The following terms are used throughout this EIR to refer to the areas under consideration:

- WWSP: Wicklow Way Specific Plan (Appendix B)
- Proposed Project: Program-level plan for the development of future projects within the WWSP site in the context of the California Environmental Quality Act (CEQA).
- **WWSP Site/Area**: Refers to the approximately 201-acre area within the boundaries of the proposed Project, shown on **Figure 2-7**.

Project Location

The WWSP site is located within unincorporated Amador County, adjacent to the City of Jackson. The WWSP site is south of Highway (SR) 88 and approximately one mile west of the SR-88 and SR-49 intersection in the Martell Regional Service Center area. Wicklow Way abuts the site on the northwest and provides a main entrance into the proposed Project from SR-88. Existing commercial uses are located to the north, and residential uses and Argonaut High School are located to the east. The WWSP site is undeveloped and contains grasslands, oak woodlands, and drainage areas, including tributaries to Rock Creek. Open grazing land is located to the east, west, and south. Lands south and west of the site are undeveloped. The WWSP site is currently used for grazing.

Project Description

The WWSP is provided in **Appendix B.** The proposed Project includes a program-level plan for the development of the 201-acre WWSP site, including the following uses: 700 dwelling units consisting of a mix of low-, medium-, and high-density residential; community commercial; public/quasi-public, including an electric substation, a sewer lift station, a fire station, a wastewater treatment plant, and an elementary school; parks and recreation areas; open space; and roadways.

Specific Plan Vision

The vision for the WWSP is to create a new community that meets or exceeds the County's development plans through amenities and services and distinguishes itself through an efficient and compact design and development pattern. Once developed, the WWSP would make connections between existing adjacent commercial, residential, and school uses. These connections include the creation of suburban land uses, expansion of open space preserves, and new circulation linkages. In addition to advancing the County's efforts to meet its fair share obligation of the region's housing needs, the WWSP demonstrates an approach to development that results in a more efficient use of land with higher densities and significant open space preservation.

The land use plan for WWSP includes a diversity of housing types; a local-serving community commercial node with office and business professional uses; efficient vehicular, pedestrian, and bicycle circulation; natural resource conservation, specifically preserving a large portion of the existing oak woodland,

onsite drainage features, and sensitive biological resources; and proximate access to parks and open space. Residential uses within the WWSP area will allow opportunities for students to walk to the proposed elementary school and to the existing Argonaut High School adjacent and east of the site.

It should be noted that the proposed Project does not include specific developer commitments at this time for commercial or residential uses. Implementation of the WWSP will establish land uses, and full buildout is expected to be over a 20-year timeframe. At a future time, when specific developments are proposed, additional entitlements, design review, and potentially additional environment review will be required.

1.2 Purpose and Intended Use of the Environmental Impact Report

The County of Amador (County) has prepared this Draft Environmental Impact Report (DEIR) to inform the general public, the local community, responsible agencies, trustee agencies, and other interested public agencies, as well as the County's decision-making bodies (i.e., Planning Commission and County Board of Supervisors) regarding potential significant environmental effects resulting from implementation of the proposed Project, feasible measures to mitigate these significant effects, and alternatives to the proposed Project. This DEIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC], Section (§) 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the County's procedures for implementing CEQA.

As described in CEQA Guidelines §15121(a), an EIR is an informational document that assesses the reasonably foreseeable environmental impacts of a proposed project and identifies potentially feasible mitigation measures and alternatives to a proposed project that could reduce or avoid adverse environmental impacts. Additionally, the County has prepared this EIR for use by responsible agencies to issue permits and approvals as required.

In summary, this document is intended to provide decision-makers and the public with information that enables them to reasonably consider the environmental consequences of the proposed Project. It identifies significant or potentially significant environmental effects ("impacts") and ways in which those impacts can be reduced to less-than-significant levels, whether through implementation of mitigation measures adopted by the lead agency or through the implementation of project alternatives. In a practical sense, an EIR functions as a method of fact-finding, allowing an applicant, the public, other public agencies, and agency staff an opportunity to review and evaluate baseline conditions and project impacts through a process of full disclosure.

An EIR is first circulated as a DEIR to the public, local community, and responsible, trustee, and interested public agencies to provide these entities with an opportunity to review the proposed project, its impacts on the environment, mitigation, and alternatives that would reduce impacts on the environment. After the DEIR is circulated for the noticed public review period, a Final EIR is prepared to serve as the basis for local decision-making bodies to determine whether to certify the EIR and for responsible agencies, trustee agencies, and other interested public agencies to use the EIR to inform their respective permitting processes. Some types of EIRs are also used as a basis for future tiering for related projects to streamline the environmental compliance process for future projects (described in further detail in Section 1.3, Type of EIR).

1.3 Type of Environmental Impact Report

This EIR, when certified, will serve as a program-level EIR, pursuant to CEQA Guidelines §15168, or as a first tier EIR prepared pursuant to CEQA Guidelines §15152. The Final EIR will provide a foundation for subsequent, more detailed analyses associated with individual projects proposed within the WWSP area. One of the County's intentions in preparing this EIR is to streamline future environmental compliance at project-level of review by addressing, as comprehensively as possible, cumulative impacts, regional considerations, and similar overarching issues. In addition, the County has made substantial efforts to provide project-level detail for impacts that would result from implementation of the WWSP, where it is feasible to do so. To the extent that potential impacts of a subsequent individual project have been addressed in this EIR, no additional CEQA compliance would be necessary.

According to CEQA Guidelines §15168(c)(5), "(a) program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible." Later environmental documents (EIRs, EIR addenda, mitigated negative declarations, negative declarations) can incorporate reference materials from the EIR regarding regional influences, secondary impacts, cumulative impacts, alternatives, and other factors (CEQA Guidelines §15168[d][2]). These later documents would only need to focus on new impacts not considered in the program EIR (CEQA Guidelines §15168[d][3]).

The CEQA Guidelines §15168(c) state the role of a program EIR with respect to future CEQA environmental compliance documents as follows:

Subsequent activities in the program must be examined in light of the program EIR to determine whether an additional environmental document must be prepared.

- 1. If a later activity would have effects not examined in the program EIR, a new Initial Study would need to be prepared, leading to either an EIR or a Mitigated Negative Declaration.
- 2. If the agency finds that pursuant to §15162, no new effects will occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.
- 3. An agency shall incorporate feasible mitigation measures and alternatives in the program EIR into subsequent actions.
- 4. Where subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document site evaluation and the activity to determine whether the environmental effects of the new operation were covered in the program EIR.

The County will determine to what extent environmental review for such future projects and programs may rely on this EIR. CEQA Guidelines §15152 provide that, where a first tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and third-tier documents. Furthermore, second- and third-tier documents may limit the examination of impacts to those that "were not examined as significant effects" in the prior EIR or "(a)re susceptible to substantial reduction or avoidance by the choice of specific project revisions, by the imposition of conditions, or

other means." In general, significant environmental effects of a tiered CEQA document have been "adequately addressed" if the lead agency determines that:

- a. They have been mitigated or avoided because of the prior EIR and findings adopted in connection with that prior EIR.
- b. They have been examined at a sufficient level of detail in the prior EIR to enable those effects to be mitigated or avoided by site specific revisions, imposition of conditions, or by other means in connection with approval of a future project(s).

Accordingly, new analyses for future individual projects within the WWSP site would focus on issues and impacts not "adequately addressed" in the EIR under the meaning of the CEQA statute and CEQA Guidelines. The new analyses for these future activities would address impacts that cannot be "avoided or mitigated" by mitigation measures that either (1) were adopted in connection with the Project or (2) were formulated based on information in the EIR.

1.4 CEQA PROCESS ASSOCIATED WITH THE WWSP

Community Workshop

Though not a part of the official CEQA process, to gather community feedback on the proposed draft WWSP, the County held a public workshop on December 9, 2021, at 7:00 p.m. in the Board of Supervisors Hearing Room at the County Administration Center. Due to COVID-19 restrictions, the meeting was available both in-person and virtually.

Notice of Preparation

In accordance with CEQA Guidelines §15082, a Notice of Preparation (NOP) was circulated for public and agency review from January 27, 2023, through February 28, 2023, and a Public Scoping Meeting was held on February 14, 2023. Attendance at the NOP scoping meeting was available both in person and virtually. The purpose of the NOP was to provide notification that an EIR for the proposed Project was to be prepared, announce the date of the Public Scoping Meeting, and solicit input on the scope and content of the EIR. A summary of comments received on the NOP and at the Public Scoping Meeting is included in the Executive Summary and in **Appendix A**, as well as in the Introduction of each issue area section in Chapter 4.

Draft EIR and Public Review

This DEIR is being circulated for a 45-day public review and comment period pursuant to CEQA Guidelines §15105. The public can review the DEIR at the following address during normal business hours (Monday through Friday, 8 a.m. to noon and 1 p.m. to 5 p.m.) and at the Main Library in Jackson or the Upcountry Library in Pinegrove during normal business hours or on the County's website at: https://www.amadorgov.org/departments/planning/current-projects/wicklow-way-specific-plan.

County of Amador Planning Department 810 Court Street Jackson, CA 95642 The County encourages all comments on the DEIR to be submitted in writing. All comments or questions regarding the DEIR should be addressed to:

County of Amador Planning Department Chuck Beatty, Planning Director 810 Court Street Jackson, CA 95642 Telephone: (209) 223-6380

Email: planning@amadorgov.org

Final EIR

Upon completion of the DEIR public review period, a Final EIR will be prepared that will include written responses to all comments received during the public review period on the adequacy of the DEIR. The Final EIR will also include the Mitigation Monitoring and Reporting Program (MMRP) prepared in accordance with PRC §21081.6. The Final EIR will address any revisions to the DEIR made in response to agency or public comments. The DEIR and Final EIR together will comprise the EIR for the proposed Project. Before the County can approve the WWSP, it must first certify that the EIR has been completed in compliance with CEQA, that the County Board of Supervisors has reviewed and considered information in the EIR, and that the EIR reflects the independent judgment of the County. If the County Board of Supervisors certifies the EIR, they will also be required to adopt Findings of Fact, along with a Statement of Overriding Considerations, if there are any significant and unavoidable impacts where no feasible mitigation is available to reduce the severity of the impact (see PRC §21081).

EIR Adequacy

The level of detail contained throughout this DEIR is consistent with §15151 of the CEQA Guidelines, which states the following:

"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 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."

Use of the EIR in CEQA Review of Later Projects

As discussed in Section 1.3 above, if it is determined that a later project is consistent with the WWSP and impacts of the new project are within the scope of the EIR, further environmental review may not be necessary. Section 65457(a) of the California Government Code and §15182(a) and §15183 of the CEQA Guidelines encourage streamlining and provide, among other things, that no EIR or Negative Declaration is required for any residential project undertaken in conformity with an adopted Specific Plan for which an EIR has been certified. Later projects will be reviewed considering these streamlining provisions, the information in this EIR, and the standards set forth in PRC §21166, to determine whether further environmental review is required.

1.5 Scope of the Environmental Impact Report

In accordance with CEQA Guidelines §15063, this EIR evaluates impacts of the proposed Project to the extent feasible. This analysis includes identifying relevant regulatory framework for each resource area with respect to the proposed Project, establishing existing environmental resources within the WWSP site, analyzing potential impacts on those resources due to implementation of the WWSP, and identifying mitigation measures to reduce these significant impacts. Where project-specific information is available, this EIR quantifies and/or evaluates impacts at a level of detail commensurate with information available at the time the analysis was conducted.

The NOP and comment letters received during the NOP review period are included in DEIR **Appendix A**. Based on review of the proposed Project and comments received during the NOP public review period, the County determined that an EIR should be prepared to address the following technical issue areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy

- Geology and Soils
- GHG
- Hazards
- Hydrology
- Noise
- Population and Housing

- Public Services
- Transportation
- Tribal Cultural Resources
- Public Utilities
- Wildfire

Each of these technical issue areas is described in Sections 4.1 through 4.17 of Chapter 4.0. Land Use is not considered a technical issue as it is central to the adoption of a new planning document and is addressed in Chapter 3.0. The topics of forestry resources and mineral resources are not addressed in Chapter 4.0 because the proposed Project would not result in impacts to these areas. The WWSP site does not contain substantial timber resources and is not used, nor is it zoned for forestry uses. Further, the WWSP site does not support mineral recovery activities and the site is not known to contain substantial mineral resources. In addition, development of the WWSP site would not destroy any existing or yet unknown mineral resources. Therefore, the Project would not result in any impacts to forestry or mineral resources, and these topics are not analyzed in this DEIR.

The Alternatives section of this DEIR (Chapter 6.0) was prepared in accordance with §15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. In addition, CEQA requires that alternatives be identified that are feasible, would feasibly attain most of the basic objectives of the proposed project (other than the No Project Alternative, which is a required alternative for analysis), and would reduce one or more significant impacts. The EIR must evaluate the comparative merits of these alternatives. Project modification or alternatives are not required, however, where significant environmental impacts will not occur. This analysis identifies the "environmentally superior" alternative as required by CEQA. Alternatives analyzed in this EIR, in addition to the proposed Project are:

Alternative 1: No Project. The purpose of this alternative is to allow decision-makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. Under this alternative, existing land use designations would remain in effect, and no development would occur.

Alternative 2: Hybrid Wastewater Treatment Plant. This alternative assumes that the currently proposed onsite wastewater treatment plant (WWTP) would be reduced in capacity and the existing ACWA facility located in the City of Jackson would be expanded to make up for lost capacity of the reduction in the onsite WWTP.

Alternative 3: Foothill Conservancy. The Foothill Conservancy proposed a project alternative during the Public Scoping process. The Foothill Conservancy suggested that their alternative site plan would provide affordable and senior housing, preserve rural character, and preserve site environmental attributes by reducing traffic and public service impacts as compared to the WWSP.

Alternative 4: Reduced Development. This alternative is designed to meet the County's Regional Housing Needs Assessment (RHNA) targets. With the reduction in housing, other land uses have been scaled to accommodate the fewer number of residential units. For instance, the amount of community commercial and public/quasi-public acreage is assumed to be 50 percent less. This would increase open-space acreages. This alternative also assumes that the proposed fire station would be constructed but the elementary school would not be needed.

1.6 Incorporation by Reference

The CEQA Guidelines §15150 allow for incorporation by reference of "all or portions of another document which is a matter of public record or is generally available to the public." Incorporation by reference is used principally as a means of reducing the size of EIRs. This EIR relies, in part, on information previously prepared by Amador County or responsible agencies for areas within the project vicinity or infrastructure improvements necessary to serve the proposed Project.

The documents listed below are incorporated by reference as source documents for this DEIR. Pursuant to CEQA Guidelines §15150 (e) and (f), these documents were used primarily to describe the environmental setting, describe applicable County plans or policies, provide general background material, and/or communicate descriptive technical material. These documents are available for public review and inspection during normal business hours (8 a.m. to 5 p.m. Monday through Friday) at the Amador County, Planning Department, Jackson, CA 95642, or at the County's website at www.Planning/Amador County (amadorgov.org).

Amador County General Plan 2016 and General Plan EIR (SCH #2009072089)

The WWSP Site is located with the Amador County and thus would be subject to the Amador County General Plan. The General Plan was approved on October 4, 2016. Impacts determined to be significant and unavoidable from a project specific and cumulative analyses in the Final General Plan EIR are listed as follows:

Significant and Unavoidable Impacts:

- Effect scenic vistas
- Degrade visual character
- Increase light and glare and skyglow effects
- Convert farmland
- Result in land use conflicts with existing agricultural uses
- Result in conversion of forestland to non-forest use
- Result in construction-related emissions
- Long-term operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5}
- Exposure of sensitive receptors to short- and long-term Toxic Air Contaminants
- Result in an adverse effect on special-status species
- Result in a substantial adverse effect on lone chaparral, a sensitive natural community
- Generation of greenhouse gas (GHG) emissions
- Conflict with a GHG Reduction Plan
- Expose structures to urban and wildland fire risk
- Interfere with groundwater recharge or substantial depletion of groundwater supplies
- Result in substantial temporary or periodic increases in ambient noise levels
- Result in substantial permanent increases in ambient (traffic) noise levels
- Expose noise sensitive receptors to operational (traffic) noise levels exceeding standards
- Expose noise sensitive receptors to railroad noise levels exceeding County standards
- Expose noise sensitive receptors to stationary noise levels exceeding County standards
- Increase population growth
- Increase demand for water supplies
- Increase demand for water conveyance and treatment facilities
- Increase demand for wastewater collection, conveyance, and treatment facilities
- Increase traffic levels on state highways resulting in unacceptable LOS
- Increase traffic levels on local roadways resulting in unacceptable LOS

Significant and Unavoidable Cumulative Impacts:

- Effect scenic vistas
- Degrade visual character
- Increase light and glare and skyglow effects
- Convert farmland

- Convert forestry resources
- Result in long-term operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5}
- Expose of sensitive receptors to short- and long-term Toxic Air Contaminants
- Result in impacts to riparian habitat, oak woodlands, and wetlands
- Result in substantial adverse effect on lone chaparral, a sensitive natural community
- Generate GHG emissions
- Conflict with a GHG Reduction Plan
- Expose structures to urban and wildland fire risk
- Result in impacts to groundwater recharge and supplies
- Expose noise sensitive receptors to operational (traffic) noise levels exceeding standards
- Expose noise sensitive receptors to railroad noise levels exceeding County standards
- Expose noise sensitive receptors to stationary noise levels exceeding County standards
- Increase population growth
- Increase demand for water supplies
- Increase Demand for water conveyance and treatment facilities
- Increase demand for wastewater collection, conveyance, and treatment facilities
- Increase traffic levels on state highways resulting in unacceptable LOS
- Increase traffic levels on local roadways resulting in unacceptable LOS

1.7 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

As required by CEQA, this EIR defines lead, responsible, and trustee agencies. The County is the Lead Agency because it holds principal responsibility for approving the proposed Project. A responsible agency is a public agency, other than the lead agency, that has discretionary approval over the proposed Project. Potential responsible agencies include:

- Local Agency Formation Commission (LAFCO)
- Regional Water Quality Control Board (RWQCB),
- State Water Resources Control Board (SWRCB),
- Amador County, Amador Air District (AAD), and
- Amador Water Agency (AWA).

A trustee agency is defined as a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the state. The California Department of Fish and Wildlife (CDFW) is a Trustee Agency with respect to the proposed Project.

CEQA also requires coordination with federal agencies that are interested in the outcome of the County's planning process, as each of them will be involved in federal permitting necessary for the Project Site to develop, such as:

United States Fish and Wildlife Service (USFWS),

United States Army Corps of Engineers (USACE), and

United States Environmental Protection Agency (EPA)

1.8 DOCUMENT ORGANIZATION

This EIR has been designed for easy use and reference. To help the reader locate information of particular interest, a summary of the contents of each EIR section is provided. This report includes eight principal parts:

Executive Summary - Presents an overview of the results and conclusions of the EIR. This section identifies impacts and feasible mitigation measures to lessen or avoid significant impacts of the proposed Project. It also identifies the level of significance of impacts before and after implementation of mitigation measures.

Introduction (Chapter 1.0) - Provides a brief project background and description of the EIR, including its purpose, intended use, type, scope, and standards for adequacy; identification of lead, responsible, trustee and federal agencies; a description of the environmental review process; and a summary of document organization.

Project Description (Chapter 2.0) - Includes a description of the WWSP Site; a statement of project objectives; a general description of the proposed Project's technical and environmental characteristics, including plans for development; and required permits and approvals.

Land Use and Planning (Chapter 3.0) - Addresses the land use and planning implications and discusses consistency and compatibility with adopted land use policies. A general discussion of the proposed Project's consistency with applicable General Plan goals and policies is provided in this chapter.

Environmental Analysis (Chapter 4.0, Sections 4.1 – 4.17) - Includes a topic-by-topic analysis of baseline environmental conditions and impacts that would or could result from implementation of the proposed Project. It also identifies feasible mitigation measures that, if adopted, would reduce the level of significance of environmental impacts. This section also identifies the level of significance of proposed Project impacts, including, as applicable, identified mitigation. The results of field visits, data collection and review, and early consultation with responsible and trustee agencies are included in the analysis. This section also describes the process for evaluating cumulative impacts.

CEQA Considerations (Chapter 5.0) - Includes a discussion of required CEQA-specific issues: significant and unavoidable impacts, irreversible environmental changes, growth inducement, and a summary of cumulative impacts discussed in **Chapter 4.0**.

Alternatives (Chapter 6.0) - Includes an assessment of feasible alternatives for accomplishing most of the basic objectives of the proposed Project while avoiding or substantially lessening at least one significant impact. This assessment provides information for decision makers to make a reasoned choice among potentially feasible alternatives based on comparing the impacts of the alternatives to the impacts of the proposed Project. This chapter also identifies the environmentally superior alternative.

Report Preparers (Chapter 7.0) – Lists report preparers.

Appendices - Contains various reference materials and documents supporting the analysis contained in the DEIR.

2.0 PROJECT DESCRIPTION

2.1 Introduction

The Wicklow Way Specific Plan (WWSP or proposed Project) would be the primary land use, policy, and regulatory document that guides the overall development of the 201-acre proposed Project area, located in Amador County. The WWSP site is County-owned (Assessor's Parcel No. 044-100-027). The proposed Project would establish a development framework for land use, circulation, utilities and services, resource protection, and implementation. The WWSP would be a planning document that includes a mix of retail, commercial, public, and higher-density housing uses. All subsequent development projects and related activities would be required to be consistent with the WWSP.

2.2 Project Location

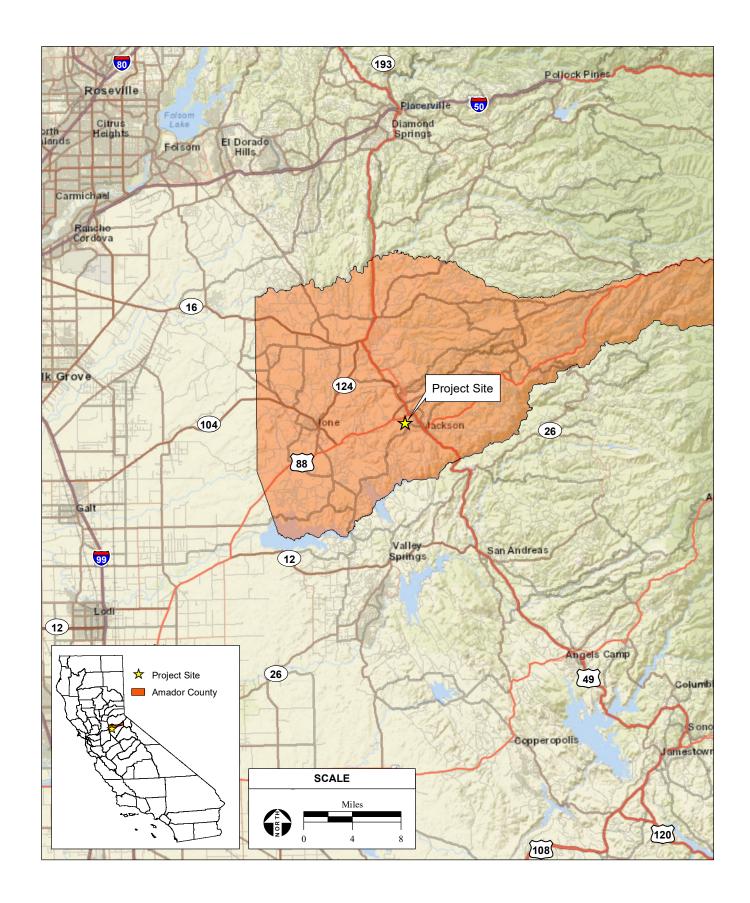
The 201-acre site is in unincorporated Amador County, immediately west of the City of Jackson and 1 mile south of the City of Sutter Creek. The WWSP site is south of Highway (SR) 88 and approximately 1 mile west of the SR-88 and SR-49 intersection in the Martell Regional Service Center area of the County. Refer to Figure 2-1, Regional Location for the regional location, and Figure 2-2, Project Site and Vicinity for an aerial photograph of the WWSP site and vicinity. Wicklow Way abuts the WWSP site on the northwest and provides a main entrance into the proposed Project area from SR-88. Existing commercial uses are located to the north, and there are residential uses along the site's eastern boundary, which surround Argonaut High School. Open grazing land is located to the northeast, west, and south.

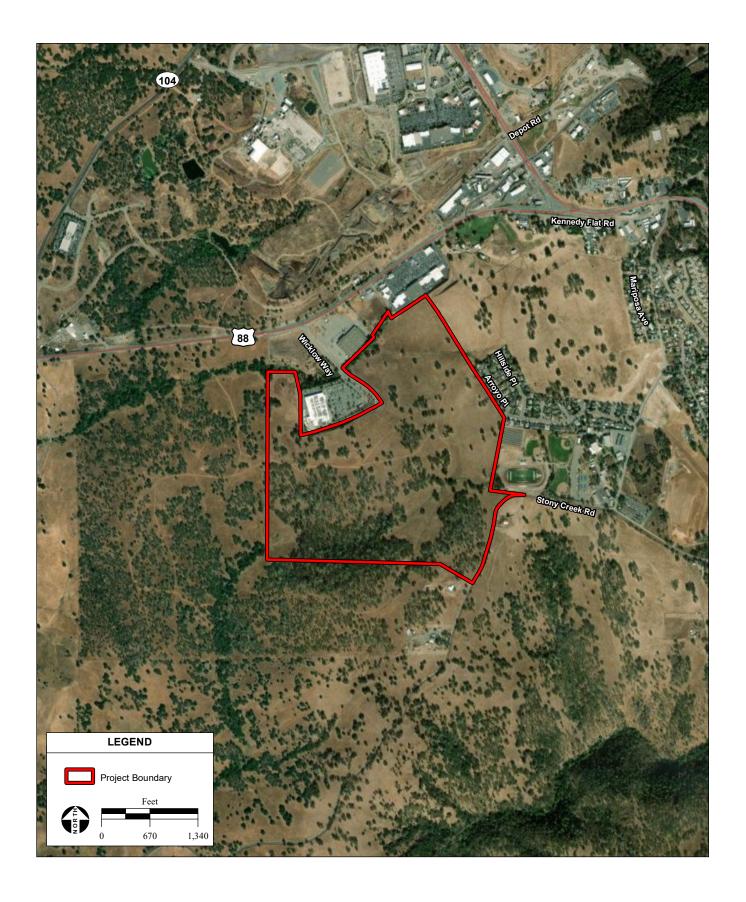
2.3 Existing Project Site Conditions

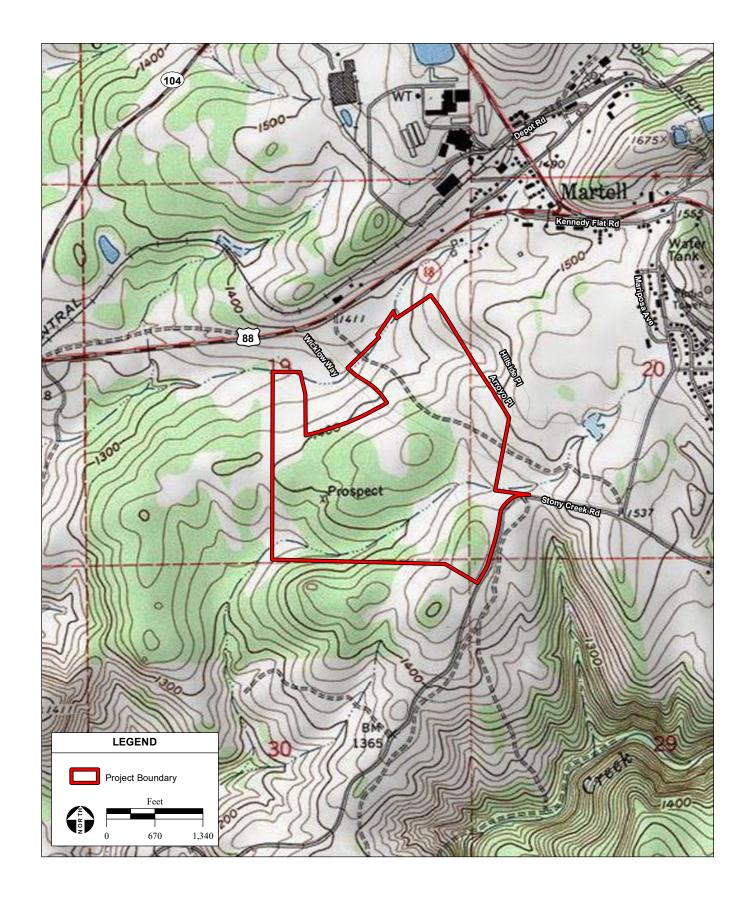
Existing Project site conditions described below are primarily based on the Baseline Constraints Report, included in **Appendix D**. The Project site is undeveloped, and most of its' perimeter is fenced since it is currently used as leased cattle pasture. The WWSP site contains grassland, oak woodland, and drainage areas, including tributaries to Rock Creek. As shown on **Figure 2-3**, **Topographical Map** the site is relatively flat with gently rolling hills, gradually sloping downward from east to west, and ranging in elevation from approximately 1,400 to 1,500 feet above mean sea level. The WWSP site is located within a Moderate and High Fire Hazard Severity Zone.

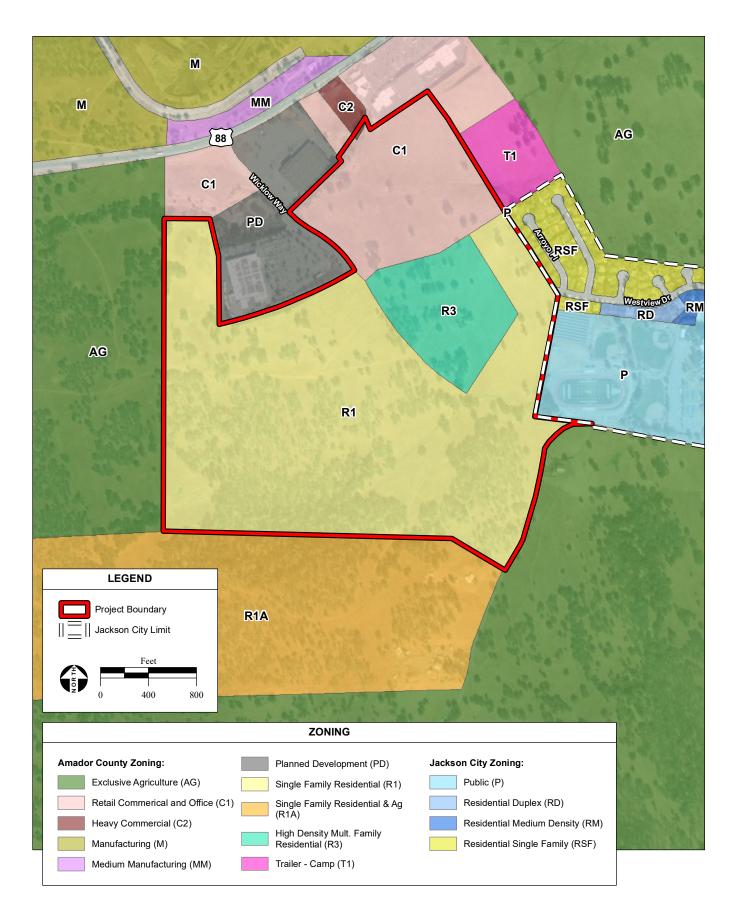
Existing Zoning and General Plan Land Use Designations

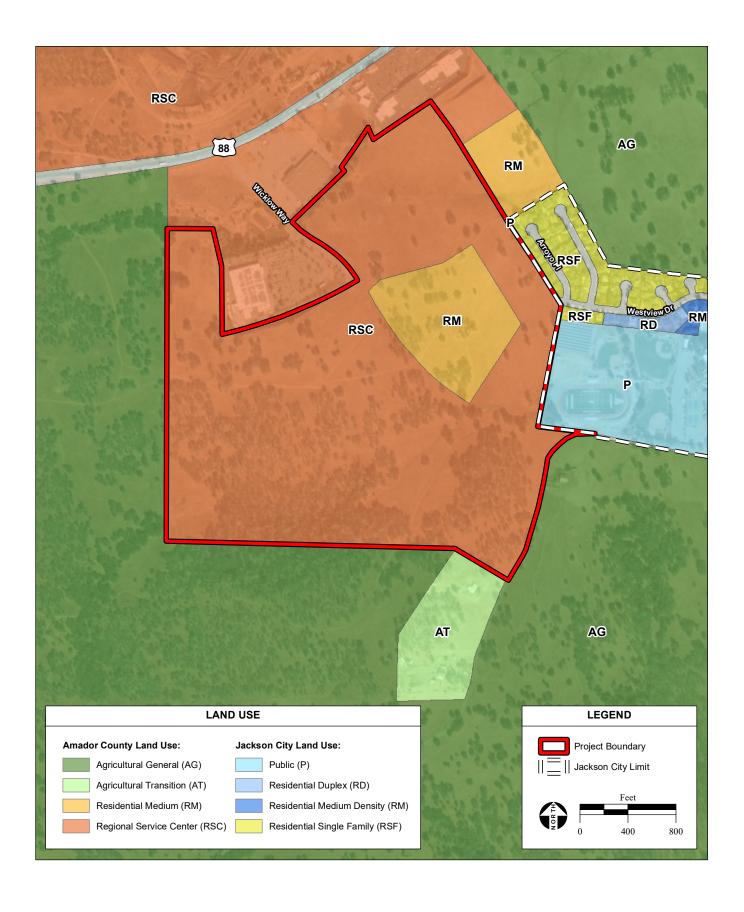
As shown on **Figure 2-4, Existing Zoning** the Project site is currently zoned R1 (Single Family Residential), C1 (Retail Commercial and Office), and R3 (High-Density Multiple-Family Residential). As depicted on **Figure 2-5, Land Use Designations** the WWSP site is located within the Martell Service Center area. Most of the Project site has a General Plan Land Use designation of Regional Service Center (RSC), and a smaller portion of the WWSP site has a designation of Residential Medium (RM), corresponding with the R3 zoning designation (Amador County, 2016b).











Adjacent Land Uses

Wicklow Way abuts the WWSP site on the northwest and provides a main entrance into the proposed Project area from SR-88. Existing commercial uses are located to the north and are zoned PD/C1. Residential uses and Argonaut High School are located along the eastern boundary, within the City of Jackson. These uses are designated in the City of Jackson's General Plan as Residential Single Family and Public, respectively. Open grazing land is located to the east, west, and south. These lands are undeveloped and zoned AG (Exclusive Agriculture District) to the west and east and R1A (Single Family Residential-Agricultural) to the south.

Martell Regional Service Center Area

As described in the Economic Development Element in the County's General Plan and shown on Figure E-3, the Project site is located within the Martell Regional Service Center (Amador County, 2016b). The Martel Regional Service Center is planned to include a mix of retail commercial, industrial, and high-density housing with the potential for mixed-use development. The Martell Regional Service Center is the largest future housing location in the County, as well as the dominant commercial center.

Farmland Classification

The California Department of Conservation (DOC) classifies the Project site as *Grazing Land*. This classification is described as "land on which the existing vegetation is suited to the grazing of livestock" (DOC, 2022). The soils in the Project site are classified by the Natural Resource Conservation Service (NRCS, 2021) as AnD, AoD, ApD, ArC, and AxD. In general, these soils are moderately well drained to well drained. A discussion of the suitability of the project site for agricultural production is discussed in more detail in Section 4.2, Agricultural and Forestry Resources. The Project site is not subject to a Williamson Act contract. The site is subject to a farmland easement granted in 1921 that allows cattle passage across the site in perpetuity. It is anticipated that the passage would follow the project's eastern and southern boundaries, with a defined livestock crossing on the extension of Wicklow Way near Stony Creek Road.

Existing Roadways

The Project site is south of SR-88 and approximately one mile west of the intersection of SR-88 and SR-49. Wicklow Way is an east-west collector roadway with two lanes in each direction. Wicklow Way provides the main access to the Project area from SR-88. Stoney Creek Road is a two-lane striped County roadway with 4-foot shoulders, located along the southeastern boundary of the Project site. Stoney Creek Road provides access to the Project site from Buena Vista in the foothills to the south all the way to the City of Jackson to the east. Although there are no paved roads on the Project site, there are various gated access points for light off-road utility vehicles.

Existing Water and Sewer Infrastructure

There are no existing water or sewer lines on the Project site. The closest water and sewer lines are located at both the southern terminus of Wicklow Way and the western terminus of Westview Drive (north of Argonaut High School). Water and wastewater infrastructure are owned and maintained by the Amador Water Agency (AWA). The closest sanitary sewer lift station is located at the residential community on the eastern boundary of the Project site, north of Argonaut High School. AWA operates wastewater collection within the unincorporated community of Martell (AWA Wastewater

Improvement District #12). Wastewater treatment and disposal for Martell is provided by the City of Sutter Creek Wastewater Treatment Plant and the Amador Regional Sanitation Authority. The Martell area needs additional capacity to support anticipated build-out demand (Amador County, 2016a).

Existing Drainage

The Project site has a relatively flat topography that gently slopes east to west, and the area is interspersed with rolling rolls. Elevations range from 1,400 to 1,500 feet above mean sea level. Drainage from the Project site flows into two streams, one of which is perennial and the other intermittent. The intermittent stream drains northward into Rock Creek, which flows parallel to the northern boundary of the Project site. The perennial stream enters the southern portion of the Project site from the east and flows westward, conveying water off-site and linking with several tributaries before contributing to Rock Creek. Rock Creek eventually flows into Jackson Creek, then into Dry Creek, and eventually into the Mokelumne River within the San Joaquin River Delta. The Project site is not located in a Federal Emergency Management Agency (FEMA)-designated flood hazard zone.

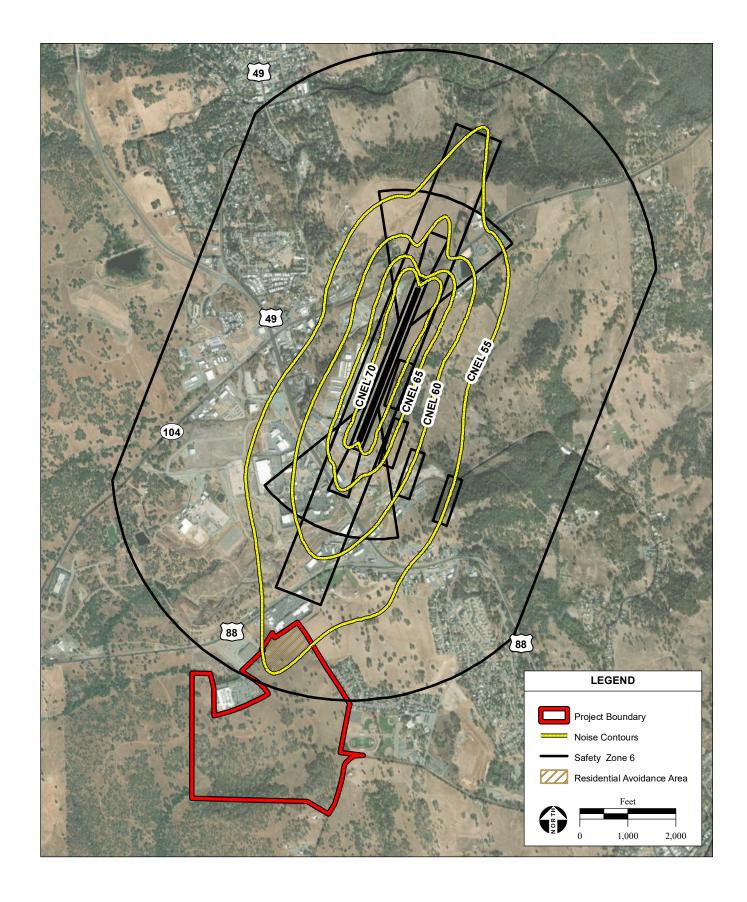
Airport Land Use Compatibility Plan

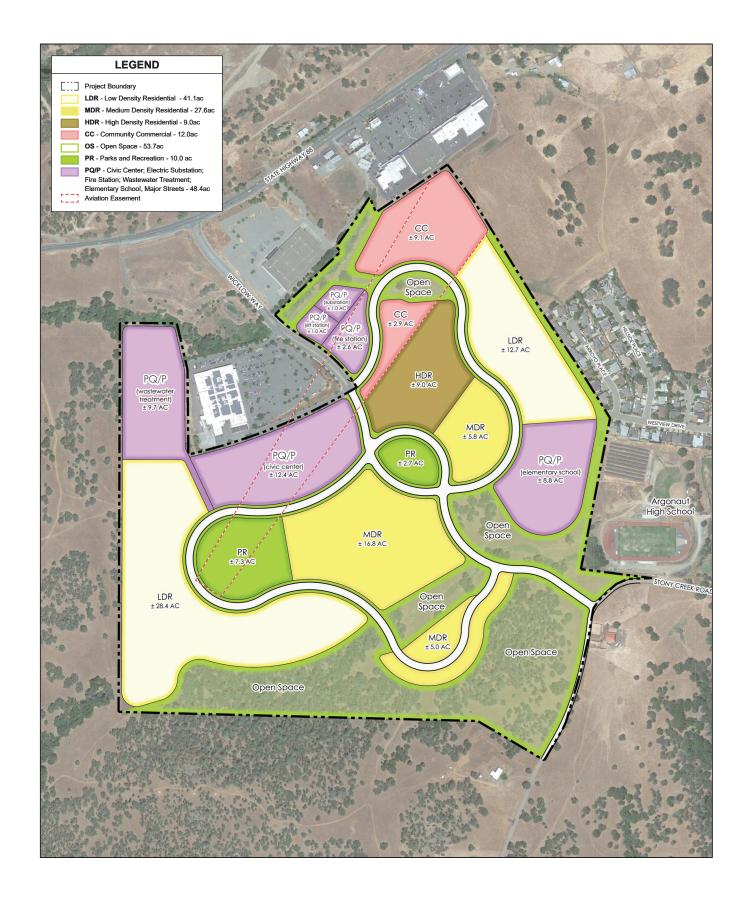
The Airport Land Use Compatibility Plan (ALUCP) establishes Safety Zones and noise contours for use in evaluating compatibility with surrounding land uses. The Project site falls within the Airport Influence Area (AIA) as specified within the ALUCP for Westover Field Airport. As shown on **Figure 2-6**, **Airport Zone**, a portion of the Project site is in Safety Zone 6. Safety Zone 6 includes several varying restrictions; within the Safety Zone 6 overlay on the Project site, a smaller portion of the Project site is within a stricter noise restriction that constricts noise to between 55 and 60 dB. As described in Table 3-1 of the ALUCP, single-family and multi-family residential uses are classified as Normally Unacceptable within 55 to 65 dB CNEL noise contours. The Normally Unacceptable classification is defined by noise that will create substantial interference with both outdoor and indoor activities. Therefore, this area has been identified as the "Residential Avoidance Area" on **Figure 2-7**, **Specific Plan Land Use**. The ALUCP also establishes overflight zones for the purpose of providing overflight notification for land uses near Westover Field. Unlike other compatibility factors, overflight compatibility policies do not restrict how land can be developed or used; rather, the policies form the requirements for notification about airport proximity and aircraft overflights.

2.4 BACKGROUND

Development of the Project site has been contemplated by the County over the past 40 years. The Project site was first zoned H (Highway Commercial) in 1970. At this time, the development envisioned a golf course, 200 residential units, and commercial uses. The project was never constructed.

The County's original General Plan land use map, adopted in 1973, designated the Project site as an Urban Planning Area (UA). In 1986, the County rezoned the site to Project Development (PD) for the proposed Hilltop Center Project that was never constructed. The General Plan designation was changed in 1986 to a Special Planning Area (SP) when the County updated its General Plan. In 1994, the County removed the PD zoning from the site and rezoned the site to R1 (Single Family Residential), R3 (High Density Multiple Family Residential), and C1 (Retail Commercial and Office District). In 1997, the County adjusted the boundaries of the area zoned R3.





In the mid-2000s, developers submitted a proposal to the County for a proposed mixed-use residential and commercial village neighborhood consisting of 678 to 728 residential units, 29.4 acres of commercial uses, an 8.5-acre school site, and 29.8 acres of parks and pathways. The proposal also included the extension of Wicklow Way south to Stony Creek Road. A Final EIR was prepared, but the proposal was ultimately withdrawn, and the County eventually acquired the site with the intention of relocating the jail. The County instead opted to expand the existing jail in the City of Jackson and retained the parcel for future use.

As part of the State's goal to create more affordable housing opportunities, two planning grants were awarded to Amador County in 2021 to prepare a Specific Plan and Environmental Impact Report (EIR) to facilitate housing on the Project site. Senate Bill 2 (SB 2) and Local Early Action Planning (LEAP) grants facilitated the preparation of the Specific Plan and EIR.

2.5 PROJECT DESCRIPTION

The Project would be the primary land use, policy, and regulatory document used to guide the overall development of the 201-acre Project site. The Project would establish a development framework for land use, circulation, utilities and services, resource protection, and implementation.

Project Objectives

The California Environmental Quality Act (CEQA) Guidelines, Section 15124(b), require that the Project Description include a statement of the objectives of the project. The objectives should describe the purpose of the Project and are intended to assist the lead agency in developing a reasonable range of alternatives for consideration in the EIR. These are presented below:

- Complete Comprehensive Planning for the Project Site. Formulate a specific plan and related land use documents and regulatory approvals for the Specific Plan that provide for Amador County's share of regional land use growth, are compatible with surrounding uses, and provide both housing and economic development opportunities.
- Mix of Land Uses. Create a comprehensively planned, residential-based community with a mix of land use to create a balanced community with residential units, commercial and business professional uses, parks, open space, and supporting public/quasi-public uses.
- General Plan Consistency. Achieve characteristics reflective of the general policy direction embodied in the County's adopted General Plan, including connectivity among neighborhoods, commercial uses, schools, and parks.
- Housing Opportunities. Plan for residential units to provide housing choices in varying densities to respond to a range of market segments, including opportunities for rental units and affordable housing, consistent with the General Plan.
- Regional Housing Needs Allocation. Aid the County in meeting its obligation to accommodate a percentage of future population growth in the region (as embodied in the Regional Housing Needs Allocation (RHNA) identified by the California Department of Housing and Community Development (HCD) by increasing the residential holding capacity.

- Community form. Shape the physical form and character of development that are functional and create a sense of place to create a land use transition and connection to existing development.
- Organize neighborhoods to be identifiable and walkable and to incorporate gathering places such as commercial areas, parks, and connections to schools.
- Provide adequate school services to students generated by build out of development under the WWSP.
- Area Roadways that provide a safe and efficient circulation system that interconnects, uses, and promotes pedestrian and bicycle circulation.
- **Open space**. Create open space preserves that provide regional benefits for habitat, resources, oak tree preservation, and open space amenities.
- **Fiscal contribution.** Include a mix of land uses and facilities that are fiscally feasible and implement funding mechanisms to maintain a neutral/positive fiscal impact to the County's General Fund.
- Long-Term Growth. Plan for long-term growth to be positioned to react to market demand. The WWSP is intended to guide development over a 20-year horizon.

Specific Plan Vision and Principles

The vision for the WWSP is to create a new community that meets or exceeds the County's development standards through amenities and services and through an efficient design and development pattern. Once developed, the WWSP would make connections between existing commercial, residential, and school uses. These connections would include the creation of urban land uses, the expansion of open space preserves, new circulation linkages, and connections via a pedestrian and bicycle network. In addition to advancing the County's efforts to meet its fair share obligation of the region's housing needs, the Specific Plan would demonstrate an emerging approach to development that results in a more efficient use of land with higher densities and significant open space preservation.

The land use plan for the WWSP includes a diversity of housing types; compact design; a local-serving community commercial node with office and business professional uses; efficient vehicular, pedestrian, and bicycle circulation; resource conservation; and proximate access to parks and open space. The residential component on the eastern side of the Project Plan area would allow opportunities for students to walk to the adjacent Argonaut High School.

The WWSP includes the following Community Form Elements, as further described in Section 3.1 and shown on Figure 3-1 of the Specific Plan (**Appendix B**):

- Commercial/Business Node (adjacent to the intersection of SR-88 and Wicklow Way)
- Civic Uses/Public Uses (provide community serving uses such as civic, education, public services, and utilities)
- Residential Neighborhoods (includes a combination of residential development standards, neighborhood design guidelines, and roadway design standards)
- Parks and Open Space (provides an open space preserve and park network)

 Circulation System (provides multiple transportation choices to address vehicles, public transit, bicyclists, and pedestrians).

Proposed Land Uses

The proposed Project land use designations are summarized in **Table 2-1, Land Use Summary** and shown on **Figure 2-7**. As shown in **Table 2-1**, the WWSP would provide a potential new County administrative offices/civic center and a total of 700 residential units with a range of densities on approximately 80 acres that would accommodate approximately 1,660 residents. Proposed land uses would also include approximately 26 acres for community commercial and civic uses; 46 acres of open space; 6.9 acres for parks and recreation; and 42 acres for public uses. To preserve options, the land use plan assumes a 9.7-acre site for an onsite wastewater treatment plant, should it be needed in the future. The Community Commercial (CC) land use designation provides a broad range of neighborhood-serving retail goods and services, such as grocery stores, restaurants, and offices. The Open Space (OS) land use designation is intended to preserve and protect Rock Creek, its intermittent tributaries, and oak woodlands. The Parks and Recreation (PR) land use designation is applied to a combination of planned active and passive recreation facilities. The Public/Quasi Public (PQ/P) land use designation provides community-serving uses such as civic, education, services, and utilities. Each land use designation is described in more detail below. Corresponding land use policies that guide development of the proposed Project are presented in Section 4 of the WWSP (**Appendix B**).

Planned Development District

A Planned Development (PD) component of the Specific Plan, as allowed in Amador Municipal Code, would be established over certain parcels to allow greater flexibility in the design of integrated developments than otherwise possible through strict application of the Amador County land use regulations.

Residential

The residential component of the Specific Plan would utilize three residential land use designations: Low Density Residential (LDR) PD- R-1, Medium Density Residential (MDR) PD-R-2, and High Density Residential (HDR) PD- R-3. **Table 2-2, Residential Zones**, provides a description of the planned residential zones, including density, zoning, and permitted uses. The WWSP also includes provisions for residential unit transfers, custom homes, and second dwelling units.

Low-Density Residential

The single-family low-density residential land use designation is intended to create neighborhoods composed of individually owned, single-family detached homes that would be creatively located due to topography and other natural features. This designation typically provides for a single-family dwelling. Additionally, second dwelling units that may provide opportunities for affordable housing units are allowed as accessory dwelling units (ADUs).

Medium-Density Residential

The medium-density residential land use designation would be intended to promote a variety of housing types that would result in diverse residential neighborhoods. Uses would include, but would not be limited to, single family dwellings (small lot detached, zero-lot line, and patio homes), two family

dwellings, and multi-family dwellings. It would be one of the most flexible residential land uses. It would be intended to provide home opportunities to first-time homeowners as well as senior populations interested in downsizing. The density would range from 7 to 12 dwelling units per gross acre.

Multi-Family High-Density Residential

The High-Density Residential land use designation would be intended to allow apartments, condominiums, and townhomes. The allowed density would range from 20 to 30 dwelling units per gross acre. According to state housing law, high density parcels are "deemed appropriate to accommodate housing for lower income households."

TABLE 2-1 LAND USE SUMMARY

LAND USE DESIGNATION		APPLIED ZONING DISTRICT	ACRES	% OF TOTAL ACRES	UNITS	% OF TOTAL UNITS
Residential						
LDR	Low Density Residential	PD-R1	41.1	20%	280	40%
MDR	Medium Density Residential	PD-R2	27.6	14%	220	31%
HDR	High Density Residential	PD-R3	9.0	4%	200	29%
	Subtotal		77.7	39%	700	100.00%
Comm	ercial/Office					
СС	Community Commercial	PD-CC	12.0	6%		
PQ/P	Civic Center	PQ/P	12.4	6%		
	Subtotal		24.4	12%		
Open :	Space and Public		1			
OS	Open Space	os	53.7	27%		
PR	Parks and Recreation	PR	10.0	5%		
	Subtotal		63.7	32%		
	Electric Substation Sewer Lift Station Fire Station	PQ/P	1.0 1.0 2.6			
PQ/P	Wastewater Treatment Elementary School		9.7 8.8			
	Major Streets		12.9			
	Subtotal		36.0	17%		
Total			201.8	100.0%	700	100.0%

TABLE 2-2 RESIDENTIAL ZONES

	LOW DENSITY RESIDENTIAL (LDR) PLANNED DEVELOPMENT	MEDIUM DENSITY RESIDENTIAL (MDR) PLANNED DEVELOPMENT	HIGH DENSITY RESIDENTIAL (HDR) PLANNED DEVELOPMENT
Density	0.5 to 6.9 dwelling units per acre	7.0 to 12.9 dwelling units per acre	13.0 dwelling units per acre or greater
Applied Zoning District	Single Family Residential PD-R-1	Small Lot Residential PD-R-2	Attached Housing PD-R-3
Description	The LDR land use designation supports single-family detached homes on conventional lots. Lot sizes range from 3,600 to 7,500 square feet and could be smaller or larger depending on site configuration, features and neighborhood design. A variety of detached, single-family residential housing types are possible in this density range. However, single-family front-loaded housing on conventional lots is anticipated as the primary product type. Half-plexes are permitted.	The MDR land use designation accommodates both single-family detached and attached residential units. Lot sizes are typically smaller than those in LDR areas. Within this density range, single-family detached housing may be provided on a wide range of lot types including small, standard, or alley-loaded lots, courtyard lots, alley clusters, and zero-lot line lots. In addition, duet/half-plex homes, townhomes, or condominiums may also be accommodated in MDR areas.	The HDR land use designation primarily accommodates attached housing. Depending on the unit type, HDR could also include some detached housing. The types of housing units which could be accommodated in the HDR designation could include, but are not limited to, townhomes, courtyard townhomes, condominiums, garden-style apartments, and podium design apartments or condominiums. Multi-family housing types may be applied to for-sale or rental units. The PD-R3 zone also allows other similar and compatible uses including community care facilities.
Permitted Uses	As specified in the Amador County Zoning Ordinance.	As specified in the Amador County Zoning Ordinance.	As specified in the Amador County Zoning Ordinance.
Development Standards	Development standards as specified in the Amador County Zoning Ordinance or established by the subdivision map. As further described in Appendix A of the Project, the PD zone district is applied to provide the potential for variation to development standards. Design standards are noted in the WWSP (Appendix B).	Development standards as specified in the Amador County Zoning Ordinance or established by the subdivision map. As further described in Appendix A of the Project, the PD zone district is applied to provide the potential for variation to development standards. Design standards are noted in the WWSP (Appendix B).	As specified in the Amador County Zoning Ordinance, and Wicklow Way Design Guidelines in the WWSP (Appendix B).

Commercial Land Uses

The commercial land use designation would provide community-based, convenience-oriented retail and service uses intended to serve residential neighborhoods within the Project Plan area and complement the existing adjacent commercial uses. The land use plan would provide for 12.1 acres of commercial land and an allocation of approximately 100,000 square feet of potential building area within walking distance of residential neighborhoods and accessible by public transit. **Table 2-3, Commercial Land Use** provides a description of the proposed commercial and office uses, including the expected floor area ratio (FAR), applied zoning district, land use description, and permitted uses.

TABLE 2-3 COMMERCIAL LAND USE

RETAIL COMMERCIAL AND OFFICE (C-1)			
Typical FAR	Up to 0.4 FAR		
Applied Zoning District	C-1 Retail Commercial and Office		
Description	The C-1 land use designation provides a broad range of neighborhood and regional serving retail goods and services, such as a grocery, drug store, restaurants, cafes, offices, personal services, and shops of approximately 100,000 square feet. Located near the SR-88 and Wicklow Way intersection, this site is suitable for retail and has excellent access needed for commercial or office services. Pedestrians and bicyclists from the project area can access the commercial site via Wicklow Way and the sidewalk and street system throughout the Project Plan area.		
Permitted Uses	As specified in the Zoning Ordinance.		

Potential uses would include grocery stores, retail shops, restaurants, banks, offices, and other similar types of uses supporting the daily needs of nearby residents. The land use designation would be consistent with the Commercial General Plan land use designation. Adjacent commercial uses are in the northwest quadrant adjacent to Wicklow Way and SR-88.

Public Quasi Public Uses

The PQ/P land use designation would encompass a variety of uses that are both desired and required within a comprehensive community setting. PQ/P uses would include schools, government offices, fire stations, and public utilities. Approximately 12 acres would allow for office use, to provide for potential consolidation of Amador County administrative offices into one location or other civic uses as needed. **Table 2-4, Public/Quasi Public Uses** provides information on the expected FAR, applied zoning district, and types of public uses.

TABLE 2-4 PUBLIC/QUASI PUBLIC USES

PUBLIC/QUASI PUBLIC (PQ/P)			
Typical FAR	Up to 0.6 FAR		
Applied Zoning District	PQ/P – Public and Civic Use		
Description	The PQ/P land use designation provides community serving uses such as civic, education, public services, and utilities. One 12-acre parcel is planned at the northeast quadrant site. Located near SR-88 and Wicklow Way intersection, this site is suitable for Amador County offices or other needed civic uses. Pedestrians and bicyclists from the project area can access the commercial site via Wicklow Way and sidewalk and the street system throughout the Project Plan area. An 8.5-acre elementary school site is planned, as well as a three-acre fire station site. Other PQ/P sites provide land for municipal services such as wastewater plant, sewer pump station,		
Permitted Uses	As specified in the Zoning Ordinance.		
Development Standards	As specified in the Zoning Ordinance, Community Design Guidelines.		

Parks and Open Space

Over 20 percent of the Specific Plan would be planned for parks and open space. The Specific Plan features neighborhood parks and significant open space corridors that contribute to the regional open space landscape. The Specific Plan would be designed to enhance and maximize views and access to the open space. Open space would account for almost one quarter of the Project Plan area. **Table 2-5, Parks and Open Space** provides a description of the planned parks and open space.

Preserve Open Space

The Preserve Open Space land use designation would be intended to preserve and protect oak woodlands and Rock Creek and its intermittent tributaries.

Parks

The Parks & Recreation land use designation provides for active and passive recreational opportunities in the Project Plan Area. Approximately 6.9 acres of parks are proposed.

TABLE 2-5 PARKS AND OPEN SPACE

	PARKS& RECREATION (PR)	OPEN SPACE (OS)
Applied Zoning District	PR – Parks & Recreation	OS – Open Space
Description	The PR land use designation is applied where formal, developed park facilities are planned. A combination of active and passive recreation facilities is planned. Parks can range in size from 1.5 to 5 acres in size. Neighborhood Park. Neighborhood parks are designed to provide additional outdoor recreation opportunities to higher density neighborhoods with residential units with less private yard space. Park sites should be linked to other land uses through a system of pedestrian pathways. Parks and recreation facilities are further described in the Public Services Plan (Chapter 7 of the Project Plan).	The OS land use designation is generally applied to lands which are environmentally sensitive or otherwise significant due to habitat and floodplain. In the Project Plan, the OS land use designation is applied to natural features (Rock Creek, and Oak Woodlands) which provide opportunities for views, passive recreation, pedestrian/bike paths, water conveyance and detention, stormwater quality/treatment and resource avoidance and preservation. The Open Space Preserve creates a natural edge, a transition to agricultural land uses. It also provides an opportunity to create a bicycle/pedestrian pathway through the Project. The Open Space Preserve is planned for permanent preservation as open space and would complement open space preservation in surrounding areas. Rock Creek and associated drainages and Oak Tree
		Preservation. The creek corridor is an opportunity to create a heavily wooded, linear open space amenity that offers a bicycle/pedestrian pathway through the Project. In addition, a significant area of oak woodlands is preserved.
Permitted Uses	As specified in the Zoning Ordinance.	As specified in the Zoning Ordinance.
Development Standards	As approved by the Parks and Recreation Agency for individual parks.	As specified in the Zoning Ordinance.

Affordable Housing Plan

Housing in the WWSP is planned to include a mix of housing types in low-, medium-, and high-density residential neighborhoods. Like existing LDR areas of the County, it is anticipated that the Specific Plan's LDR neighborhoods would provide market-rate housing affordable predominantly to moderate- and above-moderate-income households. The Specific Plan's MDR and HDR residential areas would provide greater opportunities for creating affordable housing for all income ranges. The Specific Plan would comply with state housing law and the General Plan Housing Element by providing an adequate supply of residentially zoned land in a range of densities to accommodate the housing needs of all income groups in the County. Moreover, consistent with SB 375, the Specific Plan would locate many of the higher density sites in proximity to transit corridors and stops, commercial services, schools, and parks to reduce the need for driving and to encourage walking, cycling and transit use. Additionally, the multifamily residential sites would encourage the development of affordable housing.

The Specific Plan would exceed the General Plan affordable housing goal standard of 5 percent and propose that 10 percent of the units in the Specific Plan be affordable for middle-, low- and very low-

income households. This would include a mix of purchase housing affordable to middle-income households, and rental housing affordable to low-, and very low- income households. Approximately 20 percent of the affordable housing goal will be available to middle-income residents, 40 percent to low-income residents and 40 percent to very-low-income households. Chapter 5 of the Specific Plan (included in **Appendix B**) provides additional information about the Affordable Housing Plan, including applicable Specific Plan policies, State law and General Plan requirements, definition of housing affordability, and administrative and implementation options available to assist in achieving the Specific Plan affordable housing goal.

Circulation

The circulation system for the Specific Plan includes a hierarchy of roadways and other improvements designed to link with existing and planned County and regional facilities. The facilities within the Specific Plan would include roadways, bikeways, pedestrian paths, and public transit. Collectively, these provide multiple transportation options and encourage people to rely less on automobile travel. The Specific Plan's mobility systems would emphasize connectivity among uses, transportation choices, and the provision of a safe and efficient circulation system for automobile drivers, bicyclists, and pedestrians. Circulation policies of the Specific Plan are included in Section 6.1, Circulation Policies, of the Specific Plan (Appendix B).

Roadways

The Specific Plan includes design standards for collector roadways, residential streets, local streets, alleys, and roundabouts as shown on Figures 6-1 through 6-5 in the Specific Plan (**Appendix B**).

Bikeway and Pedestrian Network

The Specific Plan includes a comprehensive system of multi-use paths and bikeways to provide connectivity for non-vehicular travel within the Project Plan Area. The bikeway and pedestrian network would create linkages to all portions of the community and connections to the regional system. As further described in Chapter 6 of the Specific Plan, the network would consist of the following components:

- Class I Bike Trails
- Class IA Sidewalks
- Class II Bike Lanes
- Class III Bike Routes
- Pedestrian Pathways
- Class IA Paths
- Sidewalks

Public Transit

Public transit would include a combination of bus service systems via Amador Regional Transit System and Dial-A-Ride. To facilitate the expansion and use of transit, higher-intensity land uses are planned near transportation corridors and transit stops. These uses include high-density residential and commercial uses located on the northwest side of the Project site.

Transportation Systems Management

Transportation System Management (TSM) measures are designed to reduce the number and length of home-to-work commute trips through actions such as ridesharing, flexible work hours, and support of public transportation. Any project site, common work location, or employer with 50 or more employees would be required to incorporate TSM measures. These could include bicycle parking, carpool parking spaces, or bus passes.

Public Services

Public services addressed in the Specific Plan include parks and recreation, schools, libraries, police, and fire protection/emergency services. Related public services policies of the Specific Plan are presented in Section 7.1 of the Specific Plan (**Appendix B**).

Parks and Recreation

The Specific Plan designates 12 acres of neighborhood parks and 46 acres of open space areas, as shown on **Figure 2-7**: Proposed Land Uses. The Specific Plan's park and open space system would be designed to provide linkages and recreational opportunities within proximity to all residents and employees. Park designs would be consistent with the Amador Parks and Recreation Agency Master Plan, as described in Section 7.2 of the Specific Plan (Appendix B).

Neighborhood Parks

The Specific Plan's park system features two parks (12 acres total) that would be located to be responsive to the recreational needs of the neighborhoods. Facilities in the parks could include ball fields, a turfed play area, play structures, and seating areas. Pedestrian and bicycle paths would provide connections through the parks and to neighboring areas.

Open Space Areas

Open space areas within the Specific Plan total approximately 46 acres, and Park acreage would comprise over 29 percent of the Specific Plan. In general, environmentally sensitive or significant land due to the presence of habitat, resources (drainage corridors or oak woodland), natural features (rock outcroppings or view sheds), or man-made features would be designated as an open space preserve. Open Space would provide opportunities for scenic vistas, passive recreation, pedestrian/bike paths, water conveyance and retention, stormwater quality/treatment, and resource avoidance and preservation. The Rock Creek corridor and associated drainage corridors would create a linear open space amenity that functions as a natural feature and connection for a bicycle/pedestrian pathway through the Specific Plan. Management of open space areas is discussed in Chapter 9, Resource Management.

Schools

The Specific Plan is located within the Amador County Unified School District (ACUSD), which serves students in grades K-12. At buildout, the Specific Plan would generate an estimated 253 elementary school (K-5) students, 87 middle school (6-8) students, and 113 high school (9-12) students. The number of elementary school students generated from buildout of the Specific Plan would create a demand for one elementary school in the Specific Plan. As shown on **Figure 2-8:** Planned Land Uses. One 8.5-acre elementary school is planned on the east side of the Specific Plan to house students within the Specific Plan. Facility planning and timing of development would be determined in consultation with the ACUSD. Middle school students in the Specific Plan would attend Jackson Middle School, approximately 1 mile east of the Specific Plan, in the city of Jackson. High school students would attend Argonaut High School, located immediately to the east of the Project site in the city of Jackson. The payment of school impact fees as required by State law and development agreements between future developers and the ACUSD would mitigate school impacts.

Libraries

Amador County operates a public library system consisting of five individual facilities. The County's main library is in the city of Jackson, and branch libraries are in lone, Pine Grove, Pioneer, and Plymouth. The libraries provide print and online access library services to all County residents.

Development Impact Fees

The County charges the following per-unit impact fees: \$4,262 facility fee cover impacts to libraries, law enforcement, etc.; \$6,380 traffic fee; \$3,699 recreation fee; \$1400 fire fee (SFD); \$955 fire fee per multifamily unit; and school impact fees of \$4.79/square foot of habitable residential space. These are all paid at the time a building permit is issued, and there are no up-front developer fees.

Law Enforcement

The Amador Sheriff's Office would provide law enforcement services to the Specific Plan. The Sheriff's Office provides all operations and patrols out of its office on Court Street in Jackson, approximately three miles north of the Specific Plan. Developments proposed within the Specific Plan would require review by the Sheriff's Office for incorporation of recommended safety, security, and design features.

Fire Protection/Emergency Services

The Amador County Fire Prevention District (ACFPD) would provide fire protection, suppression, emergency medical services, and hazardous materials management to the Specific Plan. There are seven stations that provide fire service. Fire Station 131, located in the city of Jackson, is the closest Fire Station to the Project site. However, buildout of the Specific Plan would require the need for a new fire station to provide adequate fire protection services to the Specific Plan. A 3-acre site is planned within the Specific Plan as shown on **Figure 2-8**: Planned Land Uses, which would serve the Specific Plan at buildout. The design of the new fire station would be developed in consultation with the ACFPD.

Utilities

The WWSP would provide planning for utility infrastructure required to accommodate build out of the proposed Project. Phasing of infrastructure improvements and funding obligation would be detailed in the Specific Plan Development Agreement(s) prepared at the time specific development is proposed. Utilities would include potable water, recycled water, wastewater, drainage, electric, natural gas, communication, and solid waste collection and recycling. Utility policies guiding development of the Specific Plan are included in Section 8.1 of the Project (Appendix A).

Potable Water

Potable water supply, treatment, and conveyance would be provided by the AWA. The proposed Project would connect to AWA existing potable water lines adjacent to the site. The distribution system would supply water to the Project Plan area through connection points at various locations needed to provide a reliable water network. Water would be distributed within the Project Plan area via looping systems that parallel roadways on a transmission main grid. All water improvements would be constructed to the AWA's standards. Water demand and available water supply to meet the projected demand would be determined through a Water Supply Assessment and consistency with the AWA's Urban Water Management Plan projections.

The Specific Plan includes water conservation measures that would reduce overall water demands for potable and/or recycled water through the following measures:

- Turf Reductions in Residential Areas
- Turf Reductions in Parks and Landscape Corridors
- Smart/Centrally Controlled Irrigation Controllers
- Re-circulating Hot Water Systems.

Recycled Water

Recycled water would be provided to the Specific Plan from a proposed new 15-acre Wastewater Treatment Plant (WWTP). Upon completion of the proposed WWTP, recycled water would be used within the Plan to irrigate landscaping at parks, schools, business professional, and multi-family projects, as well as publicly landscaped areas (including roadway landscape corridors and medians). The use of recycled water for irrigation purposes would offset potable water demand. During the initial phases of development, the Specific Plan, with approval from the County, may utilize potable water on an interim basis for irrigation. As the Project Plan area develops and recycled water infrastructure is added to the system, landscape areas that may utilize potable water will be transitioned to recycled water. The planned recycled water distribution system within the Project Plan area would be a looped system with interties to the recycled water system within the Project Plan area. Pipelines in the Project Plan area, ranging in size from 6 to 16 inches, are planned in roadways, with pipes extending to parcels requiring recycled water service. All recycled water improvements would be constructed to the AWA's standard using a phased approach.

Wastewater

Sanitary sewer service in this area is provided by AWA. Existing lines are located at both the southern terminus of Wicklow Way and the western terminus of Westview Drive (north of Argonaut High School). However, to meet the conveyance and treatment requirements associated with the proposed Project, a WWTP and lift station are proposed in the northwestern portion of the WWSP site (see **Figure 2-4**). All sewer improvements would be constructed to AWA standards.

Drainage System

Onsite drainage improvements would consist of a combination of conventional subsurface and surface drainage systems, construction of pipe conveyance systems, and construction of culverts and bridges at roadway and trail crossings of creeks and tributaries. Stormwater would be discharged through outfalls into open-space corridors. Vegetated swales, soft armoring, mechanical storm filters, structural interceptors and other best management practices would be utilized at pipe outfalls or other appropriate locations for water quality management and to convey stormwater runoff to receiving waters while minimizing the effects on open-space resources. Where applicable, outfall structures would be extended past any planned bikeway alignments in the open space areas. The number and locations of outfalls would be based on the best available information and are subject to refinement during the subdivision map and improvement plan approvals, as well as state/federal permitting. Drainage facilities would be designed and constructed in conformance with the Amador County Improvement Standards.

The Specific Plan would include a Stormwater Management Plan (SWMP), a Storm Water Pollution Prevention Plan (SWPPP), Best Management Practices (BMPs), Low Impact Development (LID) measures, and end-of-stormwater treatment control to minimize and treat stormwater runoff from the Project site before it enters the natural creek system.

Electric Service

Pacific Gas & Electricity (PG&E) would provide electric service to the Project to meet peak electrical demand during Project buildout. The planned electric backbone facilities include a substation and a 60 kV transmission line corridor. Underground electrical distribution would be extended to individual parcels in conjunction with roadway improvements or phasing requirements. In addition, street lighting would be provided along all public streets as part of the roadway frontage improvements. All electric and streetlight facilities would be constructed to the County's standards at the time of construction.

Natural Gas

PG&E would provide natural gas to the Project Plan area upon request and in accordance with the rules and tariffs of the California Public Utilities Commission. PG&E's long-range plans provide for the availability of gas service to accommodate increased demand. Natural gas service would be provided to the Project Plan area from existing infrastructure adjacent to the Project site. Delivery of gas service to individual projects in the Specific Plan area would be reviewed by PG&E at the time individual projects were proposed within the Project Plan area.

Communication

The Project Plan area is within the service areas of ATT Communications, Xfinity, and Viasat. Together, these providers offer both voice and data communication services. Distribution lines to individual parcels would be extended from existing infrastructure adjacent to the Project in accordance. The providers would review the delivery of telephone, cable television, and high-speed data line services to individual projects in the Project Plan Area at the time of proposal.

Solid Waste Collection and Recycling

Amador County Environmental Services (ACES) would provide collection and recycling services to the Project Plan area. Solid waste will be collected and delivered to the Kiefer Landfill in Sacramento County. ACES operate two transfer stations in Amador County for individuals to drop off garbage, which is then transferred to Kiefer Landfill. The Authority owns a Material Recovery Facility (MRF) that receives, separates, processes, and markets recyclable materials removed from the waste stream. Residual waste is transferred to the Authority's Western Regional Sanitary Landfill located on the same site for disposal.

Offsite Improvements

Offsite utility improvement would include the extension of water and sewer lines and may also include increasing the size and capacity of these lines and increasing the capacity of the existing wastewater treatment plant prior to the construction of the onsite WWTP. Other offsite improvements would include traffic signal installations at the intersections of SR-88 and Wicklow Way and at Wicklow Way and the Walmart main entrance, as described in Section 4.14, Transportation.

Wildfires

The Project Plan area is located within a High Fire Hazard Severity Zone. The Project would incorporate land use patterns with landscaped buffer areas, fuel modification zones, a review of development plans by the ACFPD for access, fire prevention and suppression measures, fire hydrant spacing and fire flow requirements, the construction of a new fire station, and an available water supply to reduce fire hazards associated with urban/wildfire interface.

Natural Resources

Annual grasslands, a concentration of oak trees, and some drainage corridors are the dominant vegetation communities, interspersed with non-native annual grasses. The Project would establish contiguous open space areas to protect some of the most prominent natural resource areas.

In addition to resource protection, the open space areas would define the visual character of the Plan site and would provide for passive recreation opportunities, pedestrian and bike access, storm water drainage and treatment, flood water conveyance, utility infrastructure, and land use buffering.

Based on the characteristics of the Plan site, the natural resources management approach in Chapter 9 of the Specific Plan focuses on wetland resources, vegetation and wildlife, and trees. Resource management policies for open space, trees, water quality, and water conservation are presented in Section 9.1 of the Specific Plan.

An Operations and Management Plan (O&M Plan) would be implemented in accordance with applicable regulatory permits to continually monitor, report, and correct disturbances, if any, to the open space/preserve areas. For the Project Plan area, preserve and open space areas would be managed in accordance with the Open Space Preserve Management Plan.

A summary of Oak Woodland and Wetland Resources is presented below. Additional resources and mitigation measures are discussed in Section 4.3, Biological Resources, and **Appendix D**, Biological Resources Assessment, of this EIR. Preserve management strategies would address fire/fuel modification zones, mowing activities, grading and construction activities, pedestrian and bikeway paths, storm drainage systems, utility crossings, and other permitted and prohibited activities.

Oak Woodland

Oak woodland habitat covers approximately a third of the Project Plan area (approximately 74 acres). Blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and gray pine (*Pinus sabiniana*) trees comprise most of the canopy in this habitat type. There are very few immature trees and shrubs within this habitat type, likely due to shade cover and livestock grazing. The sizes of trees within this habitat type vary greatly, from small trees less than 5 inches in diameter growing densely to larger trees of varying health and condition measuring more than 36 inches in diameter. There are several large old-growth oaks present within the Plan site which are mainly valley oaks. Approximately 10 mature oaks are present within the Plan site.

Assuming a maximum removal of oak woodland (i.e., half of the existing oak woodland), at least 37 acres of oak woodland would need to be preserved per the Amador County General Plan. Consistent with General Plan requirements, the oak woodland mitigation strategy would include:

- Replanting trees at no less than a 1:1 ratio of acreage of oak woodland habitat removal beyond
 50 percent of the available habitat cover;
- Conserving oak woodland through the use of conservation easements;
- Contributing funds to the Oak Woodlands Conservation Fund to purchase oak woodland conservation easements; and
- Other mitigation measures are recommended in Section 4.4, Biological Resources, of this EIR.

Oak woodland compensation on-site within the Project Site area would occur within the Rock Creek corridor and open space preserve areas. Tree mitigation plans would be coordinated through the County for planting specifications, locations, and monitoring. It should be noted that the specific oaks to be removed would vary depending on the specific development proposals within the Project Plan area.

Wetland Resources

Wetland features on the Plan site include Rock Creek, a perennial stream, an intermittent stream, and an ephemeral drainage, as described in Section 4.4, Biological Resources, of this EIR. An estimated 1.9 acres of seasonal wetlands occur throughout the Project site along the margins of the perennial and intermittent streams.

Project design and development would avoid impacts to wetlands and waters of the U.S. through the implementation of a 100-foot buffer, as measured from the centerline of any drainage. Furthermore, should unavoidable impacts occur to wetlands and waters of the U.S. or state, the appropriate permits would be acquired, and compensatory mitigation would be provided as detailed in Section 4.4, Biological Resources, of this EIR. Additionally, a SWPPP would include best management practices to reduce erosion, sedimentation, and contamination that could indirectly impact the riparian and wetland habitats during construction.

Development Standards and Design Guidelines

The Development Standards and Design Guidelines are included in the Specific Plan (Appendix B).

Development Standards

The development standards would set the criteria for residential uses such as lot size, building coverage, lot width, setbacks, and building height within the Planned Development (PD) zoning district. For commercial uses these standards would include lot size, floor area ratio, setbacks, landscape coverage, and building height. The development standards would be intended to apply to all residential and non-residential land uses within the Project Plan area and are shown in Tables A-1 through Table A-4 of the Specific Plan.

Design Guidelines

The Design Guidelines would provide design guidance for the physical form and visual character of the Specific Plan. The Design Guidelines would encourage quality and creativity for individual development projects in the Specific Plan. The design guidelines would allow the community, commercial, neighborhood, and home design elements to respond to market conditions, site constraints and opportunities, and other factors.

The Design Guidelines would include:

- landscaping themes and street tree planting concepts along roadways
- entry features and signage that include hardscape and landscape elements;
- design and materials for walls and fencing;
- residential subdivision design; and
- commercial site design.

Development Agreement

As envisioned in the Specific Plan, the County would sell all or a portion of the Specific Plan parcel to developers or builders. At the time of sale, a Development Agreement (DA) will be required to outline the requirements and obligations of both the County and the Applicant.

Consistent with state law, a DA shall specify the duration of the agreement, the permitted uses of the property, the density or intensity of use, the maximum height and size of proposed buildings, and provisions for reservation or dedication of land for public purposes. The DA may include conditions, terms, restrictions, and requirements for subsequent discretionary actions, provided that these actions

shall not prevent development of the land for the uses and to the density or intensity of development set forth in the agreement. The DA may provide that construction shall be commenced within a specified time and that the project or any phase thereof be completed within a specified time. The DA may also include terms and conditions relating to applicant financing of necessary public facilities and subsequent reimbursement over time.

Project Construction/Phasing

The WWSP would provide for a comprehensively planned infrastructure system with coordinated phasing and construction of facilities. It is anticipated that buildout will occur over the next 20 years.

Three potential infrastructure construction phases (Phases A, B and C) are assumed as the WWSP builds out. Ultimately, build-out phases are dependent upon timing of the engagement of future developer(s) (by development/residential area); permitting, finalization and recordation of subdivision maps; and market conditions. Conceptual land use allocations by residential type and phase are summarized in **Table 2-6, Conceptual Land Use and Residential Units by Phase**.

TABLE 2-6 CONCEPTUAL LAND USE AND RESIDENTIAL UNITS BY PHASE

PHASE	Α	В	С	TOTAL
LDR	16 ac	16 ac	4 ac	36 ac
	132 du	132 du	16 du	280 du
MDR	10 ac	10 ac	3 ас	23 ac
	100 du	100 du	20 du	220 du
HDR	-	-	10 ac	10 ac
			200 du	200 du
Commercial	-	12 ac	-	12 ac
PR	5	7 ac	-	12 ac
OS	58.8 ac	-	-	58.5 ac
P/QP	15 ac	20 ac	7 ac	42 ac
Total	99.5 ac	59 ac	57.5 ac	201 ac
	232 du	232 du	236 du	700 du

In general, the phasing plan would be structured to ensure the improvements in each phase can support their respective development, and the development in each phase can support the costs of the required improvements. Infrastructure phases may be modified at the discretion of the County, in consultation with all affected County departments. The infrastructure requirements for each phase of development would include all on-site backbone infrastructure and off-site facilities necessary for the buildout of each phase as described in the DA(s). These would include roadways, sewers, water, recycled water, storm drainage, dry utilities, pedestrian pathways, schools, parks, and other facilities and improvements. All intract sewer, storm drain, water, dry utilities, and recycled water would be installed as part of local project improvements.

2.6 REQUIRED APPROVALS

For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the Project (CEQA Guidelines Section 15381). Discretionary approval power may include such actions as issuance of a permit or authorization.

The following are specific County, State, and federal entitlements that must be granted prior to approval and/or implementation of the Specific Plan.

- Adoption of a Water Supply Assessment
- Adoption of a General Plan Amendment
- Adoption of the Specific Plan, Development Standards, and Design Guidelines by Amador County
- Certification of the EIR by Amador County
- Adoption of the Mitigation Monitoring and Reporting Plan by Amador County
- Approval of Development Agreements by Amador County
- Approval of Large Lot Tentative and Final Subdivision Maps by Amador County
- Approval of Small Lot Tentative and Final Subdivision Maps by Amador County
- Design Review by Amador County
- Planned Development Approval by Amador County
- Approval of Lot Line Adjustments by Amador County
- Approval of Engineering Improvement Plans by Amador County
- Approval of Conditional Use Permits by Amador County
- Approval of Grading Plans by Amador County
- Approval of a water supply by AWA
- Approval of wastewater treatment plant capacity including potential for a new onsite wastewater treatment plant by AWA
- Army Corps of Engineers Clean Water Act Section 404 Permit for fill of wetlands and/or waters of the U.S.
- United States Fish and Wildlife Service Consultation for potential impacts to federally listed species in accordance with the Federal Endangered Species Act and Agreements pursuant to Section 7 of the Federal Endangered Species Act
- State Historic Preservation Officer Consultation regarding impacts to historic properties in accordance with Section 106 of the Nation Historic Preservation Act. May be necessary should Federal Permitting be required for the Proposed Project.
- Regional Water Quality Control Board Central Valley Region 401 Water Quality Certification,
 National Pollutant Discharge Elimination System (NPDES) discharge permit for stormwater
 and/or wastewater, and Master Reclamation Permit for Recycled Water

- State Water Resources Control Board Division of Drinking Water Public/Community Water
 System Permit
- California Department of Fish and Wildlife Section 1600 Lake and Streambed Alteration
 Agreement and consultation related to potential impacts to state listed species and species of
 concern.
- Amador County Airport Land Use Commission Airport Compatibility
- Caltrans Encroachment Permit
- City of Jackson Encroachment Permit

2.7 REFERENCES

- Amador County. 2016a. *Amador County General Plan Environmental Impact Report*. Prepared by AECOM. Adopted on October 4, 2016. Available at: https://www.amadorgov.org/home/showpublisheddocument/23918/636015941935100000. Accessed: March 21, 2023.
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- California Department of Conservation (DOC). 2022. California Department of Conservation, California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: March 21, 2023.
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3.0 LAND USE AND PLANNING

3.1 Introduction

This chapter discusses applicable land use policies and evaluates potential land use impacts associated with implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). It references planning and environmental information contained in other sections of this Draft Environmental Impact Report (DEIR). Associated regulatory requirements and potential impacts from the proposed Project are evaluated considering existing laws and regulations governing land use and planning and the existing physical environmental setting.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to land and planning include concerns to reduce retail/commercial space; provide a community arts center used for theater, after-school programming, and multi-generational classes; incorporate annexation and revenue sharing options with City of Jackson; proximity to Amador County Airport and safety risks; use of drones, kites, and balloons near the airport; consider commercial zone next to Walmart, residential zone next to southern commercial zone, and an agricultural zone between residential zone and Stony Creek Road; develop commercial uses adjacent to existing commercial uses in Amador Plaza, former Kmart building, and/or adjacent to Walmart to generate tax revenue and reduce water/wastewater demand, as compared to residential uses; retain cattle movement easement; allow some land to be used for grazing by neighboring ranches; install fences/gates to prevent access to adjoining properties; analyze impact on existing neighborhoods and commercial uses (Safeway, Walgreens, Walmart). The NOP and written and verbal comments received are included in **Appendix A**.

3.2 REGULATORY SETTING

Federal

Federal Aviation Administration (FAA) Noticing Requirements

Code of Federal Regulations (CFR) Title 14, Part 77, Safe, Efficient Use and Preservation of Navigable Airspace, requires submittal of a Notice of Construction or Alteration for applicable projects within identified airports' navigable airspace. This notification applies to structures within 5,000 feet of a public-use airport that exceed a 25:1 surface or could create a potential navigable hazard or obstruction. After submittal of the required notice, the FAA reviews the project subject to the provisions of 49 US Code Section (§) 44718 and, if applicable, Title 14 of CFR, Part 77. Objects determined to be an obstruction or hazard by Part 77, or Terminal Instruction Procedures, or that create changes to flight operations, approach minimums, or departure routes would be considered incompatible. Proposed developments may be incompatible and would require evaluation if they would generate other obstructions, such as release of any substance that would impair visibility (e.g., dust, smoke, or steam); emit or reflect light that could interfere with air crew vision; produce emissions that would interfere with aircraft communication systems, navigation systems, or other electrical systems; or attract birds or waterfowl. Upon completion of the aeronautical review, the FAA issues either a Determination of Hazard to Navigation (i.e., if a project would exceed an obstruction standard and result in a "substantial aeronautical impact") or a Determination of No Hazard to Navigation. In the latter case, the FAA may

include site-specific conditions or limitations to ensure that potential hazards are avoided (e.g., noticing requirements or lighting restrictions).

State

California Government Code

California Government Code §65450 through §65457 establishes procedures and standards for specific plans and defines both the contents and methods by which a specific plan must be locally adopted. Government Code §65302.3 further requires that general plans and any applicable specific plan be consistent with Airport Land Use Compatibility Plans (ALUCP) prepared in accordance with Public Utilities Code §21675. Any Project changes that result in compatibility issues with the ALUCP require that general plans and applicable specific plans be amended accordingly.

California Airport Land Use Planning Handbook

The 2011 California Airport Land Use Planning Handbook provides guidance for determining consistency between local planning documents and the Airport Land Use Commission's (ALUC's) ALUCP. When an ALUC chooses to establish development standards in an ALUCP to prevent airport noise and safety hazards, they are indirectly setting development standards for local government because local government general and specific plans (and therefore their implementing standards) must be consistent with the ALUCP [§21670.1(c)(2)(D) and Government Code §65302.3(a)], unless the conclusion of the overrule process allows otherwise.

Local

Amador County General Plan

The Amador County General Plan (General Plan) was adopted on October 4, 2016. The goals, policies, and implementation programs make up the County's land use strategy through 2030. There are seven mandated general plan elements required by California Government Code §65302 and the California General Plan Guidelines, commonly referred to as Land Use, Circulation, Conservation, Open Space, Governance, Safety, Noise, and Housing. The General Plan also contains an Economic Development Element. The following discussion summarizes each element relevant to the proposed Project. In addition, applicable goals and policies within each element pertaining to the WWSP are evaluated in detail and presented in Table 3-1, Consistency with Amador County General Plan Applicable Goals and Policies.

Land Use Element

The Land Use Element sets forth the County's vision for future land uses and identifies how the physical environment will be shaped. This element defines the future location, type, and intensity of land uses and the desired mix and relationship between them. Land use designations presented in this element identify the types and nature of development permitted throughout the unincorporated area of the County. The goals, policies, and implementation programs that make up the County's land use strategy through 2030.

Circulation and Mobility Element

The Circulation and Mobility Element outlines a plan for efficient and safe transportation of people and goods in the County. The element contains goals, policies, and implementation programs that establish the County's circulation system to accommodate pedestrians, bicycles, motor vehicles, public transit, and other means of travel. Together, the policies, implementation programs, and diagrams are intended to ensure transportation connectivity between incorporated cities, within existing and new development in unincorporated areas, within the Town Centers, Martell Regional Service Center, and Special Planning Areas, and to places outside the County.

Conservation Element

The Conservation Element describes the breadth of natural and cultural resources present in the County, which contribute to its rural character and economic diversity. The purpose of the Conservation Element is to identify the County's important resources, including water, energy, agriculture and agricultural lands, timber, mineral resources, historic and cultural resources, and clean air, and establish a framework for their conservation and judicious use.

Open Space Element

The Open Space Element addresses open space for the managed projection of resources, outdoor recreation, public health and safety, and the preservation of natural resources. The County's open space areas support recreational uses, vegetation, and wildlife habitat and help to maintain the County's scenic beauty. The purpose of this element is to identify goals, policies, and implementation measures that manage, conserve, and enhance these resources for current and future residents and visitors.

Noise Element

The purpose of the Noise Element is to reduce noise through a combination of land use planning, site criteria, site and building design approaches, and enforcement strategies. The policies and programs described in this element focus on protecting the quality of life found within rural communities, residential areas, schools, and other noise-sensitive uses from the persistent hazards of excessive noise and on protecting existing and potential noise generators from encroachment by noise-sensitive uses.

Housing Element

State Housing Element law requires "[a]n assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs." The goals of the Housing Element provide a framework for compliance with California Government Code §65583, which requires the Housing Element contain a "statement of the community's goals, quantified objectives, and policies relative to the maintenance, improvement, and development of housing." For the County, the purpose of these requirements is to develop an understanding of the existing and projected housing needs within the community and to set policies and schedules promoting the preservation, improvement, and development of diverse housing types available at a range of costs.

Economic Development Element

The purpose of the Economic Development Element is to focus attention and effort on the need to provide an appropriate balance between residential, commercial, industrial, agricultural, timber, and

open space land uses. The appropriate balance will allow the county to provide the necessary and desirable service while maintaining a desired quality of life.

Amador County Zoning Ordinance

The Amador County Municipal Code consists of regulatory, administrative, and penal ordinances. Those that relate most closely to land use and planning include Title 17, Divisions of Land, and Title 19, Zoning. Title 17 regulates new concepts and innovations of building sites and provides minimum improvement requirements and the process for dividing land and using parcel maps. Title 19 establishes various districts within the unincorporated County area to accommodate uses identified in the General Plan. It guides development and controls and regulates future growth of the County. It also protects the character of the County and promotes public safety.

Airport Land Use Plan for Westover Field, Amador County

The ALUCP provides the basis for compatible planning within the vicinity of a public airport. These plans may include land use measures specifying uses, height restrictions, and building standards. The planning boundary of the ALUCP is the "airport influence area," or AIA, as established by the ALUC. An ALUCP contains policies and criteria that address compatibility between airports and future land uses that surround them by addressing noise, overflight, safety, and airspace protection concerns to minimize the public's exposure to excessive noise and safety hazards within the AIA for each airport over a 20-year horizon. The ALUCP provides findings, policies, and implementation mechanisms of policies at Westover Field Airport.

Amador Local Agency Formation Commissions

In California, the County Local Area Formation Commission (LAFCO) is responsible for approving annexations and similar changes to municipal and district boundaries, consistent with the requirements of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act) (Gov. Code, §56000 et seq.). The role of the LAFCO is to encourage orderly growth and development essential to the social, fiscal, and economic well-being of the state (Gov. Code §56001). Specific policies established by the CKH Act promote orderly development patterns by discouraging urban sprawl and preserving open space and prime agricultural lands. To implement the requirements listed above, LAFCOs have the specific authority to review the following actions:

- Annexations to, or detachment from, cities or districts;
- Formations or dissolution of districts;
- Incorporation or dissolution of cities;
- Consolidation or reorganization of cities and districts;
- Establishment of subsidiary districts; and,
- Development of, and amendments to, spheres of influence.

Amador County Regional Transportation Plan

The Regional Transportation Plan (RTP) is a multi-modal long-range planning document prepared by the Amador County Transportation Commission (ACTC). The RTP is updated periodically to address a 20-year projection of transportation needs. Each agency responsible for building and managing transportation

facilities, including the County, has implementation responsibilities under the RTP. The RTP relies on local plans and policies governing circulation and transportation to identify the region's future multi-modal transportation system. The 2020 RTP includes programs and policies for local streets and roads, public transit, pedestrian, and bicycling access, etc.

3.3 ENVIRONMENTAL SETTING

Project Site

The approximately 201-acre proposed Project site is in the unincorporated western part of the County near the cities of Jackson, Sutter Creek, and the town of Martell. Specifically, the site is located west of the City of Jackson and south of State Route (SR) 88, one mile west of the intersection with SR-49, within the Martell Regional Service Center (RSC).

The WWSP site is best characterized as being rural and is currently used for cattle grazing, and there is a dirt road network used to support cattle grazing activities. Physically, the site contains grasslands, oak woodlands, and oak savanna with ephemeral drainages and one perennial creek. Topography onsite ranges from areas of relatively flat ground to sloping hilly areas. The site slopes downward to both the east and west and ranges in elevation from approximately 1,300 to 1,500 feet above mean sea level.

The majority of the proposed Project site has a General Plan Land Use designation of RSC, and a smaller portion of the site has a designation of Residential Medium (RM). These land use designations are illustrated in **Figure 2-5**. The RSC designation allows for larger-scale service centers with combinations of residences, commercial, industrial, and public service uses serving countywide needs and/or communities in nearby counties. The RM designation is suitable for higher-density single- or multi-family uses in developed areas with public water and sewer service and areas set aside for primarily residential planned development under specific plans or master plans. Some compatible neighborhood commercial uses may be permitted.

Under the Amador County Zoning Ordinance, the proposed Project site is zoned R-1 (Single Family Residential), C-1 (Retail Commercial and Office), and R-3 (High Density Multiple Family Residential). Zone districts for the site are illustrated in **Figure 2-4**, Zoning. The following uses are permitted in the R-1, C-1, and R-3 zones, either by right or with the issuance of a conditional use permit:

Single Family Residential (R-1):

- Single-family dwellings;
- Home Occupations;
- Guest houses, servants' quarters; and,
- Crop and tree farming.

Retail Commercial and Office (C-1):

- Retails, office and business and personal service uses, conducted within a building, and mini warehouses. Emergency shelters and transitional/supportive housing;
- Service stations;

- Drive-in uses, including theaters;
- Outdoor area, nurseries, boat docks and boat repairs; and,
- Single-family dwelling when combined in the same structure as a commercial use.

High Density Multiple Family Residential (R-3):

- Multiple-family dwellings; and,
- Dwelling groups.

Surrounding Land Uses

The proposed Project site is situated between land under the jurisdiction of the County and land under the jurisdiction of the City of Jackson.

Amador County

Surrounding land to the north, northeast, south, southeast, and west are within the jurisdiction of the County and are designated as RSC, RM, Agricultural General (AG), and Agricultural Transition (AT) (see **Figure 2-5**). As discussed above, permitted uses in the RSC and RM include a combination of commercial and residential. The AG and AT designations permit grazing with residential densities dependent upon topography (AG) and lands suitable as transitionary between agriculture and rural residential (AT).

The corresponding County zone districts north of the proposed Project site include C-1, C-2, and Planned Development (PD); to the east and Trailer - Camp and Exclusive Agriculture (see **Figure 2-4**). Uses allowed in these zone districts include, but are not limited to, retail, offices and businesses, service stations, wholesale, service and storage, industrial and recreational, and general farming. Existing land uses include Walmart and other developed commercial properties to the north and open grazing land to the southeast, south, and west. There is also a 15.68-acre vacant parcel designated as RM and RSC between the site and grazing land further to the east.

City of Jackson

Lands directly east of the proposed Project site are within the jurisdiction of the City of Jackson and are designated by the City's General Plan as Public and Residential Single Family, respectively. The corresponding zoning includes Residential Single Family and Public/Institutional. Uses allowed in these zone districts include, but are not limited to, single-family residential and accessory buildings, schools, hospitals, churches, etc. Argonaut High School is located south/southeast and in a single-family residential neighborhood to the east.

3.4 IMPACTS

Method of Analysis

The analysis of potential impacts related to land use and planning resulting in implementation of the proposed Project is based upon consistency with the applicable goals and policies of plans discussed in Section 3.0.2, Regulatory Setting.

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, an impact on land use is significant if implementation of the proposed Project would:

Physically divide an established community; or

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.

Impact Analysis

Impact 3.0-1

WOULD THE PROJECT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
No Impact	None Required	No impact

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad, or removal of a means of access, such as a local road or bridge, that would impact mobility within an existing community or between a community and outlying area. The division of a community may lead to a variety of environmental impacts, such as creating longer commute times (and subsequent increases in air quality or GHG emissions) or the indirect impact of additional development to support a once unified but now divided community.

The proposed Project site is currently undeveloped and is situated between two separate areas of development within the County to the north and the City of Jackson to the south. The proposed Project includes roadways and infrastructure, that would provide access and mobility throughout the site and connectivity to surrounding roadways and communities. The primary circulation system would offer a north-south connection to the Martell RSC and the cities of Sutter Creek and Jackson. Consequently, the proposed Project would reduce the current geographic division by improving access, including walkability and bicycle opportunities. Implementation of the proposed Project would not physically divide any established community; therefore, there would be **no impact**.

Impact 3.0-2

WOULD THE PROJECT CAUSE A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO CONFLICT WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM BIO-1 though MM BIO-8 presented in Section 4.4 Biological Resources and MM CR-1 through MM CR-3 presented in Section 4.5 Cultural Resources Refer to Sections 4.1 – 4.17 for a discussion of the implementation of mitigation measures to address potential environmental impacts.	Less than Significant

The State CEQA Guidelines §15125(d) require that an EIR analyze the potential for inconsistencies between a proposed project and applicable general plans, specific plans, and regional plans. The proposed Project was designed to be consistent with relevant plans and policies. **Table 3-1 Consistency with Amador County General Plan Applicable Goals and Policies** provides a discussion of relevant goals and policies and the proposed Project's consistency.

Consistency with Amador County General Plan

The proposed Project is implementation of the WWSP. A specific plan is a land use planning and regulatory tool authorized by the State to local governments to implement the broad goals and policies of the local general plan. A specific plan provides the link between the policies within a local general plan and the more precise development plans for a defined area. State law requires that specific plans must be consistent with the adopted local general plan.

The General Plan designates the proposed Project site RSC and RM. As described in the Land Use Element, the RSC land use designation is assigned to those areas suitable for larger-scale service centers with combinations of residences, commercial, industrial, and public service uses serving countywide needs and/or communities in nearby counties. The intent of the RSC designation is to restore and build anew the county's historic town environments, creating places where residents and visitors can walk and bike to services, stores, restaurants, parks, and other public uses. The RM designation is assigned to areas suitable for higher-density single or multi-family uses in developed areas with public water and sewer service. Examples of intended uses of the RM designation are single-family homes, duplexes, or townhouses. Consistent with these land use designations, the WWSP acts as a guide to the development of the proposed Project site with residential and local-serving commercial uses.

The specific plan must also describe in detail the relationship of the specific plan to the locally adopted general plan and how implementation of the specific plan would assist in implementing the goals and policies of the general plan. Additionally, the Land Use Element of the General Plan recognizes the use of specific plans as a tool to implement the General Plan for geographic areas or individual development sites. The Project implements the goals and policies of the County's General Plan and augments these goals and policies by providing specific direction to reflect conditions unique to the site. Implementation of the WWSP is intended to result in the systematic and orderly development of the site. It should be noted that no specific developer or builder has been identified, and the WWSP includes a conceptual program for phasing the construction of public improvements and review of individual development projects.

General Plan goals, objectives, and policies aimed at reducing or avoiding environmental effects applicable to proposed development are contained in various Elements. As discussed in **Table 3-1**, the proposed Project would be consistent with applicable goals, objectives, and policies of the General Plan Land Use Element; Circulation and Mobility Element; Economic Development Element; Conservation Element; Open Space Element; Governance Element; Safety Element; Noise Element; and Housing Element. Accordingly, the proposed Project would not result in a conflict with or create inconsistencies with the General Plan.

However, while the Project would not conflict with General Plan goals and policies, the very nature of implementing some of the policies results in significant impacts. While the County acknowledges the need for housing and services to support existing and future residents, this growth brings changes that,

when occurring in a largely undeveloped and rural area, result in significant impacts. Thus, the County's approach is to manage growth in a manner that results in the fewest impacts. Mitigation is provided, which would reduce impacts (and conflicts with the General Plan). Refer to Section **4.4 Biological**Resources and MM BIO-1 through MM BIO-8 and Section **4.5 Cultural Resources MM CR-1** through MM CR-3.

As shown in **Table 3-1**, the Project is consistent with the applicable air quality policies of the General Plan as they relate to encouraging development near existing, activity centers, and commercial areas to reduce vehicle mile traveled impacts (see Policies C-1,9 and C-9.2). Additionally, the Project is consistent with other policies that protect sensitive receptors through the separation of land uses and encourage energy conservation (C-9.3 and C-9.4). However, as discussed in discussed further in Section **4.3**, **Air Quality**, the Project may have growth-inducing impacts, and at this time, there are not sufficient details to determine if the emissions from the proposed Project would result in an increase or decrease in emissions as envisioned by implementation of the General Plan. This ambiguity creates a conflict between meeting air quality attainment goals and the State Implementation Plan (SIP). However, this is not considered a land use impact as the Project was designed to be consistent with policies as they relate to land use and planning.

Likewise, as discussed in Sections 4.6, Energy and 4.8, Greenhouse Gas Emissions, the Project is consistent with Amador County General Plan policies and goals with respect to energy and greenhouse gas (GHG) emissions. The WWSP has several policies that aim to reduce GHG emissions, including encouraging walking and bicycling, locating transit stops in the community using efficient landscaping, and water use conservation. The proposed Project is located at the edge of a suburban growth area in an otherwise rural county. It is projected that with the proposed Project, average vehicle miles traveled (VMT) per person and per employee will decrease below County averages. The proposed Project has a variety of housing densities proposed and encourages affordable housing development. Yet, as discussed in both sections, the Project cannot implement some of the strategies of the Amador County Energy Action Plan; however, as is recognized in the language of the strategies themselves, some actions may not be enforceable or feasible. So, while the Project is not able to fully achieve the goals of the Energy Action Plan strategies, it is consistent with the General Plan and does include design features that encourage energy conservation and subsequently a reduction in GHG emissions.

Refer to Sections 4.1 through 4.17 for additional discussion of potential impacts to environmental issue areas.

Amador County Zoning Ordinance

Defined zone districts are generally aligned with general plan land use designations identified by the general plan land use map. In turn, the zoning ordinance typically defines the development standards for properties within each designation. Adoption of a specific plan that is consistent with the goals and policies of a general plan provides more flexibility for land uses and development standards prescribed for the specific plan area based on the underlying zone district. A specific plan is a planning tool designed to bridge this relationship between a jurisdiction's general plan and zoning ordinance.

The proposed Project establishes development regulations to implement the WWSP in lieu of standard zoning classifications. Although the site is located within the C1, R1, and R3 zone districts, onsite land uses would be governed by proposed PD Residential zones, which are consistent with the County's

Zoning Ordinance for residential development. Specifically, this zoning is equal to Low Density Residential (PD-R1), Medium Density Residential (PD-R2), and High Density Residential (PD-R3) zones. In addition, the proposed Project would establish the PD - Community Commercial (CC), Public/Quasi-Public (P/PQ), Open Space (OS), and Parks and Recreation (PR) zones districts in accordance with the development standards contained within the WWSP. In cases where development standards are not specifically expressed in the WWSP, existing policies and standards of the General Plan and Zoning Ordinance would apply.

The existing proposed Project site zoning C1, R1, and R3 (commercial and residential) are not zones indicative of protecting environmental resources. Generally, land uses associated with the proposed Project zoning would be consistent with the existing zoning, apart from the OS and PR zones, which are not development-intensive zones but rather natural resource protection districts. The establishment of new zoning districts is allowed through the General Plan process and would not create land uses that would result in a significant environmental impact.

Amador County Regional Transportation Plan (RTP)

The RTP contains goals and policies to reduce congestion, optimize connectivity and integrate transportation improvements to support economic development.

The circulation system for the proposed Project includes a hierarchy of roadways and other improvements designed to link existing and planned County and regional facilities. The primary residential loop road is intended to provide circulation throughout the site to connect residential areas to collector streets, parks, open space, and the planned school. Local streets may be public or private. Private roadways may be supplemental to the public roadway system.

The proposed Project would extend Wicklow Way from its northern terminus near Walmart to Stony Creek Road in the south. This would connect SR-88 to Stony Creek Road and ease reliance on existing north-south connectors, such as Argonaut Lane. This roadway would also provide a linkage from the City of Jackson to commercial land uses north of the proposed Project site. The WWSP's system of pedestrian and bike paths and pedestrian pathways would add to the mix of transportation choices available for residents. Off-street bike paths are included in landscape corridors and open-space areas, and bike lanes are provided on public streets. The proposed Project incorporates a new circulation system of multi-use paths and bikeways to connect non-vehicular travel within the WWSP area. The bikeway and pedestrian network would allow pedestrians and bicyclists to access commercial, residential, and public/quasi-public uses throughout the WWSP area.

The extension of Wicklow Way, in conjunction with the overall circulation strategies of the proposed Project are consistent with RTC goals and policies to reduce congestion, optimize connectivity, and support economic development through transportation improvements. The RTP also identifies that new developments should study transportation impacts and be responsible for implementing and funding mitigation/improvements. In accordance with the RTP, a transportation study was prepared (see **Section 4.14** Transportation and **Appendix F**), and future development project applicants would be responsible for covering the financial burden for roadway improvements.

The proposed Project would not conflict with the RTP; therefore, no impact would occur.

Westover Field Airport Land Use Compatibility Plan

The Westover Field Airport is located approximately one mile from the eastern border of the proposed Project site. The northeast portion of the site is in Safety Zone 6. This zone is on the outer perimeter of the AIA, and while there are recommended restrictions, the proposed WWSP land uses are consistent with those allowed in Zone 6. However, land uses may be restricted if aircraft noise would exceed noise standards set forth in the ALUCP. A portion of the proposed low-density residential area lies within the airport's 55 dBA noise contour, as shown on **Figure 2-6**. The proposed Project would require that these residences incorporate noise control measures to reduce interior noise levels to 45 dBA CNEL or less.

Noise Compatibility Criteria, of the ALUCP establishes noise compatibility standards for land uses. Prior to the approval of any specific development within the WWSP area, future projects would be required to demonstrate compatibility with these standards. At the time of consideration of individual developments, a site-specific noise analysis would be required to determine final noise control measures required to achieve compliance with interior noise level standards. Refer to Section **4.11**Noise and Mitigation Measure NOI-2 Airport Land Use Compatibility Noise Control that addresses impacts from proximity to the ALUCP.

Therefore, implementation of the proposed Project and **Mitigation Measure NOI-2** would not result in a conflict with or create inconsistencies with the Westover Field Airport ALUCP.

Conclusion

Based on the discussion above, with the incorporation of MM BIO-1 through MM BIO-8 presented in Section 4.4 Biological Resources and MM CR-1 through MM CR-3 presented in Section 4.5 Cultural Resources the proposed Project would not conflict with applicable land use plans, policies, or regulations, and therefore, impacts are less than significant.

3.5 CUMULATIVE IMPACTS

Impact 3.0-3

WOULD THE PROJECT RESULT IN IMPACTS REGARDING LAND USES AND PLANNING IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM BIO-1 though MM BIO-8 presented in Section 4.4 Biological Resources and MM CR-1 through MM CR-3 presented in Section 4.5 Cultural Resources Refer to Sections 4.1 – 4.17 for a discussion of the implementation of mitigation measures to address potential environmental impacts.	Less than Significant

The geographic scope for the cumulative land use analysis includes Amador County. Land uses and development patterns are typically established in local land use planning documents specific to jurisdictions but can have implications on surrounding areas. Cumulative project development within the County would be required to comply with the General Plan. Projects that are inconsistent with existing land use designations would require approval of a General Plan amendment, as applicable. Future implementation of the WWSP and development plans of surrounding communities would not result in significant cumulative impacts related to land use. The proposed WWSP establishes a framework for orderly development and would not result in land uses or transportation/circulation routes that would physically divide existing communities, or conflict with existing plans, policies, or regulations. Therefore, implementation of the WWSP would not contribute to a significant cumulative land use impact.

3.6 MITIGATION MEASURES

With the incorporation of MM BIO-1 though MM BIO-8 presented in Section 4.4 Biological Resources and MM CR-1 through MM CR-3 presented in Section 4.5 Cultural Resources, cumulative impacts to land use are reduced to less than significant. Refer to Sections 4.1 – 4.17 for a detailed discussion of the implementation of mitigation measures to address potential environmental impacts.

3.7 GENERAL PLAN USE CONSISTENCY

The following **Table 3-1 Consistency with Amador County General Plan Applicable Goals and Policies** provides a discussion of the consistency of the proposed Project with applicable goals and policies of the Amador County General Plan.

TABLE 3-1 CONSISTENCY WITH AMADOR COUNTY GENERAL PLAN APPLICABLE GOALS AND POLICIES

POLICY	CONSISTENCY
Goal LU-1: Attain a diverse and integrated mix of residential, commercial, agricultural, industrial, recreational, public, and open space land uses.	The proposed Project includes a mix of land uses including low-, medium-, and high-density residential; commercial and office; public/quasi-public; schools and civic facilities; parks and open space. At buildout, implementation of the WWSP will provide approximately 700 dwelling units, add approximately 100,000 square feet (sf) of retail and office space, and a potential 10-acre site for a consolidation of County civic offices. Parks, open space, an elementary school, and a fire station are also intended to provide a comprehensively planned area that supports housing, jobs, and community amenities. Once developed, the WWSP would connect existing commercial, residential, and school uses. These connections include the creation of urban land uses, expansion of open space preserves, new circulation linkages, and connections via a pedestrian and bicycle network. The proposed Project is consistent with this goal.
Policy LU-1.1: Protect existing land uses and public facilities from encroachment by incompatible land uses.	The proposed Project would introduce new land uses into an undeveloped area; however, it would also provide a logical consolidation of uses between two separated and disparate developed areas north and south of the proposed Project site. The proposed WWSP is designed to develop the more intensive commercial and residential adjacent to the existing Walmart and commercial uses along SR-88 with lower density residential adjacent to the existing neighborhood to the east. The low-density residential uses are sited with consideration to topography and other natural features. The low density residential and open space land uses would provide a buffer between the more intense land uses and agricultural land adjacent to the southern and western edge of the site.

POLICY	CONSISTENCY
	The proposed Project is consistent with this policy.
Policy LU-1.2: Designate residential areas of varying densities to create the opportunity to provide affordable housing for all income levels. Consider affordable and senior housing needs in the siting and design of residential projects.	The high-density residential land use designation is intended to allow apartments, condominiums, and townhomes. According to state housing law, high density parcels are "deemed appropriate to accommodate housing for lower income households". The medium density residential housing is intended to provide home opportunities to first time homeowners as wells as senior populations interested in downsizing. The proposed Project is consistent with this policy.
Policy LU-1.3: Encourage development patterns which support water quality objectives; protect agricultural lands and natural resources; promote community identities; minimize environmental impacts; enable viable transit, bicycle, and pedestrian transportation; reduce greenhouse gas emissions; and promote public health and wellness.	Twenty-three percent of the proposed WWSP site is planned for parks and open space. Several of the existing natural features would be retained within open space areas, including Rock Creek drainage and tributaries that have high-quality natural resources. The Open Space Plan (WWSP, Figure 9-1) presents how proposed Project design will provide buffers between more intense uses and surrounding agricultural land uses. As required, the proposed Project would comply with National Pollution Discharge Elimination (NPDES) regulations and approvals from various state and federal agencies tasked with protecting natural resources. As identified in the WWSP, prior to the approval of individual developments, the County and applicants would engage with agencies to approve applications that minimize impacts to resources and create open space preserves and wetlands. The WWSP vision is to create a new community that meets or exceeds County development standards through amenities and services and distinguishes itself through an efficient design and development pattern. The proposed Project's system of pedestrian and bike paths and pedestrian pathways add to the mix of transportation choices. Off-street Class I and Class IA bike paths are included in landscape corridors and open space areas. On-street Class II bike lanes are provided on public streets 1. The system of pedestrian and bike paths are enhanced by street design standards which place priority on pedestrian comfort and safety. A focus on non-motorized transportation would both assist in reducing greenhouse gas emissions and encourage public health and wellness.
	The proposed Project is consistent with this policy.
Policy LU-1.6: Balance communities' interests in protecting agriculture, historic, cultural, and natural resources, and species with the property rights of individual landowners.	The County owns the proposed Project site and has considered the surrounding land uses in designing the proposed Project. The County has balanced community interests to have a centralized area that supports a combination of land uses and a connection between existing commercial, residential, and school uses. The proposed WWSP design places more intense urban uses closest to existing development (SR-88 / Walmart to the north and residential and school uses to the south and east) with open space and lower density land uses along the periphery adjacent to existing agricultural land uses. Thus, land use conflicts are reduced through design. In addition, the proposed Project is designed to retain the site's natural features and protect cultural and historic resources (see Section 4.5, Cultural Resources.)
	The proposed Project is consistent with this policy.
Goal LU-2: Enhance and maintain separate and distinct community areas within the county.	The proposed Project site is designated as Regional Service Center (RSC) and Residential Medium (RM). The intent of the RSC designation is to restore and build anew the County's historic town character, creating places where residents and visitors can walk and bike to services, stores, restaurants, parks, and other public uses while the RM designation allows for a variety of housing types. The vision is to create a new community that meets or exceeds the County's development standards through amenities and services and distinguishes itself through an efficient design and development pattern. The WWSP Design Guidelines provide design guidance for

¹ Class I bike lanes provide a separated right of way for exclusive use of bicycles and pedestrians where crossflow by motorists is minimized. Class II bike lanes provides a striped lane for one-way bike travel on a street or highway.

POLICY	CONSISTENCY
	physical form and visual character to encourage quality and creativity for individual development projects.
	The proposed Project is consistent with this goal.
Policy LU-2.1: Direct development to areas with existing urban services and infrastructure, or to areas where extending urban services is feasible given distance from developed areas and topography, capacity, or land capability.	The proposed Project site is situated between two disparate areas of development, residential and school land uses to the south and east and commercial uses to the north. Currently there is no onsite infrastructure which would need to be extended to the site to accommodate new development. This is a logical extension of infrastructure from existing adjacent uses. The proposed Project provides for high level planning for utility infrastructure and phasing of infrastructure improvements where funding obligations would be included in Development Agreement(s) prepared at the time specific development projects area proposed. The proposed Project is consistent with this policy.
Policy LU-2.2: Target future commercial, industrial, and residential growth to Town Center and Regional Service Center locations, including the communities of Martell, Pine Grove, Buckhorn, and River Pines.	The proposed Project is within the Martell RSC and would provide for land uses consistent with RSC and RM designations. The proposed WWSP would allow for a variety of community commercial uses including retail and office, civic and public uses, residential of varying densities, and open space. The proposed Project is consistent with this policy
Policy LU-2.3: Promote higher density or intensity development in infill areas, or areas adjacent to existing communities or activity centers.	Currently there is a disconnect between the commercial land uses on the northern edge of the proposed Project site and residential and school uses on the southern and eastern edge. Once developed, the proposed Project would connect to existing surrounding commercial, residential, and school uses. Proposed The Project is designed to create an efficient use of land, reducing urban sprawl with development intensification on the approximately 201 acres, allowing for open space preservation. Proposed land uses include a diversity of housing types; compact design; local-serving community commercial node with office and business professional uses; efficient vehicular, pedestrian and bicycle circulation; resource conservation and proximate access to parks and open space. The residential component on the eastern side of the WWSP area allows opportunities for students to walk to Argonaut High School. The proposed Project includes both motorized and non-motorized connections from the residential land uses to the commercial, public/quasi-public land uses, and open space. The proposed Project is consistent with this policy.
Goal LU-13 : Maintain compatible land uses in the vicinity of Westover Field.	The Westover Field Airport is located approximately one mile from the eastern border of the proposed Project site. The northeast portion of the WWSP site is within Safety Zone 6 which is on the outer perimeter of AIA and while there are recommended restrictions, the proposed Project land uses are consistent with the allowable uses in this zone. However, land uses may be restricted if aircraft noise would exceed allowable noise criteria set forth in the ALUCP, Table 3-1, Noise Compatibility Criteria. A portion of low-density residential lies within the airport's 55 dBA exterior noise contour. Prior to the approval of any specific development, future projects would be required to demonstrate that they are compatible with the ALUCP noise standards which requires that residences incorporate interior noise control measures to reduce interior noise levels to 45 dBA CNEL or less. Interior noise control measures may require the use of glazing and exterior doors with an improved sound transmission class rating or the use of resilient channels on exterior walls and ceilings. A site-specific noise analysis shall be conducted to determine final noise control measures to ensure compliance with these standards. Refer to Section 4.11 Noise for additional discussion of airport-related noise. The proposed Project is consistent with this goal.
Policy LU-13.1: Ensure that future	The northeastern portion of the proposed Project site is in Zone 6 of the AIA and would
development proposals within the	be reviewed to incorporate noise attenuating features. A site-specific noise analysis

POLICY	CONSISTENCY
Airport Land Use Plan area are consistent with the requirements of the ALUCP.	shall be conducted to determine the final noise control measures required to achieve compliance with the County's exterior and interior noise level standards. Refer to Section 4.11 Noise for additional discussion of airport-related noise.
	The proposed Project is consistent with this policy.
Policy LU-13.2: Protect viability of Westover Field. Future land uses should not restrict permitted activities.	The proposed land uses are typical of urban development and would not conflict with airport operations. Land uses are subject to the WWSP Design Guidelines requiring conformance to height limitations; development standards and commercial structures may be 50 feet tall subject to ALUC approval and no lighting or glare that could interfere with aircraft navigation. The proposed Project does not contain sensitive or unique land uses that would restrict airport activities.
	The proposed Project is consistent with this policy.
Policy CM-1.4: Encourage greater connectivity on local roads and improve connections between unincorporated communities. Ensure multiple routes are available between communities wherever possible.	The circulation system for the proposed Project includes a hierarchy of roadways and improvements designed to link existing and planned County and regional facilities. The backbone roadway system includes a combination of arterial and collector streets to provide connections from existing and planned adjacent roadways. These roadways are designed to accommodate future anticipated local and area traffic demands. The design of the backbone roadway system supports the creation of a smaller neighborhood network of local roadways. The proposed primary residential streets would provide main connections into residential subdivisions. The primary residential loop road is planned to provide circulation throughout the proposed Project to connect residential areas to the collector streets, parks, open space and planned schools. Local streets may be public or private. Private roadways may serve as supplemental to the public roadway system.
	The proposed Project is consistent with this policy.
Goal CM-3 : Provide transportation alternatives to automobiles.	The proposed Project provides opportunities for multi-modal circulation, with infrastructure to accommodate vehicles, public transit, bicyclists, and pedestrians. The WWSP Vision and Principles outline a system of pedestrian and bike paths and pedestrian pathways which add to the mix of transportation choices available for residents. Off-street Class I and Class IA bike paths are included in landscape corridors and open space areas along with on-street Class II bike lanes. The system of pedestrian and bike paths are enhanced by street design standards which place priority on pedestrian comfort and safety. Amador County Transit operates the Route 5 Shuttle in the vicinity of the proposed WWSP site, with transit stops along Wicklow Way near Walmart and Argonaut High School. Route 5 follows a circular route encompassing 37 stops. It commences at the Sutter Hill Transit Center, providing a 1-hour frequency of service, operating between 9:05 AM to 3:15 PM on weekdays. Residents would be able to access the bus stop locations via the system of paths and pedestrian pathways. The proposed Project is consistent with this goal.
	The proposed Project encourages non-motorized travel. This is accomplished through
Policy CM-3.4: Consider transportation needs in the context of new development proposals. Promote land use patterns which place residents near activity centers and essential services to reduce the need for frequent automobile travel.	siting residential land uses in walking or biking distance to community commercial uses and recreation coupled with providing the infrastructure such as bike lanes and pedestrian pathways. Specifically, residential uses are planned south and east of the commercial area, and a portion of those uses are within a one-quarter mile walk of the commercial area. Also, there would be the opportunity for future Argonaut High School students to walk to school. Internally, neighborhoods in the proposed Project would be connected by a unique system of walking paths and trails that would link the residential land uses to the recreational uses.
Goal E-4: Improve jobs-housing	The proposed Project is consistent with this policy.
balance and maintain the fiscal health of the County.	As of 2020 the County had a jobs-housing balance of 0.76, indicating that there was slightly more housing than jobs. The WWSP proposes 100,000 sf of commercial uses in addition to the public/quasi-public civic uses both of which would create employment

POLICY	CONSISTENCY
	opportunities. A consolidation of the County civic offices is anticipated to provide for approximately 235 permanent jobs. Additionally, the WWSP proposes a mix of land uses and facilities which are fiscally feasible and would implement funding mechanisms to maintain a neutral/positive fiscal impact to the County's General Fund.
	The proposed Project is consistent with this goal.
Policy E-4.2: Promote a balance of commercial and industrial development to residential development which maintains the	The proposed Project proposes 100,000 sf of commercial uses and 700 residential units. Additionally, the WWSP proposes a mix of land uses and facilities which are fiscally feasible and would implement funding mechanisms to maintain a neutral / positive fiscal impact to the County's General Fund.
fiscal health of the County.	The proposed Project is consistent with this policy.
Policy E-9.4: Direct future development toward "infill" areas (areas of existing urban development), areas contiguous to cities, and areas with infrastructure and services to maintain viability of existing agricultural land.	While infill development is often considered in the context of smaller sites in densely populated urban centers; in the more rural Amador County, infill development can be considered in the context of larger undeveloped parcels that exist between areas of development where it is logical to extend services and concentrate development to prevent sprawl and protect rural character. The proposed Project site is situated adjacent to the northern and western jurisdictional boundary of the City of Jackson and the southern edge of the Martell RSC. The proposed Project would connect two disparate areas of development and cluster a mixture of land uses to discourages a disjointed development pattern. This allows for retention of open space and preservation of agricultural lands.
	The proposed Project is consistent with this policy.
Policy E-9.5: Review future development for compatibility with existing adjacent and nearby	The proposed Project has been designed to consider sensitive surrounding land uses. Agricultural lands are present to the south, southwest, and west of the WWSP site and the Open Space Plan (Figure 9-1 of the WWSP) establishes buffers between more intense land uses and existing agricultural land uses.
agricultural uses.	The proposed Project is consistent with this policy.
Policy E-9.8: Encourage use of site planning techniques such as properly maintained buffers, building envelopes and setbacks on lands adjacent to agricultural uses to	The Open Space Plan (Figure 9-1 of the WWSP) establishes buffers between more intense project-related land uses and existing agricultural land uses. The WWSP Design Guidelines identify walls and fencing intended to screen land uses and create a transition between developed areas and open space.
protect agriculture from encroachment by incompatible land	The proposed Project is consistent with this policy.
Goal C-3: Minimize negative effects of sewage treatment on water quality.	The proposed Project proposes a new 15-acre onsite Wastewater Treatment Plan (WWTP) serviced and constructed in compliance with the Amador Water Agency (AWA). AWA Standard Design and Construction Specifications for Wastewater Systems outlines engineering design specifications to meet required water quality standards. Prior to construction, all plans shall be approved by AWA and applicable agencies, such as the Regional Water Quality Control Board.
	The proposed Project is consistent with this goal.
Policy C-3.1: Guide future development within the County to obtain adequate wastewater service and treatment capacity	The proposed Project provides high level planning for utility infrastructure to accommodate buildout. Phasing of infrastructure improvements and funding obligations would be detailed in future WWSP Development Agreement(s) prepared at the time individual development proposals. The phasing plan is structured to ensure improvements can support respective development in compliance with policies and standards, and development in each phase can support the costs of the required improvements. The proposed Project consists of a new onsite WWTP in the northwestern portion of the WWSP site to meet the conveyance and treatment requirements associated with wastewater generation.

POLICY	CONSISTENCY
	The proposed Project is consistent with this policy.
Goal C-6: Reduce energy use and promote renewable and locally available sources of energy.	The Project includes implementation of cost-effective energy efficiency, load management, and renewable energy programs to meet electricity demand before new electricity sources are acquired. Refer to Section Refer to Section 4.6 Energy for additional discussion of energy use related impacts. The proposed Project is consistent with this goal.
	The proposed Project incorporates a new circulation system of multi-use paths and
Policy C-6.1: Encourage new development to be pedestrian-friendly and located near existing activity centers to limit energy use associated with automobile transportation.	bikeways to provide connectivity for non-vehicular travel. The bikeway and pedestrian network would allow pedestrians and bicyclists to access commercial, residential, and public/quasi-public uses. Additionally, pedestrian and bicycle paths would provide connections to onsite parks and open space areas. These transportation options encourage people to rely less on automobile travel and therefore limit energy use. The WWSP Design Guidelines contain specifications to promote a pedestrian friendly environment by minimizing barriers between neighborhoods to allow connectivity, use of gates only if it can be demonstrated they would not prevent through access, easily identifiable access points to trails, parks, and open space, and enhance pedestrian features in commercial centers that create walkability and a pleasant pedestrian experience.
	The proposed Project is consistent with this policy.
Policy C-6.3: Promote increased energy efficiency and green building practices through the County's use of these practices and through use of	The Project supports a mix of uses and alternative modes of transportation, specifically bicycle and pedestrian transportation. Additionally, the WWSP promotes green building standards and low impact development practices, consistent with state and federal laws. Refer to Section 4.6 Energy for additional discussion of energy use related impacts.
incentives.	The proposed Project is consistent with this policy.
Policy C-6.5. Support use of renewable and locally available sources of energy, where feasible.	As stated in the WWSP Electric Energy Efficiency and Conservation section, the proposed Project includes implementation of cost-effective energy, load management, and renewable energy programs meet electricity demand before new electricity sources are acquired. Refer to Section 4.6 Energy for additional discussion of energy use related impacts.
	The proposed Project is consistent with this policy.
Goal C-9 : Maintain and improve air quality.	The proposed Project incorporates a system of pedestrian and bike paths and pedestrian pathways for circulation purposes. Off-street Class I and Class IA bike paths are included in landscape corridors and open space areas as well as on-street Class II bike lanes. The system of pedestrian and bike paths reduce the need for automobile use and in turn reduce GHG emissions and improve air quality. Refer to Section 4.3 for additional discussion of air quality.
	The proposed Project is consistent with this goal.
Policy C-9.1: Encourage development of commercial and industrial businesses which provide jobs for County residents to reduce vehicle miles traveled for residents who must drive elsewhere for employment.	The proposed Project incorporates various land uses including commercial, business, and professional in addition to public/quasi-public civic which would create employment opportunities. The commercial land uses could include local-servicing retail and office uses such as grocery and drug stores, retail services, restaurants, personal services, and professional offices; all of which would provide jobs for County residents. Additionally, residential uses are planned east and south of the commercial area and would be connected by a system of walking paths and trails. This system would reduce vehicle miles traveled (VMT) for residents who work in the plan area and encourage employees to walk or bicycle to work.
	The proposed Project is consistent with this policy.
Policy C-9.2: Encourage infill development, and development near	In relation to Amador County, infill development can be considered in the context of larger undeveloped parcels that exist between areas of development where it is logical

POLICY	CONSISTENCY
existing activity centers to encourage walking or bicycle use in running local errands.	to extend services and concentrate development to prevent sprawl and protect rural character. The proposed Project site is situated adjacent to the northern and western jurisdictional boundary of the City of Jackson and the southern edge of the Martell RSC. The project incorporates a new circulation system of multi-use paths and bikeways to provide connectivity for non-vehicular travel. The bikeway and pedestrian network would allow pedestrians and bicyclists to access commercial, residential, and public/quasi-public uses. This is accomplished through siting residential land uses in walking or biking distance to community commercial uses and recreation coupled with providing the infrastructure such as bike lanes and pedestrian pathways. Specifically, residential uses are planned south and east of the commercial area, and a portion of those uses are within a one-quarter mile walk of the commercial area. Also, there would be the opportunity for future Argonaut High School students to walk to school. These transportation options encourage people to rely less on automobile travel and therefore limit energy use.
Policy C-9.3: Promote separation of emission sources from sensitive receptors such as schools, day care centers, and health care facilities.	The Project is designed to create a logical synergy among the land uses. More intense land uses are concentrated in the northern portion of the Project site closer to SR-88 with the land uses decreasing in intensity the further they radiate out from SR-88. Park and recreation and open space land uses provide buffers in areas where a more intense land uses interfaces with more sensitive land uses. The school site is situated in the eastern portion of the Project site, distanced from the commercial uses, surrounded by open space and residential within the site and the existing neighborhood and high school outside of the Project site. Likewise, the Project is designed to minimize impacts at the Project boundaries with existing land uses. The eastern portion of the site adjacent to the existing residences along Arroyo Place and Westview Drive would be developed with low density residential, with the cattle crossing easement separating the Project site from the existing neighborhood, similarly land uses that are proposed adjacent to Argonaut High School include the future elementary school and open space. This design is intentional to minimize land use conflicts, including those that could arise from air emissions. The proposed Project is consistent with this policy.
Policy C-9.4: Encourage energy conservation and energy efficient design in new development projects.	The vision for the proposed Project would create a new community that meets or exceeds the County's development standards through amenities and services and distinguishes itself through an efficient design and development pattern. This would be achieved by strategically connecting commercial, residential and school uses to create efficient use of land with higher densities and significant open space preservation while limiting reliance on vehicular travel, which would reduce energy usage. Refer to Section 4.6 Energy for additional discussion of energy use related impacts. The proposed Project is consistent with this policy.
Goal C-6: Encourage development and use of recreational and transportation trails within Amador County.	A comprehensive system of multi-use paths and bikeways is planned throughout the proposed Project site providing transportation choices for residents, employees, and visitors. The system of bikeways and multi-use paths provides off-street internal and external linkages and includes connection opportunities to the regional system. Off-street Class I bike trails and Class IA sidewalks are included in landscape corridors and open space areas and link parks within the area. Several existing natural features would be retained within open space areas, including oak woodlands and Rock Creek drainage features and tributaries which would be accessible to the public via bike paths and paved and unpaved trails. The proposed Project is consistent with this goal.

POLICY	CONSISTENCY
Policy OS-2.1: Promote development of a network of recreational trails for pedestrians, hikers, equestrians, and bicyclists. Where possible, promote functional use of trails as transportation corridors.	The proposed Project includes walking trails, bike paths, sidewalks etc. that encourage a variety of modes of transportation including walking, hiking, bicycling and possibly horse-back riding. The WWSP vision is to create a new community that meets or exceeds the County's development standards through amenities and services and distinguishes itself through an efficient design and development pattern. This would be achieved by strategically connecting commercial, residential and school uses and designing the Plan area to create efficient use of land with higher densities and significant open space preservation. The proposed Project is consistent with this policy.
Policy OS-2.2: Link trails to existing infrastructure, including other recreation opportunities, parks, schools, neighborhoods, and commercial areas. Coordinate with surrounding counties and communities to connect trails to regional and statewide systems.	It is beyond the scope of the proposed Project to coordinate with other regional jurisdictions and agencies; however, the WWSP is designed to encourage connectivity. One of the goals of the proposed Project is to create a new community that meets or exceeds the County's development standards through amenities and services and distinguishes itself through an efficient design and development pattern. This would be achieved by strategically connecting commercial, residential and school uses and creating efficient use of land with higher densities combined with open space preservation. The WWSP includes a comprehensive system of multi-use paths and bikeways is planned throughout the site, complementing transportation choices for residents, employees, and visitors. This network is an important component in providing connectivity for non-vehicular travel as well as linkages to the community and potentially to the regional system.
	The proposed Project is consistent with this policy.
Goal N-2 : Minimize noise conflicts from transportation sources.	As shown in Chapter 2, Figure 2-5, the primary north to south access to the site connects to adjacent uses in the Martell area and the City of Jackson and provides access to the various land uses. The system also includes a combination of internal arterial and collector streets. These roadways are designed to accommodate future anticipated local and area traffic demands. This design allows for the roadways to be appropriately scaled to the land use such that less intense land uses would not experience noise impacts from through traffic. Masonry walls are intended to provide sound attenuation where appropriate along collector roadways and along the back edge of landscape corridors between differing land uses.
	The proposed Project is consistent with this goal.
Policy N-2.1: Minimize noise conflicts between current and proposed land uses and the circulation network by encouraging compatible land uses around critical roadway segments with higher noise potential.	As shown in Chapter 2, Figure 2-5, the primary roadway north to south access connects the proposed Project site to adjacent uses in the Martell area and the City of Jackson as well as providing the access to the various land uses. Compatibility is achieved through the placement of commercial land uses adjacent to existing commercial and lower density residential land uses would be located adjacent to existing residential neighborhoods and agricultural land uses. This design allows for the roadways to be appropriately scaled to the land use such that less intense land uses would not experience noise impacts from through traffic. Moreover, as shown in the Open Space Plan (WWSP, Figure 9-1) the open space would be a buffer between more intense onsite land uses and surrounding agricultural uses that would create a natural attenuation from onsite traffic noise. Further, masonry walls would be constructed to provide sound attenuation.
	The proposed Project is consistent with this policy.
Goal N-3 : Minimize noise conflicts between airports and surrounding land uses.	The Westover ALUCP establishes noise contours for the purpose of evaluating noise compatibility of development in the vicinity of the Westover Field Airport. A portion of the proposed Project's low-density residential lies within the airport's 55 dBA exterior noise contour. Prior to the approval of any specific development proposal within the Project area, future projects would be required to demonstrate compatibility with ALUCP Table 3-1 which would require that residences incorporate interior noise control measures to reduce interior noise levels to 45 dBA CNEL or less. Interior noise

POLICY	CONSISTENCY
	control measures may require use of glazing and exterior doors with improved sound transmission class rating or the use of resilient channels on exterior walls and ceilings. A site-specific noise analysis shall be conducted to determine final noise control measures required to achieve compliance with the County's noise standards. Refer to Section 4.11 Noise for additional discussion of airport-related noise.
	The proposed Project is consistent with this policy.
Policy N-3.2: Ensure future development in the vicinity of airports, including Westover Field and Eagle's Nest Airport, is compatible with current and projected airport noise levels for each facility in accordance with noise standards presented in Table N-3 of the General Plan.	A portion of the proposed Project's low-density residential uses is within the Westover Field 55 dBA CNEL noise contour. The Westover ALUCP indicates that residential development within 55-65 dBA CNEL contour is considered "Normally Unacceptable." Prior to the approval of any specific development proposal within the WWSP area, future projects would be required to demonstrate that they are compatible with ALUCP, Table 3-1. The proposed Project would require that these residences incorporate interior noise control measures to reduce interior noise levels to 45 dBA CNEL or less. Interior noise control measures may require the use of glazing and exterior doors with an improved sound transmission class rating or the use of resilient channels on exterior walls and ceilings. A site-specific noise analysis shall be conducted to determine the final noise control measures required to achieve compliance with the County's interior noise level standards. Refer to Section 4.11 Noise for additional discussion of airport-related noise.
	The proposed Project is consistent with this policy.
Goal H-1 : Provide adequate sites to encourage provision of affordable housing.	A key objective of the proposed Project is to aid the County in meeting its obligation to accommodate a percentage of future population growth in the region (as embodied in the Regional Housing Needs Allocation (RHNA) identified by the California Department of Housing and Community Development (HCD, by increasing residential holding capacity. Thus, the WWSP provides for 700 units of varying housing densities including rental units and affordable units with 10% of units as affordable for middle, low- and very low-income households. This includes a mix of purchase housing affordable to middle-income households, and rental housing affordable to low- and very low-income households.
	The proposed Project is consistent with this goal.
Policy H-1.1: Ensure sufficient sites are zoned to accommodate each jurisdiction's share of regional housing needs.	A key objective of the proposed Project is to aid the County in meeting its obligation to accommodate a percentage of future population growth in the region (as embodied in the RHNA identified by the HCD by increasing the residential holding capacity. For residential areas, the WWSP proposes a PD zoning, which is consistent with the County's Zoning Ordinance for residential zones. Specifically, the zoning would equate to the Low Density Residential (PD-R1), Medium Density Residential (PD-R2) and High Density Residential (PD-R3). The PD-R1 neighborhoods would provide market-rate housing affordable predominantly to moderate and above-moderate income households. However, accessory dwelling units which provide opportunities for affordable housing units are permitted on PD-R1 properties. The PD-R2 and PD-R3 neighborhoods would provide greater opportunities for creating affordable housing for all income ranges.
	The proposed Project is consistent with this policy.

3.8 REFERENCES

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- California Department of Transportation (Caltrans). 2017. California Airport Land Use Planning Handbook. Prepared by State of California Department of Transportation. Available at: https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf. Accessed: February 29, 2024.

4.0 INTRODUCTION TO ANALYSIS

4.0.1 Scope of Analysis

This Chapter of the Draft Environmental Impact Report (DEIR) introduces the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical issue areas (Sections 4.1 through 4.17):

4.1 **Aesthetics** 4.2 **Agricultural Resources** 4.3 Air Quality 4.4 **Biological Resources** 4.5 **Cultural Resources** 4.6 Energy 4.7 **Geology and Soils** 4.8 Greenhouse Gas Emissions 4.9 Hazards and Hazardous Materials Hydrology and Water Quality 4.10 4.11 Noise 4.12 Population and Housing 4.13 **Public Services** 4.14 **Transportation** 4.15 **Tribal Cultural Resources** 4.16 **Public Utilities** 4.17 Wildfire

The Wicklow Way Specific Plan (WWSP or proposed Project) includes approximately 201 acres of land currently located in unincorporated Amador County (County). Implementation of the proposed Project must be consistent with the County's General Plan goals and policies, and all applicable regulations such as the California Department of Fish and Wildlife (CDFW), State Water Resources Control Board (SWRCB) and California Building Code standards. Therefore, such policies and standards are not identified as mitigation, and compliance with relevant goals, policies, and federal, state or County requirements is described within the impact analysis. In addition, the policies, actions, design guidelines and development standards set forth in the WWSP and subsequent Development Agreements take precedence over the County's Municipal Code, except where the WWSP is silent or specifically references the Municipal Code.

The Amador County General Plan EIR (Amador County, 2016) included an evaluation of proposed land use designations within the unincorporated county, which included the WWSP site. Therefore, this EIR evaluates potential impacts consistent with the County's General Plan goals and policies, Municipal Code, and other development requirements and standards.

4.0.2 Technical Studies

Several technical studies were prepared to support the analysis of the proposed Project and are included in the technical appendices. Studies prepared include the results of the air quality and greenhouse gas CalEEMod Model outputs (**Appendix C**), Hydrology and Drainage Report (**Appendix D**), Noise Report (**Appendix E**), a Traffic Impact Assessment (**Appendix F**), and a Paleontological Sensitivity Memorandum (**Appendix G**).

4.0.3 Environmental Setting

According to subdivision (a) of Section (§)15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project as they exist at the time the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this EIR, unless noted otherwise, are based on conditions that existed in January/February 2023, when the NOP was published and circulated. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis. When appropriate, baseline conditions that differ from existing conditions are identified clearly in the resource analysis.

4.0.4 Section Format

4.0.4.1 Environmental Setting and Regulatory Setting

Each issue area section begins with a description of the proposed Project's environmental and regulatory setting. The environmental setting describes conditions relevant to impact analysis (discussed below in **Section 4.0.4.2, Impacts**) that were present in the baseline condition. The regulatory setting provides a summary of applicable federal, state, and local regulations, plans, policies, and laws relevant to each issue area. The regulatory setting also includes policies and actions included in the WWSP because, if the Plan is adopted, these policies and actions will guide future development of the Plan area.

4.0.4.2 Impacts

4.0.4.2.1 Impact Analysis

The regulatory setting description in each section is followed by a discussion of potential impacts. For purposes of this analysis, thresholds of significance, as derived from **Appendix G** of the CEQA Guidelines, are used to determine whether implementation of the proposed Project would result in significant impacts.

The impact portion of each section includes an impact statement prefaced by a number for ease of identification, followed by an impact analysis and a determination of whether the impact would be significant (that is, exceeds applicable threshold), less than significant (that is, below the applicable threshold) or if there is no impact. If a significant impact is identified, one or more mitigation measures are recommended to reduce impact severity. If no mitigation is available to reduce the severity of the impact to less than significant, this is noted. All applicable mitigation measures are identified at the end of each impact discussion. The degree to which the identified mitigation measure(s) would reduce the impact is also identified. Each impacts discussion is followed by an analysis of cumulative impacts, discussed below under Cumulative Analysis.

In determining the level of significance of environmental impacts associated with implementation of the proposed Project, as stated in Section 4.0.1, the analysis in this Draft EIR assumes that the proposed Project would comply with relevant federal and state laws and regulations, County General Plan policies, ordinances, other adopted County documents, and the policies, actions, design guidelines, and development standards contained in the WWSP, unless otherwise noted. Such mandatory policies, ordinances, and standards are not identified as mitigation measures but rather are discussed as part of the "Regulatory Setting" governing the proposed Project; compliance with these requirements often addresses potential impacts.

An example of an impact statement is presented below.

4.1-1: Would the proposed Project have a substantial adverse effect on a scenic vista?

This is followed by a discussion of potential construction and operation impacts evaluated and compared to the thresholds of significance for each impact. The analysis also includes applicable laws, regulations and standards that would reduce impacts and assumes that the proposed Project would comply with them. It is assumed that the Project applicant would obtain all necessary permits and comply with all required conditions. WWSP policies and actions are also provided because, when the WWSP is adopted, conformance would direct development and future buildout. The impact analysis concludes with a determination of the impact's significance in bold font (e.g., significant and unavoidable/potentially significant/less-than-significant/no impact).

4.0.4.2.2 Mitigation Measures

Following each impact analysis is a discussion of mitigation measure(s) identified to reduce significance, if required. Each section of Chapter 4.0 includes a statement indicating whether the mitigation measure would reduce the impact to a less-than-significant level. A discussion of how the mitigation would reduce the impact is included before each mitigation measure. Mitigation measures, if applicable, are numbered and presented in the following alphanumerical format, i.e.: BIO-1: Statement of requirements set for the mitigation.

Note that the CEQA Guidelines, §15370, defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In some instances, contribution of a project's fair-share to an established program (provided there is a "reasonable plan for mitigation" [such as school or traffic impact fees]), where fair-share contributions are clearly designated to mitigate an impact, is considered adequate mitigation for both project and cumulative impacts under CEQA.

4.0.4.2.3 Cumulative Analysis

CEQA Guidelines §15130 require EIRs to discuss cumulative impacts when a project's incremental effects are significant when viewed in connection with the effects of past, current, and probable future projects. CEQA further states that such discussion must reflect the severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the impacts of the project alone. CEQA Guidelines §15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Further, CEQA Guidelines §15130(b)(1) require that information from one of the following two sources be included when analyzing significant cumulative impacts:

- 1. 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
- 2. A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for the reduction of GHG emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

In the cumulative context, the geographic area in which an environmental document considers potential cumulative effects is important to defining potential cumulative impacts. The cumulative context may vary according to each issue area. An appropriate cumulative context for construction air quality might be regional, which would encompass a larger area than the cumulative context for a more localized impact such as construction noise. Thus, the cumulative analysis in this EIR uses a hybrid approach. The list method is used to assess more localized impacts and the plan method is used to assess broader regional issues (air quality, GHG, loss of habitat, loss of resources of cultural importance, operational noise, transportation, water supply and wastewater treatment).

The analysis of cumulative impacts follows the evaluation of project impacts Sections 4.1-4.17. The cumulative impacts analyze the extent to which the proposed Project would contribute to cumulative impacts, and whether that contribution would be considerable (i.e., would it cause a cumulative condition to be significant and/or substantially increase the severity of a cumulative impact to become significant). In some instances, a proposed Project-specific impact may be considered less than significant but could be considered potentially significant in combination with other development within the surrounding area. Similarly, in some instances, a potentially significant impact could result on a

project level but would not result in a cumulatively considerable impact. The cumulative impacts analysis is presented in the same format as the impacts section, as noted above.

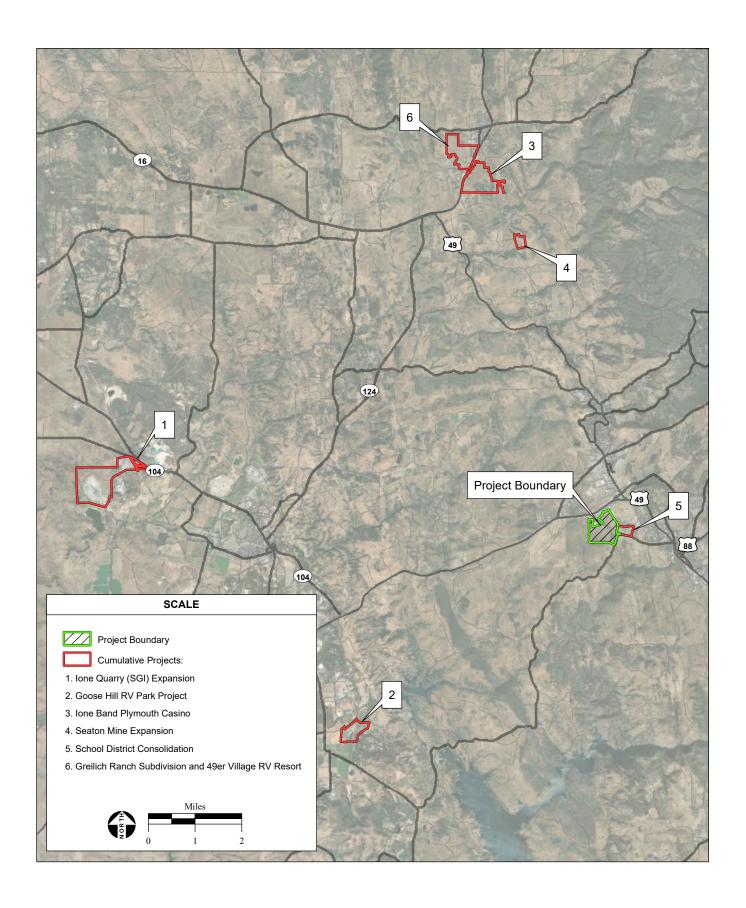
To support the cumulative impact analyses, a list of related past, present, and reasonably foreseeable future projects is provided in **Table 4.0-1**. The locations of these projects are shown on **Figure 4.0-1**. For resource areas with a broader cumulative context, the discussion of cumulative conditions is framed by geographic boundaries such as the air basin or the County and/or by projections and data contained in the State Implementation Plan, General Plan (buildout), Amador County Transportation Demand Model, or the Amador Water Agency Urban Water Management Plan. Note that the cumulative analysis for each resource area considers the cumulative condition and the contribution of potential impacts from the proposed Project to the cumulative condition.

TABLE 4.0-1 PAST, PRESENT AND REASONABLY FORESEEABLE PROJECTS

MAP ID	PROJECT NAME	LOCATION	ACTIVITIES	STATUS
1	Ione Quarry (SGI) Expansion	1900 State Highway (SR) 104 Ione	Expansion of existing footprint and depth to access additional rock reserves.	Environmental Review
2	Tentative Subdivision Map No. 186 General Plan Amendment GP-22; 7-1	North of intersection of SRs 16, 124 and 49, directly south of the City of Plymouth	Division of 423 acres into 53 residential lots ranging from ~5 to 9.9 acres with 118.7 acres of open space.	Application Received
3	Goose Hill Recreational Vehicle (RV) Park	6080 Jackson Valley Road, Ione	Development of a 125-space RV Park with associated uses (UP- 19;11-2), including three shower/restroom units, two restroom units, a two-story 8,020 sq. ft. clubhouse including a manager's residence, office, lounge area, meeting hall, convenience store, storage, and restaurant for public use.	Environmental Review
4	Ione Band Plymouth Casino	Tribal Land: 228.04± acres located in northwest Amador County, ~35 miles east of the City of Sacramento and ~17 miles south of the City of Placerville.	Development of a gaming facility, hotel, event center, guest services, offices, and security. Also includes surface parking for guests and employees, a wastewater treatment and disposal plant, two well water storage tanks, one reclaimed water storage tank, surface water discharge facilities, stormwater detention, landscaping, and a fire station.	Application Review
5	Seaton Mine Expansion	APN: 008-140-016; East of Drytown; ~2400 feet from	Expansion of existing exploration pit and excavation of a quartz vein system.	Application Review

4.0. INTRODUCTION TO ANALYSIS

MAP ID	PROJECT NAME	LOCATION	ACTIVITIES	STATUS
		intersection of California Mine Road and New Chicago Road		
6	School District Consolidation	217 Rex Avenue, Jackson	Consolidation of local High Schools into one High School located at existing Argonaut High School.	Environmental Review
7	Greilich Ranch Subdivision and 49er Village RV Resort	Southwestern area of the City of Plymouth, west of SR-49	Development of a 161.4-acre subdivision that includes a mix of residential and public uses, open space, 234 single-family residential lots, three open space parcels including a 5.2-acre park, two stormwater retention basins, a landscaped corridor, greenways, and common areas. Also includes, development of a RV Resort on 44.9 acres comprised of 214 new RV and vacation sites west and south of existing RV and vacation sites.	Application Review



4.0.5 Terminology Used in the EIR

This EIR uses the following terminology to describe the environmental effects of the proposed Project:

A finding of *no impact* is made when the analysis concludes that there is no effect on a particular environmental resource or issue.

An impact is considered *less than significant* if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.

An impact is considered *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the application of the mitigation measures described.

An impact is considered *significant or potentially significant* if the analysis concludes that a substantial adverse effect on the environment could result.

Mitigation refers to specific measures or activities that would be adopted by the County (Lead Agency) to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.

A cumulative impact refers to one that can result when a change in the environment would result from the incremental impacts of the proposed Project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this EIR focuses on whether the proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.

Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

4.1 **AESTHETICS**

4.1.1 Introduction

This section addresses the potential for implementation of the Wicklow Way Specific Plan (WWSP or proposed Project) to cause significant impacts to aesthetics, including unwanted light and glare. Visual resources are the natural and cultural features of the landscape that can be seen and that contribute to the public's enjoyment of the environment. The analysis focuses on the potential loss of visual resources, effects on views, compatibility with the visual characteristics of surrounding uses, and the likelihood that sensitive receptors would be disturbed by light and glare generated or reflected by new structures within the vicinity of the Project site.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to aesthetics include concerns regarding protection of rural character; changes to scenic resources and increases from light and glare from new development on adjacent properties and the City of Jackson. The NOP and written and verbal comments received are included in **Appendix A**.

4.1.2 Regulatory Setting

Federal Regulations

There are no federal regulations regarding aesthetics applicable to the proposed 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." Caltrans administers the program, which was established in 1963 and is governed by the California Streets and Highways Code. 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 eligible for designation as scenic.

A County or City may nominate an eligible highway for designation as a Scenic Highway if it meets certain criteria based on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the view. To nominate such a highway, the local jurisdiction, with citizen participation, must submit a scenic corridor protection program to the Caltrans Departmental Transportation Advisory Committee that includes the following components:

- Regulation of land use and density of development;
- Detailed land and site planning;
- Control of outdoor advertising;
- Attention to and control of earthmoving landscaping;
- Attention to the design and appearance of structures and equipment.

Public Resources Code Section 21083.4 - Oak Woodlands Conservation

In 2004, the California legislature enacted SB 1334, which added oak woodland conservation regulations to the Public Resources Code (PRC). This law requires a County to determine whether a Project, within its jurisdiction, may result in a conversion of oak woodlands that will have a significant effect on the environment. If a County determines that there may be a significant effect to oak woodlands, the County must require oak woodland mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. Such mitigation alternatives include conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; the contribution of funds to the Oak Woodlands Conservation Fund for the purpose of purchasing Oak Woodlands Conservation easements; and/or other mitigation measures developed by the County.

Nighttime Sky – Title 24 Outdoor Lighting Standards

The California legislature passed a bill in 2001 requiring the California Energy Commission (CEC) to adopt energy efficiency standards for outdoor lighting for both the public and private sectors. The most recent 2019 update to Title 24, Parts 1 and 6, includes requirements for outdoor lighting for residential and nonresidential development to help to reduce the impacts of light pollution, light trespass, and glare. The standards regulate lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off (CEC, 2022).

Local

Amador County General Plan

The County's General Plan contains goals and policies for enhancement and protection of visual quality. The following policies are directly applicable to the visual characteristics of proposed Project.

Land Use – Goals and Policies

Diverse Land Uses

- **Policy LU-1.1:** Protect existing land uses and public facilities from encroachment by incompatible land uses.
- **Policy LU-1.3:** Encourage development patterns which support water quality objectives, protect agricultural land and natural resources; promote community identity; minimize environmental impacts; enable transit bicycle and pedestrian transportation; reduce greenhouse gas emission; and promote public health.
- **Goal LU-2:** Enhance and maintain separate and distinct community areas within the county.
- **Policy LU-2.1:** Direct development to areas with existing urban services and infrastructure, or to areas where extending of urban services is feasible given distance from developed areas and topography, capacity, or land capability.

Open Space – Goals and Policies

Natural Resource and Species Protection

Goal OS-3: Protect wildlife habitats, including sensitive environments and aquatic habitats, consistent with State and federal law.

- **Policy OS-3.1:** Encourage preservation of oak woodlands in accordance with Public Resources Code Section 21083.4.
- **Policy OS-3.4:** Use site planning techniques, including, but not limited to, buffers, setbacks, and clustering of development to protect sensitive environments, including wetlands, riparian corridors, vernal pools, and sensitive species.
- **Policy OS-3.6:** Encourage the use of appropriate native species for reclamation and revegetation components of development projects. Restrict the introduction of invasive exotic species. The County will amend Chapter 15.40 of the County Code (governing grading and erosion control) to include a section addressing the requirement to limit the potential for introduction and spread of invasive species during soil disturbance and construction activities.

Wicklow Way Specific Plan

Development Standards and Design Guidelines have been incorporated into the WWSP. This is the primary reference document that establishes how the proposed Project would be compatible with County policies regarding visual compatibility and how the Project will reduce or mitigate impacts on the surrounding land uses and public views. **Appendix A** of the WWSP describes development standards, and **Appendix B** describes design guidelines.

Appendix A: Development Standards

Appendix A of the WWSP provides development standards that apply to the entire WWSP area. The development standards are designed to promote and protect the health, safety, and welfare of WWSP area residents and set criteria for such things as permitted uses, lot size, setback and building height. The development standards are intended to apply to all residential and non-residential land uses within the WWSP area.

Appendix B: Design Guidelines

Appendix B of the WWSP provides design guidelines to protect the physical form and visual character of the WWSP area. The design guidelines support the implementation of the WWSP development standards presented in **Appendix A** of the WWSP. These guidelines were developed to promote quality and creativity for individual development projects in the WWSP area. These guidelines focus on architectural, residential, non-residential, landscape architecture, and general design elements for future buildout of the Project and address the physical attributes of community design, ranging from building placement to building architecture. Applicable policies intended to reduce impacts of the proposed Project on the existing environment are listed below:

Chapter 4.0 Section 4.1: Land Use Policies

Open Space Policies

- **Policy 4.12:** Twenty percent (20%) of the WWSP area shall be preserved and maintained as natural open space.
- **Policy 4.13:** The open space land use designation shall provide for permanent protection of preserved wetlands and oak woodland.

Chapter 7.0 Section 7.1: Public Service Policies

Policy 7.7: All park plans shall include a lighting plan that requires all lighting fixtures to be shielded and energy efficient.

Amador County Zoning Ordinance

The Amador County Zoning Ordinance (Title 19 of the Amador County Municipal Code [ACMC]) implements General Plan policies. The Zoning Ordinance is a regulatory document that establishes specific standards for the use and development of all properties in the County. The Zoning Ordinance regulates development intensity using a variety of methods, such as regulations regarding the use of land, minimum lot sizes, limitations on location, height, bulk, and scale of buildings, and other methods, such as lighting.

4.1.3 Environmental Setting

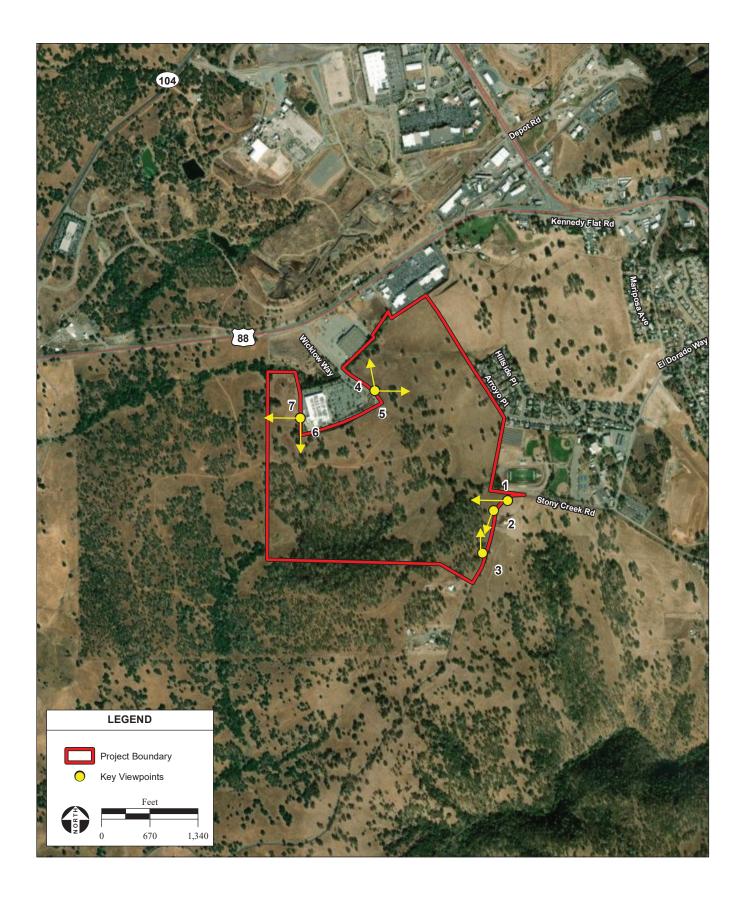
Regional Setting

Amador County is located in the central Sierra foothills, between the South Fork of the Cosumnes River and the North Fork of the Mokelumne River. The county has a rural character and a rich history of gold mining, timber harvesting, and livestock grazing, which can be seen in the character of the cities. The proposed Project site is in the unincorporated area of Amador County, west of the City of Jackson and south of State Route (SR) 88, one mile west of the intersection with Highway (SR) 49, within the Martell Regional Service Center (RSC). The Project site is in the western part of the county, near the cities of Jackson, Sutter Creek, and the town of Martell. These cities located to the north and east of the Project site portray a historic gold country with an old west character. To the south and west, the Project site is surrounded by agricultural land and open space with a rural character.

Visual Setting and Site Characteristics

The proposed Project site consists of approximately 201 acres in the unincorporated area of Amador County and is best characterized as being rural. The Project site is currently used for cattle grazing, and there is an existing dirt road network that has been used to support cattle grazing activities (see **Figure 4.1-1a, Key Viewpoint References**). Habitat types occurring onsite include grasslands, oak woodland, and oak savanna with ephemeral drainages and one perennial creek. The topography on the Project site ranges from areas of relatively flat ground to sloping hilly areas. The site slopes downward to both the east and west and ranges in elevation from approximately 1,300 to 1,500 feet above mean sea level (see **Figure 4.1-1b, Landscape Reference Photographs**).

As discussed in Section 4.2, Biological Resources, the southern portion of the property has a higher density of native oaks, which diminishes from south to north. Some parts of the property are devoid of oak trees, while other areas have many trees whose crowns are interlocked to form thick canopies. The size of the trunks of these oaks ranges from five inches in diameter at breast height (DBH) to 58 inches DBH (see **Appendix E**). There are also several creeks and drainages located within the WWSP site.





SOURCE: Montrose Environmental, 5/30/2024

Wicklow Way Specific Plan EIR / 221549 ■

Figure 4.1-1b Landscape Reference Photograph

Surrounding Land Uses

The proposed Project site is located south of SR-88, at the Wicklow Way intersection in the Martell area of unincorporated Amador County. Land uses surrounding the site are a combination of commercial, residential, institutional (high school) and undeveloped land currently used for cattle grazing. A description of the surrounding land uses is provided below.

Land Uses to the North

The northern boundary of the proposed Project site is defined by commercially zoned property, and beyond that, SR-88. Existing land uses to the north of the site include commercial development including a Walmart store and other retail uses. The Walmart property is 16.3 acres and consists of a 103,794 sq. ft. building and parking lot with associated outdoor lighting. Wicklow Way, a paved roadway, intersects with SR-88 and stretches southeast to the Project site's northern boundary. Other properties surrounding the northern boundary of the site include undeveloped and developed commercial lots.

SR-88 is approximately 0.15 miles north of the proposed Project site's northernmost boundary and generally stretches east to west. It is the main highway that provides access to the site and is heavily traveled. Refer to Section 4.14 for information regarding traffic conditions. The portion of SR-88 that stretches east to west, located north of the site, has two lanes and associated turning lanes and does not include any side or middle barriers. The highway is lined with telephone poles and street lighting structures. The County's General Plan designates the area north of the site, across SR-88, RSC.

Land Uses to the South

Directly south of the proposed Project site is undeveloped open space and one single family residential property. The undeveloped land consists of a combination of open space, oak savannah, and dense oak woodland. The residential property east of the southern boundary of the site is an approximately 5.01-acre parcel that includes an 1,824 sq. ft. residential structure surrounded by open space. There are two additional residential properties approximately 0.1 miles further south of the site. One is 5.01 acres currently developed and the other is 6.14 acres and includes several structures and associated parking. Land south of the site is designated as Agricultural General (AG) and Agricultural Transition (AT) in the County General Plan.

Land Uses to the East

A residential neighborhood and Argonaut High School are located east of the proposed Project site, and both are within the boundaries of the City of Jackson. Beyond that there are residential properties and SR-49. SR-49 is a state highway that runs north to south and is approximately 0.6 miles east of the site.

The residential neighborhood immediately east of the Project site consists of single-family residences served by a series of local streets, including Westview Drive, that connect to Argonaut Lane. The Project site is visible from the end of Westview Drive; however, a street connection from this road to the site is not proposed. The character of this neighborhood is eclectic, with a variety of residential building types at varying ages and different architectural styles. Street lighting is present throughout this neighborhood.

Argonaut High School is located directly east of the proposed Project site and directly south of the residential neighborhood discussed above. The school property includes 28 buildings (a combination of permanent and portable buildings) comprised of library/classrooms, offices, gymnasiums, and storage (ACUSD 2023). The campus also includes four tennis courts, one baseball field, two softball fields, one sports field with track and field, lawn areas, and surface parking lots. The campus is partially fenced and has outdoor lighting associated with the sports fields, buildings, and parking lots.

Land to the east of the proposed Project site that is not within the City of Jackson's jurisdiction is designated either RSC or Residential Medium (RM); and beyond this, lands are designated as AG in the County General Plan.

Land Uses to the West

Immediately west of the proposed Project site is undeveloped open space land consisting of rolling hills with oak savannah and oak woodland habitat. Grazing occurs on this land and there are several dirt roads used to support cattle grazing activities. West of the Project site, there is a dirt road, Brown Road, that stretches north to south and connects a single residential property to SR-88. This road is lightly used and does not have any street lighting.

Land to the west of the Project site is designated as AG and AT in the County General Plan.

Visual Resources

Scenic Views and Vistas

The term vista generally implies an expansive view, usually from an elevated point or open area. A scenic vista is a view that possesses visual and aesthetic qualities of high value to the community. Scenic vistas can provide views of natural features or significant structures and buildings. Open-area visual resources, such as agricultural and natural, undeveloped lands, contribute to the scenic vistas present in the proposed Project area. Often, local planning documents identify scenic vistas, but locally known areas or locations where high-quality public views are available despite not being officially listed can constitute a scenic vista as well. The County General Plan does not identify any scenic vistas; it does, however, recognize that there are valued visual resources within the County. In particular, the County General Plan EIR identifies the low-lying hills covered in annual grasslands, rangelands, and oak woodlands in the western part of the County as scenic resources (Amador County, 2016a).

Scenic Resources

Scenic resources are described as 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. The topography of the 201-acre Project site generally consists of rolling terrain and grazing lands characterized by wide expanses of flat to rolling grasslands and woodlands. Minor drainages flow in a radial pattern from a slight rise in the northeast quadrant of the property. An aerial photograph of the proposed Project site is provided on **Figure 4.1-1a** with little topographical variation, the site offers expansive views in all directions.

Scenic Highways and Corridors

Two state highways, SR-49 and SR-88, are within a mile of the proposed Project site boundaries. SR-88 generally stretches in a north-south direction, and SR-49 generally stretches in an east-west direction. A 33.4-mile portion of SR-88 located 23 miles east of the site is officially designated as a state Scenic Highway. The remainder of SR-88 (that is not officially designated) and the entire length of SR-49 in the County are eligible for designation as scenic highways but have not been officially designated (Amador County 2016b; Caltrans, 2024). The WWSP area is approximately 0.5 miles southwest of eligible portions of SR-49 and approximately 0.75 miles west of eligible portions of SR-88.

Visual Character and Quality

The proposed Project site consists of rolling hills dotted with mature oaks, oak woodland, and annual grassland, which contribute to the visual character. The north portion of the site consists mostly of annual grassland and sparsely distributed trees. The grassland is generally dominated by non-native annual grasses. Native oak species are found within this portion of the property, including some very large oak tree specimens. Riparian forest is located north of the site lining the edge of Rock Creek, a perennial stream. The center of the site consists of grasslands and oak savannah habitat, consisting of more oak tree species and annual grasslands. A dirt road stretches east to west through the middle of the site and is mainly used for cattle grazing purposes. The south portion of the site consists of annual grassland and oak woodland. Oak woodland covers approximately one-third of the site consisting of small trees growing densely along with larger trees of varying health and condition. Overall, the visual character of the proposed Project site is rural, with oak trees and grasslands.

Light and Glare

Lighting effects are associated with the use of artificial light during evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting). Light introduction can be a nuisance to adjacent light-sensitive uses, diminish the view of the clear night sky, and, if uncontrolled, cause visual disturbances. Land uses such as residences and hotels are considered light sensitive because occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Recreational sites, such as camping sites, would similarly be considered light-sensitive. Light spill is typically defined as the presence of unwanted light on properties adjacent to a property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount and intensity of light generated, the height of the light source, the presence of barriers or obstructions, the type of light source, and weather conditions.

Glare is primarily a daytime occurrence typically caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials. Daytime glare generation is commonly associated with commercial and multi-family residential buildings with exterior façades that are largely or entirely comprised of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Daytime glare generation is typically related to sun angles, although glare resulting from reflected sunlight can be seasonal depending on the direction of the sun. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. Typically, nighttime glare results from unshielded light sources or light sources that are directed upward.

No significant sources of lighting or glare are currently present within the proposed Project site. The developed areas surrounding the site, including residences, Argonaut High School, and commercial properties, are a source of nighttime light and daytime glare. The low-density rural residential, agricultural, and open space areas surrounding the site do not generate significant amounts of light.

Project Site Viewpoints

To assess the proposed Project's potential impacts on visual resources, representative public viewpoints were selected to provide context in relation to the location of sensitive receptors that could be impacts from implementation of the WWSP. Consideration for the selection of these viewpoints was given to distance from the site, number of viewers, and presence of recreational or residential uses. Potentially sensitive viewing areas selected for analysis are indicated on **Figure 4.1-2, Project Site Viewpoints** and the views from the viewpoints are described below.

4.1.4 Impacts

Method of Analysis

The analysis of potential visual impacts resulting from the adoption and implementation of the proposed Project is based on review of photographs, online imagery, and maps. The County's General Plan and other applicable planning documents were reviewed to determine what visual elements have been deemed valuable by the community. Visual impacts are identified by describing the existing visual setting, assessing the amount of change that would occur and interpreting how the affected public would respond to or perceive those changes. Analysis focused on how implementation of the WWSP could alter visual resources, character, or quality. In deciding on the extent and implications of the visual changes, consideration was given to:

Changes in the visual composition, character, and valued qualities of the affected environment;

The visual context of the affected environment;

The extent to which the affected environment contains places or features that have been designated in plans and policies for protection or special consideration.

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, an aesthetic impact is significant if implementation of the Proposed Project would do any of the following:

Have a substantial adverse effect on a scenic vista;

Substantially damage or block scenic resources, including, trees, rock outcroppings, and historic buildings viewed from a state Scenic Highway;

In non-urban areas, substantially degrade existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point; or

Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.



Viewpoint 1: Stony Creek Road (near Argonaut High School) — West View representative of views from Stony Creek Road just south of the Argonaut High School southeastern property boundary looking west.



Viewpoint 3: Stony Creek Road – North View representative of views from Stony Creek Road south of viewpoints 1 through 3, just north of the southeast corner of the property boundary, looking north.



Viewpoint 5: Wicklow Way – East View a representative from Wicklow Way across the street from the Walmart parking lot looking east.



Viewpoint 2: Stony Creek Road (near Argonaut High School) – South View representative of views from Stony Creek Road just south of the Argonaut High School southeastern property boundary looking south.



Viewpoint 4: Wicklow Way – North View a representative of Wicklow Way across the street from the Walmart parking lot looking north.



Viewpoint 6: Walmart West Property Line – South View representative of views from the western property line of the Walmart property located north of the property boundary looking south.

Impact Analysis

Impact 4.1-1

Would the Project have a substantial adverse effect on a scenic vista?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Significant	No feasible mitigation	Significant and Unavoidable	

As discussed above, while the County General Plan does not identify any scenic vistas, it does recognize the low-lying hills covered in annual grasslands, rangelands, and oak woodlands in the western part of the County as scenic resources. As described above in Section 4.1.3, Environmental Setting, the proposed Project site is void of development and is characterized by rolling hills with a mixture of grassland and oak woodlands that is visually consistent with the County's General Plan EIR description of scenic resources.

CEQA considers the effect of a project on public views when evaluating impacts. Relative to the proposed Project site, public views are those into the site from surrounding public roadways (SR-88, Wicklow Way, Stony Creek Road, and the terminus of Westview Drive) and Argonaut High School. Aesthetic effects are subjective and are influenced by factors such as the location, duration of exposure, activity, and concern for the scenic quality of the viewer. Thus, a viewer's reaction to a visual change at the site which is considered a County- scenic resource, may vary, yet as discussed below, the change would be distinct.

Implementation of the WWSP would create a new community with a mixture of land uses including residential development of varying densities, community commercial, parks and recreation, open space, and public/quasi-public. At full buildout, the proposed Project would provide approximately 700 dwelling units, accommodate approximately 1,660 residents and approximately 100,000 square feet of retail and office uses, provide a potential 10-acre site for the consolidation of County civic offices, and provide approximately 235 permanent jobs. Parks, open space, an elementary school, and a fire station are also planned.

The transition from 201 acres of undeveloped open space to a planned community would permanently alter the rural character of the proposed Project site. Currently, public views of the site from adjacent areas and roadways include unobstructed views of grasslands, trees, and open space (see **Figures 4.1-3 through 4.1-8**). Public views from SR-88 and Wicklow Way on the northern perimeter of the site are of gently rolling hills and oak woodland and are similar to those from Argonaut High School, Stony Creek Road, and Westview Drive.

Implementation of the WWSP would result in the loss of a County-determined valuable visual resource, the onsite annual grassland, rangeland, and oak woodlands. In particular, the proposed Project would involve the loss of 37 acres of oak woodland. The proposed Project would change the visual character from rural to built environment. After development of the proposed Project, public views from these areas would include buildings of varying design, mass and scale, roadways, and associated infrastructure with intermittent views of open space and retained oak woodland and grassland.

The proposed Project is required to comply with the County General Plan, including the adopted mitigation measures in the General Plan EIR. Consistent with the County General Plan EIR, projects proposed in areas considered visually valuable are required to incorporate measures to reduce the effect on scenic views and visual character to the maximum extent practicable. Reduction measures may include, but are not limited to:

- Limiting building heights;
- Placing and orienting structures to lessen or avoid impacts on scenic vistas to be consistent with existing visual character;
- Regulating development setbacks to be compatible with surrounding uses and existing visual character; and,
- Regulating signage to reduce or avoid impacts to scenic views or visual character.

In addition, the County General Plan protects oak woodlands and has adopted measures when impacts to oak woodland cannot be avoided. Projects that result in the loss of oak woodland are required to comply with PRC 21083.4, which may include replacement, offset, or restoration.

Likewise, the WWSP includes policies intended to compliment the County General Plan while providing site specific guidance to reduce impacts to surrounding land uses. These policies serve to promote internal compatibility and adherence to the County measures, listed above. Broadly, the WWSP policies encourage quality and creativity for individual development components. The WWSP Design Guidelines identify landscape design concepts to enhance the proposed Project existing setting by incorporating native plant species to create a visual transition from development to the surrounding rural environment.

Future development would be reviewed for consistency with the ACMC, General Plan, and WWSP, as well as any other applicable regulations governing scenic resources. Review and approval of site plans and architectural designs would be required prior to the issuance of a building permit by the County, unless an element of proposed development is exempt from design review. All non-exempt development projects are subject to the County's development review process.

Although the proposed Project has been designed considering General Plan, ACMC and WWSP policies and Design Guidelines, which strive to preserve scenic views, implementation of the proposed Project would permanently change the existing rural and natural character of the Project area. Further, areas within the WWSP boundary retained in their natural state would also experience a change in visual character since these spaces would be surrounded by more intensive development.



FIGURE 4.1-3. VIEWPOINT 1

Stony Creek Road (near Argonaut High School) – West View representative of views from Stony Creek Road just south of the Argonaut High School southeastern property line looking west.



FIGURE 4.1-4. VIEWPOINT 2

Stony Creek Road (near Argonaut High School) – South View representative of views from Stony Creek Road just south of the Argonaut High School southeastern property line looking south.



FIGURE 4.1-5. VIEWPOINT 3

Stony Creek Road – North View representative of views from Stony Creek Road south of viewpoints 1 through 3, just north of the southeast corner of the proposed property, looking north.



FIGURE 4.1-6. VIEWPOINT 4

Wicklow Way – North View a representative of Wicklow Way across the street from the Walmart parking lot looking north.



FIGURE 4.1-7. VIEWPOINT 5
Wicklow Way – East View a representative from Wicklow Way across the street from the Walmart parking lot looking east.



FIGURE 4.1-8. VIEWPOINT 6
Walmart West Property Line – South View representative of views from the western property line of the Walmart property located north of the proposed property looking south.

Impact 4.1-2

WOULD THE PROJECT SUBSTANTIALLY DAMAGE SCENIC RESOURCES, INCLUDING, BUT NOT LIMITED TO TREES, ROCK OUTCROPPINGS, AND HISTORIC BUILDINGS WITHIN A STATE SCENIC HIGHWAY?						
SIGNIFICANCE BEFORE MITIGATION						
No Impact None Required No Impact						

An approximately 33-mile portion of SR-88 in the northernmost part of the County extending from the Dew Drop Ranger Station to the County line has been designated as a state Scenic Highway in the Caltrans California Scenic Highway Program. SR-88 is also identified as a scenic corridor within the Amador County General Plan, and the County has adopted Ordinance 1763, Scenic Highway Overlay Zone, to protect this officially designated portion of SR-88 located 23 miles north of the Project site. Due to distance and topography, the proposed site is not visible from this segment of SR-88.

The remainder of SR-88 that is not officially designated and the entire length of SR-49 are eligible for listing in the State Scenic Highway Program, and the County General Plan indicates that both are scenic corridors that should be considered for future planning. However, no official designation has been made at the State or local level; therefore, neither are afforded the protections of the State Scenic Highway Program or County Ordinance 1763.

The site does not contain rock outcrops or historic buildings, but as discussed above, it is characterized as undisturbed open space with grassland and oak woodlands, which the County recognizes as scenic resources. Implementation of the WWSP would result in the loss of existing oak trees and the current rural landscape would be disturbed (see discussion below). However, the WWSP site is not visible from an officially designated state scenic highway, therefore, no impact would occur.

Impact 4.1-3

WOULD THE PROJECT, IN NONURBANIZED 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?

SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Significant	No feasible mitigation	Significant and Unavoidable

PRC 21071 defines the term "urbanized area" for the purpose of CEQA to mean an incorporated city that has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. The proposed Project is within unincorporated Amador County and is considered non-urbanized. Accordingly, this discussion focuses on whether the proposed Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

As discussed above, the WWSP site is considered a scenic resource, and implementation of the WWSP would have a significant and unavoidable impact on scenic vistas. There are multiple public viewing access points since the site is situated south of SR-88, a major roadway, and the key part of the local circulation network. **Figure 4.1-2** depicts the existing views into the site from public viewpoints. With implementation of the WWSP, the site would transition from open space to a planned community with a mixture of land uses that would introduce new residential, commercial, and public structures, roadways, and other supporting infrastructure of varying densities.

While there are no current individual development proposals, based on the Development Standards and Design Guidelines of the WWSP, it is expected that future land uses would be designed to be of similar visual character as other more developed settings in the county. The proposed Project is subject to the County General Plan and the adopted General Plan mitigation measures which includes height limitations, building orientation, setbacks, and signage restrictions. Likewise, the proposed Project would comply with PRC 21083.4 for mitigation of the loss of oak woodlands. While adherence to existing plans and regulations would assist in reducing visual impacts and promoting community compatibility, the proposed Project would result in the loss of a scenic resource through conversion of the natural rural landscape character to a built environment with urban uses. There are no feasible policies that could maintain the existing visual character; therefore, implementation of the WWSP would result in a significant and unavoidable impact.

Impact 4.1-4

WOULD THE PROJECT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE WHICH WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA?					
SIGNIFICANCE BEFORE MITIGATION	RE MITIGATION SIGNIFICANCE AFTER MITIGATION				
Significant No feasible mitigation Significant and Unavoidable					

The proposed Project site is located in an area that has minimal sources of light, although there is some light generation from surrounding residential land uses as well as the Walmart and Argonaut High School, which both have nighttime security and parking lot lighting. The high school also uses stadium lighting for nighttime field events. Other sources of light include vehicles traveling on surrounding roadways.

The Project would introduce residential lighting similar to existing residential lighting in surrounding neighborhoods. Such lighting would include security or ambiance lighting as well as light cast from the interior of homes. Commercial and public/quasi-public land uses would likely include parking lots and security lighting, as well as navigational and ambient lights. New project-related light sources also include streetlights and light from traffic. Proposed lighting would be required to conform to the California Building Code (CBC), which requires newly constructed buildings to incorporate warmer-colored, shielded, energy-efficient light fixtures that shine primarily on surfaces where they are needed rather than up into the sky or into drivers' eyes and neighbors' windows. In addition, the proposed Project would comply with adopted General Plan EIR mitigation, which requires new projects to incorporate measures to reduce light intrusion using auto-timing devices, fully shield or directing light towards the ground, and limiting lights to emit the minimum amount of light necessary. The

introduction of artificial light into a rural area constitutes a substantial change as the site transforms from unlit to a developed, lit environment with multiple light-contributing sources.

Glare impacts can occur because artificial light or sunlight can reflect off a surface and create discomfort or present safety concerns. Presently, the site is undeveloped and there are no sources of glare. The proposed Project includes development that could be sources of glare. During daylight hours, the amount of existing glare depends on the intensity and direction of sunlight; at night, artificial lighting can also generate glare, particularly in commercial and business/professional areas. Windows comprise a large portion of building surfaces, creating potential for glare that would increase with the use of reflective coatings and building materials. Residential and small commercial buildings are not generally considered sources of substantial glare. Thus, the most prominent source of potential glare could result from commercial and office buildings. The extent of this impact would be dependent on the seasonal angle of the sun in relation to the structure and the type of building material used.

The transition of the site from no artificial light to a 201-acre development with a variety of land uses that would require lighting would result in a substantial change. The proposed Project would generate nighttime light pollution that would dramatically alter the existing unlit environment. In addition, nighttime lighting, or the presence of reflective surfaces on buildings from commercial and office areas may result in light and glare shining on existing and proposed residences. Therefore, potential visual impacts from light and glare from the proposed Project are considered significant. There are no feasible mitigation measures to reduce Project related impacts to less than significant. Impacts to light and glare are significant and unavoidable.

4.1.5 Cumulative Impacts

Impact 4.1-5

WOULD THE PROJECT RESULT IN IMPACTS TO AESTHETICS IN THE CUMULATIVE CONDITION?				
SIGNIFICANCE BEFORE MITIGATION	MITIGATION SIGNIFICANCE AFTER MITIGATION			
Significant	No feasible mitigation	Significant and Unavoidable.		

The scope for the cumulative impact analysis for aesthetic resources considers the potential future development on the surrounding parcels as envisioned by the County General Plan. General Plan Figure LU-1, Land Use Diagram, identifies the area north of SR-88 and the proposed Project site as RSC and land that is not within the jurisdiction of the City of Jackson to the south/southeast as AG and to the west/southwest as AG and AT. The types of development that could occur under these designations include larger-scale combinations of residences, commercial, industrial, and public service uses (RSC); primarily agricultural uses (AG); and rural ranchettes, orchards, animal husbandry, and family gardens with density based on various site factors (AT).

The greatest intensity of land use would occur north of SR-88, an area experiencing some development but where a large amount of open space remains. Due to topography and vegetation, present public views from SR-88 are rural in character. There is an upward slope along the northern edge of SR-88 that obscures any views further north. However, development in accordance with the General Plan land use

designation of RSC would allow development to occur along SR-88. New structures, infrastructure, and lighting would be introduced into a largely undeveloped area. Coupled with the WWSP, this would be a noticeable visual change from a natural rural environment to a built environment. There would also be a cumulative loss of the recognized valued visual resources of rolling hills covered in annual grasslands, rangelands, and oak woodlands in the western part of the County.

As with the WWSP, any cumulatively related development would be subject to the County General Plan policies, and the General Plan EIR adopted mitigation measures as well as any other county or state regulations, such as PRC 21083.4. Thus, the transition to a built environment would be highly perceptible. This would be a cumulatively considerable change related to scenic vistas, scenic resources, and existing visual quality. There are no feasible mitigation measures to reduce cumulative impacts to less than significant.

Areas to the south, southeast, and southwest would remain relatively unchanged, as these areas have less intensive land use designations consistent with their current uses. Thus, public views in this area would not experience a direct cumulative impact. However, by the very nature of the WWSP and other cumulative developments, the overall visual character of this area would change and indirectly affect the sense of rural character.

Similarly, light and glare impacts would be greatest north of SR-88. There is also the potential for the effects of light to extend farther beyond what's visible from SR-88. The nighttime effects of light pollution can be experienced even by those who do not have open views into a site. Since the proposed Project site is currently undeveloped, there are no existing light and glare effects within the area. When considered in combination with the impacts of other projects in the cumulative scenario, the proposed Project's incremental contribution to light and glare would be cumulatively considerable. As with the proposed Project, other cumulative projects would be required to adhere to the General Plan policies and the adopted General Plan EIR mitigation measures intended to reduce light and glare impacts. However, consistent with the determinization of the General Plan EIR, there would be a cumulatively considerable impact related to light and glare resulting from new development. As undeveloped areas transition from rural to suburban character, the amount of light and glare will increase due to new buildings, structures, streetlights, and vehicle lights. General Plan policies and mitigation measures would not reduce impacts from these sources to less-than-significant levels, and there are no other feasible mitigation measures to reduce impacts. Therefore, the cumulative light and glare impact would be significant and unavoidable.

4.1.6 Mitigation Measures

There are no feasible mitigation measures to reduce impacts to less than significant.

4.1.7 References

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4.2 AGRICULTURE AND FORESTRY

4.2.1 Introduction

This section describes existing agricultural and forestry resources in the Project vicinity. This section describes potential changes in agricultural and forestry resources, as defined under CEQA, based on implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). The impacts on these resources are evaluated based on the potential for conversion of Important Farmland, changes to land use for parcels under the Williamson Act contract or agricultural zoning, or conversion of forestland to occur from the implementation of the WWSP. See also Sections 3.0 Project Description, 4.4, Biological Resources, and 4.13 Public Services for a discussion of open space.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to agricultural resources include concerns related to the existing onsite easement and existing uses for grazing. The NOP and written and verbal comments received are included in **Appendix A**.

4.2.2 Regulatory Setting

Federal Regulations

There are no federal laws or regulations that apply to agricultural or forestry resources with respect to the Project.

State

Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 as a non-regulatory program to provide a consistent and impartial analysis of agricultural land use and land use changes throughout California. The first Important Farmland Maps, produced in 1984, covered 30.3 million acres in 38 counties. Since that time, DOC has collected data every two years to assist in understanding changes in agricultural land in the state. Data now span more than 32 years and have expanded to 49.1 million acres as modern soil surveys have been completed by the U.S. Department of Agriculture (USDA). FMMP now maps agricultural and urban land use for nearly 98 percent of California's privately held land.

The FMMP has developed categorical definitions of Important Farmland that incorporate the land's suitability for agricultural production rather than solely relying on the physical and chemical characteristics of the soil. The FMMP includes data on the location of agricultural land, land use changes from agriculture to urban development, and soil quality. Land that is identified as Important Farmland is mapped as one of the following four categories (DOC 2024a):

Prime Farmland. Farmland with the best combination of physical and chemical features is able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained, high yields. Prime Farmland must have been used for irrigated agricultural production at some point during the four years before the FMMP's mapping date.

Farmland of Statewide Importance. Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have

been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland. Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but may also include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some point during the four years before the FMMP's mapping date.

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

Grazing Land is an additional recognized farmland category that is not considered Important Farmland. Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, better known as the Williamson Act, is California's primary program to protect agricultural land. The Williamson Act discourages conversion of agricultural land by allowing landowners to enter into long-term contracts (10 or 20 years) with the State of California to keep agricultural land in production in return for reduced property tax rates (DOC 2024b). The landowner and any successors-in-interest are obligated to adhere to the contract's enforceable restrictions unless the contract is rescinded or cancelled. In 1998, an option was added in the Williamson Act Program to create Farmland Security Zones, which are areas within an agricultural preserve that offer private landowners a greater property tax reduction than the regular assessment within the Williamson Act.

State Planning and Zoning Laws (Government Code Section 65000 et seq.)

Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county'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 city's or county'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 the 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. Government Code Section 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. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure that the land uses designated in the general plan would also be allowable by the zoning ordinance (Gov. Code §65860, subd. [c]).

A specific plan is another planning device authorized by the state planning and zoning law that governs a smaller land area than the general plan but must be consistent with the overarching general plan.

Specifically, it implements the general plan in a particular geographic area (Gov. Code, § 65450 et seq.). Generally, it describes the distribution, location, and extent of the land uses and the associated infrastructure, as well as standards governing future development. A specific plan must include a statement of the relationship of the specific plan to the general plan (Gov. Code, § 65451, subd. [b].). A local jurisdiction's conclusion that a specific plan is consistent with its general plan "carries a strong presumption of regularity" (Napa Citizens for Honest Government v. County of Napa Bd. of Supervisors (2001) 91 Cal.App.4th 342, 357).

Regional and Local

The California Environmental Quality Act (CEQA) Guidelines Section 15125(d) states that an "EIR shall discuss any inconsistencies between the Proposed Project and applicable general plans and regional plans." General plan amendments and rezoning proposed as part of the project would make the Proposed Project consistent with the applicable local jurisdiction's General Plan and zoning and would create specific development policies to guide project development. Adopted land use plans and regulations relevant to existing conditions on the project site and implementation of the proposed Project are described below.

Amador County General Plan

Goals and policies from the County's General Plan that are related to land use, growth, and agriculture and are applicable to the Project are described below (Amador County 2016).

<u>Economically Viable Agriculture – Goals and Policies</u>

- **Goal 3:** Preserve the land base necessary to sustain agricultural production and maintain long-term economic viability of agricultural land uses.
- **Policy 3.1**: Ensure future land uses are appropriately located and scaled to fit in with the county's rural and agricultural context.
- **Policy 3.2:** On lands under Williamson Act contracts, provide for and support value-added agricultural activities designed to provide an additional source of farming income while maintaining the land for viable agricultural production, in accordance with state law.
- **Policy 3.3:** Provide for and support value-added agricultural activities designed to provide an additional source of farming income while maintaining the land for viable agricultural production.
- **Policy 3.4:** Promote development of support businesses associated with agri-tourism.
- **Goal 4:** Maintain important farmlands for agricultural uses and agri-tourism.
- **Policy 4.1:** Maintain the right of individuals in Amador County to farm, including enforcement of the County's "Right to Farm" ordinance.
- **Policy 4.2:** Encourage use of Williamson Act contracts to maintain farm and ranch lands in agricultural use.
- **Policy 4.3:** Educate landowners about alternative methods of farmland preservation, including identification of funding for conservation easements.

- **Policy 4.4:** Direct future development toward "infill" areas (areas of existing urban development), areas contiguous to cities, and areas with infrastructure and services in order to maintain the viability of existing agricultural land.
- **Policy 4.5:** Review future development for compatibility with existing adjacent and nearby agricultural uses.
- **Policy 4.6:** Direct future development away from farmlands of local or statewide importance.
- **Policy 4.7:** Encourage provision of farm family and farm worker housing in a manner that conserves important farmlands.

Timber Resources – Goals and Policies

- **Goal 5:** Promote sustainable forest management that ensures continued timber production, water quality and the timber land base, and reduces the risk of catastrophic fires.
- **Policy 5.1:** Encourage the continued economic and ecologic viability of timber harvesting and promote creation of defensible space and community wildfire protection.
- Policy 5.2: Maintain Timber Production Zone (TPZ) areas as renewable source of timber and wood products.
- **Policy 5.3:** Encourage value-added activities (such as sawmills, cogeneration plants, timber-based manufacturing, and other uses) which contribute to the economic viability of timber production.
- **Policy 5.4:** Protect timber resource areas from incompatible uses.

Amador County Land Use Designations

The Amador County General Plan serves as a guide for both land development and conservation in the unincorporated portions of the County. The Amador County General Plan (updated in October 2016) designated the majority of the Project site as Regional Service Center (RSC) and a smaller portion as the Residential Medium (RM).

Amador County Zoning

Zoning is addressed in Amador County Code in Title 19, Zoning. The Project site is zoned R1 (Single Family Residential), C1 (Retail Commercial and Office), and R3 (High Density Multiple Family Residential).

4.2.3 Environmental Setting

The project site is located in unincorporated Amador County, in the southwestern portion of the census-designated place of Martell. The project vicinity and project site are shown on **Figures 2-1, 2-2**, **and 2-3**, respectively.

Existing Uses

The 201-acre project site is currently undeveloped and provides rangeland for cattle.

Past Agricultural Use

The project site has previously been used as a cattle ranch. In 1929, T.A. Maher, owner of the land where the project site is located, granted the right to drive livestock across this land in perpetuity to J.C.

Kremmel (Maher 1929). The practice of allowing livestock passage across the project site has continued to this day.

Important Farmland

The California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) applies one of four important farmland designations to agricultural land that has the best conditions for agricultural use. As stated above in 4.2.2, these are Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. In addition, the FMMP recognizes Grazing Land as another category of agricultural use. These classifications combine the actual farming use of the land with the technical soil ratings that determine a land area's suitability for farming and ranching. The DOC classifies the project site as Grazing Land (DOC 2024c) (Figure 4.2-1).

Williamson Act Lands

As described above in Section 4.2.2, Regulatory Setting, under the California Land Conservation Act of 1965 (Williamson Act), landowners may enter into contracts with local governments by which, in exchange for agreeing to keep land in agricultural or open space use, the landowners gain a reduced assessment for tax purposes. None of the parcels within the project site are subject to Williamson Act contracts restricting use of the land to agricultural or open space uses (Amador County 2024a).

Agricultural Land Use and Zoning

None of the parcels at the project site are designated in the General Plan for agricultural use (Amador County 2024b). As discussed in Section 4.2.2, land at the site is designated as RSC and RM.

Similarly, none of the parcels at the project site are zoned for agricultural use (Amador County 2024c). Land use designations and zoning at the project site are described above in Section 4.2.2. As discussed in Section 4.2.2, land at the site is zoned RA, C1, and R3.

Forestry Land Use and Zoning

None of the parcels at the Project site are designated for forest or forestry uses (Amador County 2024c). Further, none of the parcels is zoned for forestry uses, such as timberland production zones (Amador County 2024b).

4.2.4 Impacts

Method of Analysis

Impacts of Project implementation on agricultural and forestry resources were determined by evaluating current FMMP, land use, zoning, and Williamson Act contracting conditions at the Project site through mapping analysis, including review of online Amador County GIS databases and published maps.

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, an impact on agriculture and forestry resources is significant if implementation of the Proposed Project would do any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Involve other changes in the existing environment that, due to their location or nature, could result in the conversion of Farmland to non-agricultural uses or conversion of forest land to nonforest use.

Effects Found Not to be Significant

As discussed in Section 4.2.3, the proposed Project is not located in a forest or on forest land, on land designated in the General Plan for forest uses, or zoned for forest uses. Therefore, further discussion of these issue areas is not included within this EIR.

Impact Analysis

Impact 4.2-1

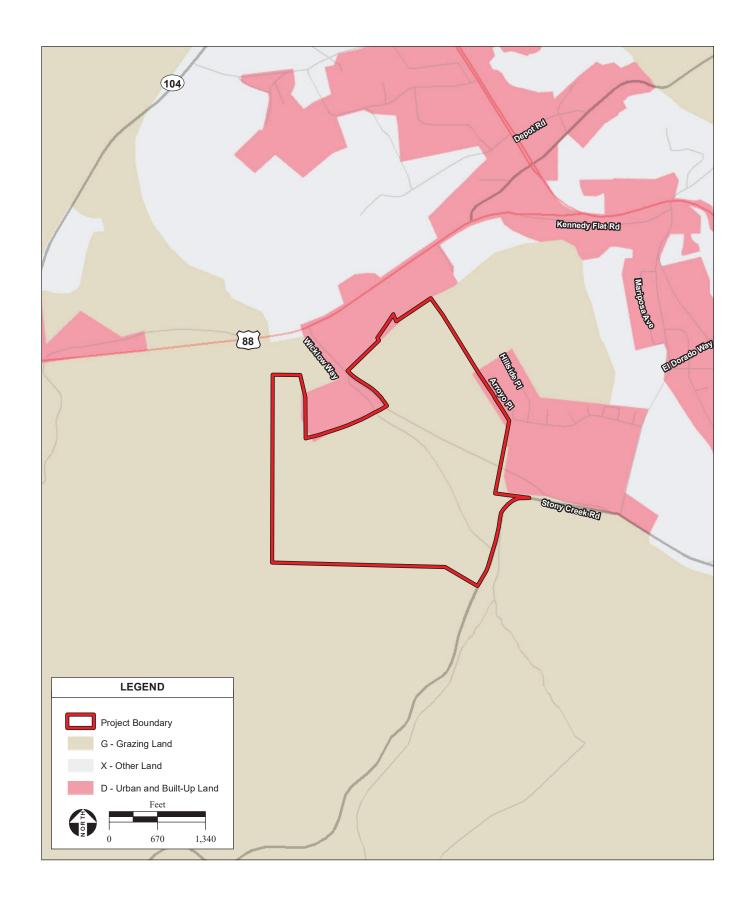
WOULD THE PROJECT CONVERT PRIME FARMLAND, UNIQUE FARMLAND, OR FARMLAND OF STATEWIDE IMPORTANCE (FARMLAND), AS SHOWN ON MAPS PREPARED PURSUANT TO THE FMMP OF THE CALIFORNIA RESOURCES AGENCY, TO NON-AGRICULTURAL USE?					
SIGNIFICANCE BEFORE MITIGATION SIGNIFICANCE AFTER MITIGATION MEASURES MITIGATION					
No Impact None Required No Impact					

As described in Section 4.2.3, land at the Project site is not designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland (Farmland). The FMMP has designated the land as Grazing Land. The proposed Project would allow the project site to be developed for urban uses. However, this development would not constitute conversion of Farmland to nonagricultural use. There would be no impact.

Impact 4.2-2

WOULD THE PROJECT CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT?					
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES SIGNIFICANCE AFTER MITIGATION				
No Impact	None Required	No Impact			

As discussed in Section 4.2.3, the land at the Project site is not under Williamson Act contract. In addition, none of the land is designated or zoned for agricultural use in Amador County. Therefore, although the land would cease to be used for agricultural purposes (i.e., grazing) after Project implementation, this change in use would not conflict with existing zoning or a Williamson Act contract. There would be no impact.



As described in Section 4.2.3, an agreement established in perpetuity between a prior landowner of the land at the Project site and an owner of the adjacent ranchlands allowed passage of cattle belonging to the adjacent rancher across the Project site. This agreement would continue to be upheld after Project implementation, through a passage established. It is anticipated that the passage would follow the project's eastern and southern boundaries with a defined livestock crossing on the extension of Wicklow Way near Stony Creek Road. Because this agreement is not related to Williamson Act contract or zoning, it does not contribute to the impact analysis.

Impact 4.2-3

WOULD THE PROJECT INVOLVE OTHER CHANGES IN THE EXISTING ENVIRONMENT WHICH, DUE TO THEIR LOCATION OR NATURE, COULD RESULT IN CONVERSION OF FARMLAND, TO NON-AGRICULTURAL USE?					
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES SIGNIFICANCE AFTER MITIGATION				
No impact None Required No Impact					

As discussed above under Impact 4.2-1, there is no Prime Farmland, Farmland of Statewide Importance, or Unique Farmland (Farmland) at the Project site. Therefore, no changes to the project site, such as severing access to Farmland, creating unfarmable parcels, or other adverse changes, would affect Farmland. There would be no impact.

4.2.5 Cumulative Impacts

Cumulative impacts must be analyzed if a project would have a significant or less than significant impact on the resource in question. As described in Section 4.4 Impacts, the proposed Project would have no impact on agricultural or forestry resources. Therefore, no cumulative impact analysis is required.

4.2.6 References

Amador County. 2016. *Amador County General Plan*. Prepared by Amador County. Adopted on October 4, 2016. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan. Accessed: February 20, 2024.

Amador County. 2024a. GIS Viewer: Williamson Act Properties. Available at: https://gisviewer.amadorgov.org/gpv/Viewer.aspx. Accessed: February 20, 2024.

Amador County. 2024b. GIS Viewer: General Plan. Available at: https://gisviewer.amadorgov.org/gpv/Viewer.aspx. Accessed: February 20, 2024.

Amador County. 2024c. GIS Viewer: Zoning. Available at: https://gisviewer.amadorgov.org/gpv/Viewer.aspx. Accessed: February 20, 2024.

Department of Conservation (DOC). 2024a. Important Farmland Categories. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx. Accessed: February 20, 2024.

- DOC. 2024b. Williamson Act Program. Available at: https://www.conservation.ca.gov/dlrp/wa. Accessed: February 21, 2024.
- DOC. 2024c. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: February 20, 2024.
- Maher, T.A. 1929. Indenture between T.A. Maher and J.C. Kremmel granting the right to drive livestock across the Project site.

4.3 AIR QUALITY

4.3.1 Introduction

This section describes applicable regulations related to air quality, the local air quality setting, including the current attainment status of the applicable air basin, local sensitive receptors, emissions sources, and evaluates the air quality impacts of the Wicklow Way Specific Plan (WWSP or proposed Project), including pollutant emissions, health risks, and odors. "Emissions" refers to the actual quantity of pollutants, measured in pounds per day or tons per year. "Concentrations" refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter (μ g/m3). Greenhouse gas emissions from the proposed Project are discussed in Section 4.8: Greenhouse Gases.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to air quality include concerns related to fugitive dust from exposed soils during construction that may impact the surrounding area. The NOP and written and verbal comments received are included in **Appendix A**.

4.3.2 Regulatory Setting

Federal, State, and local air districts have passed laws and regulations intended to control and enhance air quality. The proposed Project is subject to the rules and regulations imposed by the United States Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Amador Air District (AAD). Federal, State, regional, and local laws, regulations, plans, or guidelines potentially applicable to the proposed Project are summarized herein.

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, 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 six air pollutants based on human health and welfare criteria. The six criteria for air pollutants include particulate matter with an aerodynamic radius of 10 microns or less (PM10), particulate matter with an aerodynamic radius of 2.5 microns or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), ground-level ozone (O3), and lead (Pb). Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects such as visibility reduction. **Table 4.3-1, California and National Ambient Air Quality Standards** shows the NAAQS and the California Ambient Air Quality Standards (CAAQS).

TABLE 4.3-1 CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

	AVERAGING	CAA OSA	NAAQS		FORM
POLLUTANT	TIME	CAAQS ^A	Primary	Secondary	FORM
	1 hour	0.09 ppm	NA		Annual fourth-highest daily
Ozone (O₃)	8 hours	0.07 ppm	0.070 ppm	Same as Primary	maximum 8-hour concentration, averaged over 3 years
Carbon monoxide	1 hour	20 ppm	35 ppm	NA	Not to be exceeded more
(CO)	8 hours	9.0 ppm	9.0 ppm	INA	than once per year
Nitrogen dioxide	1 hour	0.18 ppm	0.1 ppm	Same as Primary	98 th percentile of 1-hour daily maximum concentrations, averaged over 3 years
(NO ₂)	Annual	0.03 ppm	0.053 ppm	Primary	Annual Mean
	1 hour	0.25 ppm	0.075 ppm	NA	99 th percentile of 1-hour daily maximum concentrations, averaged over 3 years
Sulfur dioxide (SO ₂)	3 hours	NA	NA	0.50 ppm	Not to be exceeded more than once per year
	24 hours	0.04 ppm	NA	NA	NA
Particulate Matter 10 microns in size	24 hours	50 μg/m³	150 μg/m³	Same as Primary	Not to be exceeded more than once per year on average over 3 years
(PM ₁₀)	Annual	20 μg/m³	NA]	NA
Particulate Matter 2.5 microns in size	24 hours	NA	35 μg/m3	NA	Primary: 98 th percentile, averaged over 3 years. Secondary: annual mean, averaged over 3 years
(PM _{2.5})	Annual	12 μg/m³	9 μg/m3	15.0 μg/m³	Annual Mean, averaged over 3 years
Sulfates (SO _x)	24 hours	25 μg/m³	NA	NA	NA
	30 days	1.5 μg/m ³	NA	NA	NA
Lead (Pb)	Rolling 3- Month Average	NA	0.15 μg/m3	Same as Primary	Not to exceed
Hydrogen sulfide (H₂S)	1 hour	0.03 ppm	NA	NA	NA
Vinyl chloride (C ₂ H ₃ Cl)	24 hours	0.01 ppm	NA	NA	NA
Visibility Reducing Particles	8 hours	Extinction of 0.23 kilometers	NA	NA	NA

NA = not applicable, ppm = parts per million; $\mu g/m3$ = micrograms per cubic meter; A: The CAAQS for ozone, CO, SO₂ (1- and 24-hour), NO₂ PM₁₀, and PM_{2.5} are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded. Source: EPA, 2024, CARB, 2016.

The law recognizes the importance for each state to locally carry out FCAA requirements, considering new and expanded industry and commercial, geography, housing patterns, and new and expanded public services and utilities, etc., to qualify and forecast local pollution control problems. EPA requires each state to develop a State Implementation Plan (SIP) to capture the considerations and identify how this growth will meet FCAA requirements. A SIP identifies the rules and regulations each state will implement to control air quality within their jurisdiction. CARB is the state agency responsible for preparing the California SIP.

Federal New Source Performance Standards

New source performance standards (NSPS) implement FCAA §111(b) and are issued for categories of sources that the EPA has listed because they cause or contribute significantly to air pollution. The purpose of the NSPS is to attain and maintain ambient air quality by ensuring that the best demonstrated emission control technologies are installed as industrial sources are modernized. The proposed Project may have sources that are subject to these NSPS, including boilers, stationary combustion engines and turbines, storage vessels, and sewage treatment plan incineration (likely associated with the proposed WWSP WWTP [Wastewater Treatment Plant]).

Federal Hazardous Air Pollutant Program

Title III of the FCAA requires the EPA to promulgate National Emission Standards for Hazardous Air Pollutants (NESHAPs). The NESHAP may differ for major sources than for area sources of hazardous air pollutants (HAPs) (major sources are defined as stationary sources with potential to emit more than 10 tons per year [t/yr] of any HAP or more than 25 t/yr of any combination of HAPs; all other sources are considered area sources). These standards include technology-based emission standards, generally referred to as maximum available control technology (MACT), based on generally available control technology, and health risk-based emissions standards to address risks remaining after implementation of the technology-based NESHAP standards. Implementation of the proposed Project may result in emission sources subject to MACT standards (likely associated with the proposed WWSP and WWTP).

On-Road Vehicle Emission Regulations and Corporate Average Fuel Economy Standards

The EPA and National Highway Transportation Safety Administration (NHTSA) have issued rulemakings regarding the national program of fuel economy standards for passenger vehicles, light-duty trucks, medium- and heavy-duty vehicles, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses. In March 2024, the EPA finalized multi-pollutant emissions standards for passenger cars, light- and medium-duty vehicles, starting in 2027 and phasing in through 2032. GHG emissions for light-duty fleets will go down to 85 grams of CO2 per mile in 2032, and medium-duty vehicles will have a fleet average of 274 grams of CO₂ per mile. For the 2032 model year, engines will have a fleet average of 15 milligrams per mile of non-methane organic gases plus NO_x which represents a 50 percent reduction from the 2025 model year standards. For medium-duty vehicles, the nonmethane organic gases plus NO_x will have a fleet average of 75 milligrams per mile, representing a 58 to 70 percent reduction from current standards. For both light- and medium-duty vehicles the PM standard will be 0.5 milligrams per mile which is projected to reduce tailpipe PM emissions from gasoline vehicles by over 95 percent, as well as reducing mobile source air toxics. Current rulemaking is underway to establish standards for medium- and heavy-duty on-highway vehicles and work trucks. California harmonized its vehicle efficiency standards through 2025 with the federal standards through the Advanced Clean Cars Program.

Non-road Emission Regulations

The EPA has adopted emission standards for different types of non-road engines, equipment, and vehicles. For non-road diesel engines, the EPA has adopted multiple tiers of emission standards. EPA signed a final rule on May 11, 2004, introducing Tier 4 emission standards to be phased in between 2008 and 2015 (69 CFR 38957–39273, June 29, 2004). Tier 4 standards require that emissions of PM and NO_x be reduced by about 90 percent. Such emission reductions can be achieved using control technologies, including advanced exhaust gas after-treatment. To enable sulfur-sensitive control technologies in Tier 4 engines, the EPA also mandated reductions in sulfur content in non-road diesel fuels. In most cases, federal non-road regulations also apply in California, which has only limited authority to set emission standards for new non-road engines.

State

California Clean Air Act

The CCAA, adopted in 1988, established the CAAQS. As shown in **Table 4.3-1** CAAQS have been established for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing PM, and the six national criteria air pollutants. The CCAA requires air districts in the state to achieve and maintain CAAQS by the earliest practical date. The CCAA requires air quality plans to be prepared for areas that have not met state air quality standards for O₃, CO, NO₂, and SO₂. In addition, the CCAA requires implementation of control measures that address transportation control measures and performance standards. To implement the transportation-related provisions of the CCAA, local air pollution control districts have been granted explicit authority to adopt and implement transportation control measures.

The proposed Project is in Amador County within the Mountain Counties Air Basin (MCAB), managed by the AAD, which is responsible for monitoring ambient air pollutant levels and developing and implementing strategies to attain conformance with applicable federal and state standards. As shown in **Table 4.3-2, Amador County CAAQS and NAAQS Attainment Status,** Amador County is currently classified as non-attainment for the federal 8-hour O₃ standard and non-attainment for the state O₃ standard. CARB is currently finalizing updates to the CAAQS designations to change Amador County to non-attainment-transitional since its most recent air monitoring data had less than three exceedances of the O₃ standard.

TABLE 4.3-2 AMADOR COUNTY CAAQS AND NAAQS ATTAINMENT STATUS

CRITERIA AIR POLLUTANTS	AVERAGING TIME	CAAQS	NAAQS
	1-Hour	Nonattainment	NA
Ozone (O ₃₎	8-Hour	Nonattainment Proposed: (Nonattainment-Transitional)	Nonattainment
CO	1-Hour	Unclassified	Unclassified/Attainment
CO	8-Hour	Unclassified	Unclassified/Attainment
NO	1-Hour	Attainment	Unclassified/Attainment
NO ₂	Annual	Attainment	Unclassified/Attainment
.0	1-Hour	Attainment	Unclassified/Attainment
SO ₂	Annual	Attainment	NA
DNA	24-Hour	Unclassified	Unclassified
PM ₁₀	Annual	Unclassified	NA
DNA	24-Hour	NA	Unclassified/Attainment
PM _{2.5}	Annual	Unclassified	Unclassified/Attainment
Lead (Pb)	30-Day/3- Months	Attainment	Unclassified/Attainment
Sulfates	24-Hour	Attainment	NA
Hydrogen sulfide	1-Hour	Attainment	NA
Visible Reducing Particles	8-Hour	Unclassified	NA
Vinyl Chloride	24-Hour	Unclassified	NA

CARB adopted updates to the area designations for State ambient air quality standards on January 25, 2024. For Amador County to move from non-attainment to non-attainment-transitional this means that no air monitors in the area can have more than three exceedances of CAAQS for O₃ in one year (Source: CARB, 2023.)

California Air Resources Board

CARB is responsible for coordination and oversight of state and local air pollution control programs and for implementing the CCAA. CARB has the primary responsibility to develop and implement air pollution control plans to achieve and maintain NAAQS. All regional air pollution control plans or air quality management plans that achieve NAAQS throughout the state constitute the SIP. As California's air quality management agency, CARB regulates mobile emission sources and oversees the activities of county air pollution control districts and regional air quality management districts. CARB is responsible for setting emission standards for consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications. CARB regulates local air quality indirectly by using state standards and vehicle emission standards, conducting research, and carrying out planning and coordinating activities. CARB also provides land use guidance as it relates to air quality, including criteria for siting schools and other sensitive land uses.

In-use Off-road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce diesel Particulate Matter (DPM) and NO_X emissions from in-use, off-road, heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits

on older engines. In December 2011, the regulation was amended to modify the compliance dates for performance standards and establish requirements for compliance with verified diesel emission control strategy technologies that reduce PM and/or NO_X emissions. CARB is in the process of finalizing additional amendments that will require phase-out of the oldest and highest-emitting off-road engines and restrict the addition of vehicles with Tier 3 and Tier 4 interim engines. This rulemaking, started in 2024, will also require contracting entities to obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet, mandate the use of formulated renewable diesel fuel (R99 or R100) for all fleets with limited exceptions, and provide additional requirements to increase enforceability and allow flexibility for permanent low-use vehicles.

Heavy-duty On-board Diagnostic System Regulations

In 2004, CARB adopted regulations requiring on-board diagnostic (OBD) systems on all 2007 and later model year heavy-duty engines and vehicles (i.e., vehicles with a gross vehicle weight rating greater than 14,000 pounds) in California. CARB subsequently adopted a comprehensive OBD regulation for heavy-duty vehicles in model years 2010 and beyond. The heavy-duty OBD regulations were last updated in 2016 with revisions to enforcement and testing requirements and implementation schedules. Heavy-duty trucks used during proposed Project construction or operations would be required to comply with these requirements.

Heavy-duty Vehicle Inspection Program

The heavy-duty vehicle inspection program requires heavy-duty trucks and buses to be inspected for excessive smoke, tampering, and compliance with engine certification labels. Any heavy-duty vehicle (i.e., a vehicle with a gross vehicle weight rating greater than 14,000 pounds) traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations. Owners of trucks and buses found to be in violation are subject to penalties, starting at \$300 per violation. Heavy-duty trucks used during construction or operations of the proposed Project would be subject to this inspection program.

California Standards for Diesel Fuel Regulations

These regulations require the use of diesel fuel with a sulfur content of 15 parts per million (ppm) or less (by weight) for all diesel-fueled vehicles operated in California. These regulations also contain standards for the aromatic hydrocarbon content and lubricity of diesel fuels.

AB 1346: Air Pollution: small off-road engines

Assembly Bill 1346 (AB 1346) requires CARB to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new Small Off-Road Engines (SORE) by July 1, 2022, for engines produced on or after January 1, 2024, or as soon as CARB determines is feasible. In determining technological feasibility, CARB is to consider emissions from SOREs in the state, timeline for zero-emission SORE development, increased electricity demand from charging zero-emission SORE, cases for both commercial and residential users of SOREs, and expected availability of zero-emission generators and emergency response equipment. CARB must also identify and make available funding for rebates or incentives. CARB adopted engine exhaust emission regulations for small

off-road engines in compliance with AB 1346, which requires most new small off-road engines to be zero emissions by 2024.

Portable Equipment Registration Program

The statewide Portable Equipment Registration Program (PERP) establishes a system to uniformly regulate portable engines and portable engine-driven equipment units. After being registered in this program, engines and equipment units may operate throughout the state without the need to obtain permits from individual air districts. Owners or operators of portable engines and certain types of equipment can voluntarily register their units under this program. Operation of registered portable engines may still be subject to certain air district requirements for reporting and notification. Engines with less than 50 brake horsepower are exempt from this program. Some of the engines used for the proposed Project may operate under PERP.

Advanced Clean Cars Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the first set of regulations that addressed GHG emissions (CARB, 2017a). The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emission Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, as well as the Zero Emission Vehicle (ZEV) regulations requiring manufacturers to produce more ZEVs (i.e., battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. Due to federal adoption of the final SAFE Vehicles Rule, new cars of model years 2021 through 2026 are not currently required to achieve the fuel economy targets set by the Advanced Clean Cars program. The rule was judicially challenged, but the litigation has been placed in abeyance while undergoing review by the Biden administration.

Advanced Clean Trucks Regulation

CARB adopted the Advanced Clean Trucks Regulation, which requires that truck manufacturers in California sell a percentage of zero-emission trucks beginning in 2024, with an increased percentage over time. Under this rule, every new truck sold in California must have zero emissions by 2045.

Advanced Clean Fleets

The Advanced Clean Fleets (ACF) regulation is CARB's approach to accelerating a transition to zero-emission medium- and heavy-duty vehicles. The ACF regulation applies to fleets performing drayage operations, those owned by state, local, and federal government agencies, as well as high-priority fleets. High priority fleets are entities that own, operate, or direct at least one vehicle in California and that have either \$50 million or more in gross annual revenues or that own, operate, or have common ownership or control of 50 or more vehicles (excluding light-duty package delivery vehicles). The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. Manufacturers may sell only zero-emission medium- and heavy-duty vehicles starting in 2036. High-priority and federal fleets must comply with the Model Year Schedule or the optional ZEV milestones to phase in ZEV. State and local government fleets are required to ensure that 50 percent of vehicle purchases are zero-emission beginning in 2024 and 100 percent of vehicle purchases are zero-emission

by 2027. Small government fleets with 10 or fewer vehicles, or low population counties such as Amador County, can delay the start of the ZEV purchases until 2027. At which point, 100 percent of vehicle purchases must be ZEVs, but must still meet other regulatory requirements, including reporting, starting in 2024.

Toxic Air Contaminants

Airborne Toxic Control Measures (ATCMs), including the following relevant measures, are implemented to address sources of toxic air contaminants (TACs):

- ATCM to limit school bus idling and idling at schools;
- DPM control measure for on-road heavy-duty diesel-fueled residential and commercial solid waste collection vehicles;
- ATCM for DPM from portable engines rated at 50 horsepower and greater;
- ATCM to limit diesel-fueled commercial motor vehicle idling;
- Benzene ATCM for retail service stations;
- ATCM to reduce particulate emissions from diesel-fueled engines; standards for non-vehicular diesel fuel;
- ATCM for stationary compression ignition engines;
- Asbestos ATCM for construction, grading, quarrying, and surface mining operations;
- Asbestos ATCM for surfacing applications; and,
- ATCM for emissions of chlorinated TACs from automotive maintenance and repair activities.

In addition to ATCMs, TACs are controlled under several regulations in California, including the Tanner Air Toxics Act, Air Toxics Hot Spots Information Act, and AB 2588: Air Toxics "Hot Spots" Information and Assessment Act. Proposition 65 (Safe Water and Toxic Enforcement Act of 1996) also requires the state to publish a list of chemicals known to cause cancer, birth defects, or other reproductive harm. This proposition requires businesses to notify Californians about substantial amounts of chemicals in the products they purchase or that are released into the environment.

Valley Fever Regulations

Enacted in 2019, AB 203 modifies §6709 of the California Labor Code to require construction employers in counties where Valley Fever is prevalent (>20 cases per 100,000 people per year) to provide training to all employees by May 1, 2020, and annually thereafter. The training requirements must include:

- What Valley Fever is and how it is contracted;
- Areas where environmental conditions and types of work pose a high risk of contracting Valley Fever;
- Factors that put employees at higher risk of infection or disease development, including pregnancy, diabetes, having a compromised immune system due to conditions such as human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), having received an

organ transplant, or taking immunosuppressant drugs such as corticosteroids or tumor necrosis factor inhibitors;

- Human and environmental exposure prevention methods such as water-based dust suppression, good hygiene practices when skin and clothing are soiled by dust, avoiding contamination of drinks and food, working upwind from dusty areas when feasible, wet cleaning dusty equipment when feasible, and wearing a respirator when exposure to dust cannot be avoided;
- The importance of early detection, diagnosis, and treatment to prevent the disease from progressing is because the effectiveness of medication is greatest in the early stages of the disease;
- Recognizing common signs and symptoms of Valley Fever; including cough, fatigue, fever, headache, joint pain or muscle aches, rash on upper body or legs, shortness of breath, and symptoms similar to influenza that linger longer than usual;
- The importance of reporting symptoms to the employer and seeking prompt medical attention from a physician for appropriate diagnosis and treatment; and
- Prognosis and common treatment for Valley Fever.

If incidence rates in Amador County go above 20 cases per 100,000 persons per year, it would be classified as having a high incidence of Valley Fever. Construction contractors would then be required to comply with Division of Occupational Health and Safety Administration (Cal/OSHA) recommendations and regulations requiring that employers are legally responsible to report to Cal/OSHA any serious injury, illness, or death (including Valley Fever) of an employee. Employers also have responsibilities to control workers' exposure to hazardous materials. Applicable regulations pertaining to Valley Fever protection and exposure in the California Code of Regulation, Title 8, include:

- §342 (reporting Work-Connected Fatalities and Serious Injuries)
- §3203 (Injury and Illness Prevention)
- §5141 (Control of Harmful Exposures)
- §5144 (Respiratory Protection)
- §1433 (Employer Records-Log 300)

Odors

Odors are commonly regarded as a form of public nuisance, and in the United States, many states have adopted regulations to limit odors generated by odorous operations. In California, odors are regulated through Health and Safety Code (HSC) §41700, which states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, determent, nuisance, or annoyance to any considerable number of people." The regulation does not contain guidance on how to define or determine a violation. As a result, local agencies are typically responsible for establishing enforcement criteria. Many agencies have developed their own criteria based on the acceptable number of complaints reported for a particular incident or facility, and a violation is issued if the criteria is not satisfied. In most cases, each odor complaint is investigated by the responsible agency to determine the source and cause, as well as the validity of the complaint. If the complaint is verified, then it would be classified as a confirmed complaint; otherwise, the complaint would be classified as

unconfirmed. For the purposes of evaluating significance under CEQA, agencies often have separate odor evaluation criteria for confirmed and unconfirmed complaints.

California Title 24 Part 6 Building Energy Efficiency Standards and Title 24 Part 11 Green Building Standards Code

Title 24 Building Energy Efficiency Standards are designed to ensure that new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is responsible for adopting, implementing, and updating building energy efficiency. Title 24 Part 6 covers the building envelope, space conditioning, water heating, pools and spas, solar-ready buildings, indoor and outdoor signage and lighting, and electrical power distribution systems.

California's Green Building Standards (CALGreen) Code, Title 24 Part 11, is focused on improving public health, reducing environmental impacts, and encouraging sustainable construction in residential and nonresidential buildings by enhancing the design and construction measures. Multiple agencies have authority to propose building standards for CALGreen. The CALGreen Code includes mandatory measures to support the goals of the State's GHG reduction program as well as promote healthy indoor and outdoor air quality. In addition to mandatory building standards, the CALGreen Code includes voluntary "reach" standards known as the Tiers. CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the Tiers, the provisions become mandates for all new construction within that jurisdiction.

Local

At the local level, air quality is managed through rules and regulations and land use and development policies.

Amador County Air Pollution Control District (Amador Air District)

The AAD is responsible for attaining and maintaining air quality conditions in Amador County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of understanding of air quality issues. AAD is the local agency with primary responsibility for compliance with federal and state standards and for ensuring that air quality conditions are maintained. AAD responsibilities include preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

AAD Rules and Regulations

AAD has several rules and regulations regarding air quality relevant to the proposed Project. A general summary of key AAD rules and regulations applicable to construction and operation of the proposed Project may include, but are not limited to:

Rule 202-Visible Emissions: A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated as number 1 on the Ringelmann Chart, as

published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree equal to or greater than does smoking.

Rule 205-Nuisance: A person shall not discharge from any source whatsoever such quantities of air contaminants or other material 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 persons or the public, or which cause to have a natural tendency to cause injury or damage to business or property. Rule 205 does not apply to odors emanating from agriculture operations necessary for the growing of crops or raising animals.

Rule 218-Fugitive Dust Emissions: The purpose of this rule is to prevent and control fugitive dust emissions by using good housekeeping and/or work practices that include, but are not limited to, the following:

- Application of water and/or approved chemicals to control emissions in the demolition of existing buildings or structures, construction operations, solid waste disposal operations, grading of roads, and/or clearing of land.
- Application of asphalt, water, and/or approved chemicals to road surfaces.
- Application of water and/or suitable chemicals to material stockpiles and other surfaces that may generate fugitive dust emissions.
- Paving and/or re-paving roads.
- Maintenance of roadways in a clean condition by washing with water or sweeping promptly.
- Covering or wetting material stockpiles and open-bodied trucks, trailers, or other vehicles transporting materials that may generate fugitive dust emissions when in motion.
- Installation and use of paved entry aprons or other effective cleaning techniques to remove dirt accumulating on a vehicle's wheels on haul or access roads to prevent tracking onto paved roadways.
- Installation and use of hoods, fans, and filters to enclose, collect, and clean process equipment emissions prior to venting.
- Ceasing operations until fugitive emissions can be reduced and controlled.
- Using vegetation and other barriers to contain and to reduce fugitive emissions.
- Using vegetation for windbreaks.
- Instituting good housekeeping practices by regularly removing piles of material that have accumulated in work areas and/or are generated from equipment overflow.
- Maintaining reasonable vehicle speeds while driving on unpaved roads to minimize fugitive dust emissions.
- Other precautions not specifically listed in this rule have been approved in writing by the Association of Public-Safety Communications Officials (APCO) prior to implementation.

Regulation IV-Authority to Construct Regulations: Any person building, altering, or replacing any source of air contaminants shall first obtain an Authority to Construct (ATC) from the APCO. An ATC shall

remain in effect until the Permit to Operate (PTO) for that source for which the application was filed is granted.

Regulation V Permit to Operate Regulations: Requires obtaining a PTO for stationary sources.

Amador County General Plan

The following goals, objectives, and policies are included in the County's General Plan (Amador County, 2016a).

Air Quality – Goals and Policies

- **Goal C-9:** Maintain and improve air quality.
- **Policy C-9.1:** Encourage development of commercial or industrial businesses which provide jobs for county residents to reduce vehicle miles traveled (VMT) for residents who must drive elsewhere for employment.
- **Policy C-9.2:** Encourage infill development and development near existing activity centers to encourage walking or bicycle use in running local errands.
- **Policy C-9.3:** Promote separation of emission sources from sensitive receptors such as schools, daycare centers, and health care facilities.
- **Policy C-9.4:** Encourage energy conservation and energy-efficient design in new development projects.
- **Policy C-9.5:** Promote recycling of waste materials and use of recycled materials.
- **Policy C-9.6:** Maintain viable public transportation options in Amador County and provide transit connections, such as park-and-ride services, to job centers in nearby counties.
- **Policy 1.7:** Work with state and federal agencies to seek recognition of air pollutant movement from valley to mountain counties as a contributor to reduced air quality.

4.3.3 Environmental Setting

The proposed Project is in Amador County, within the MCAB and the jurisdictional boundaries of the AAD. In addition to Amador County, the MCAB comprises Plumas, Sierra, Nevada, Placer (middle portion), El Dorado (western portion), Calaveras, Tuolumne, and Mariposa counties. The MCAB lies along the northern Sierra Nevada Mountain range, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles.

Topography, Climate, and Meteorology

The majority of the MCAB is in the northern Sierra Nevada area, with the western boundary of the basin extending into the Sacramento Valley. Topography in the MCAB is variable because of mountain peaks, rolling hills, and valleys that differ substantially in elevation from approximately 100 to 10,000 feet.

The climate of the MCAB is influenced by foothill and mountainous terrain unique to the counties included in the MCAB. The general climate of the MCAB varies considerably with elevation and proximity to the Sierra ridge. Terrain features of the MCAB make it possible for various climates to exist in

relatively close proximity. The pattern of mountains, hills, and valleys causes a wide variation in rainfall, temperature, and localized winds throughout the MCAB. Temperature variations have an important influence on basin wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry.

In the winter, the Sierra Nevada Range receives large amounts of precipitation from storms moving in from the Pacific. In the summer, it receives lighter amounts of precipitation from intermittent "monsoonal" moisture flows from the south and cumulus buildup. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion of the MCAB. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures rarely dip below freezing, and precipitation is mixed with rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s°F, while temperatures in the western end of El Dorado County and in the vicinity of the proposed Project can routinely exceed 100°F.

The annual temperature, humidity, precipitation, and wind patterns reflect the topography of the MCAB and the strength and location of a semi-permanent, subtropical high-pressure cell. Within the vicinity of the proposed Project, this area generally has warm, dry summers and mild winters. During the summer, in the western portion of the MCAB, temperatures that often exceed 100°F coupled with clear sky conditions are favorable for ozone formation. Temperatures of more than 100°F occur every year, and temperatures drop below freezing during winter months. The seasonal rain totals range from less than 20 inches at lower elevations to more than 40 inches at higher elevations. In the lower foothills' region surrounding the WWSP site, there is little snowfall, but at higher elevations, the amount of snowfall is greater.

Due to the combination of topography and meteorology of the MCAB, local conditions predominate in determining the effect of emissions. Regional air flows are affected by the mountains, hills, and valleys, which direct surface air flows, cause shallow vertical mixing and hinder dispersion, creating areas of high pollutant concentrations. Inversion layers, in which warm air overlays cooler air, frequently occur and trap pollutants close to the ground. During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine conditions and energy are necessary for the photochemical reaction between ROG and NO_{x_i} which results in the formation of ozone (O_3). Because of its long formation time, O_3 is a regional pollutant rather than a local hotspot problem.

In the summer, the strong upwind valley air flowing into the MCAB from the Central Valley to the west is an effective transport medium for O_3 precursors and for O_3 generated in the San Francisco Bay Area and the Sacramento and San Joaquin Valleys. These transported pollutants are the predominant cause of O_3 in the MCAB and are largely responsible for the exceedances of CAAQS and NAAQS.

Ambient Air Quality Standards and Attainment Status

Ambient air quality in the MCAB is affected by pollutants emitted from stationary and mobile sources. Stationary sources are divided into point and area sources. Point sources consist of one or more emission sources at a facility from an identified location and are usually associated with manufacturing and industrial processing plants. Area sources are widely distributed and consist of many small emission sources. Area source examples include lawnmowers and other landscape maintenance equipment, natural gas-fired water and space heaters, and consumer products such as paints, hairspray, deodorant,

and similar products with evaporative emissions. Mobile source emissions are from on- and off-road motor vehicles and include emissions from vehicle tailpipes, evaporative emissions, and fugitive emissions.

Air pollutants emitted by stationary and mobile sources are regulated by federal and state law. Certain regulated pollutants are known as "criteria air pollutants" or "CAPs" and are emitted as primary and secondary pollutants. The criteria air pollutants are ground-level O_3 , CO, NO_X , SO_2 , PM, and Pb. The primary criteria for air pollutants are those that are emitted directly from sources. CO, NO_X , SO_2 , and most forms of particulate matter (PM_{10} and $PM_{2.5}$) are primary air pollutants. Secondary criteria air pollutants are those formed by chemical and photochemical reactions in the atmosphere. O_3 is the principal secondary pollutant.

The EPA has developed NAAQS criteria for air pollutants. Primary standards are designed to protect public health, and secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. At the state level, CARB has developed CAAQS. The federal and State ambient standards were developed independently, with differing purposes and methods. As a result, the federal and State standards differ in some cases. **Table 4.3-1** shows the NAAQS and CAAQS.

The federal Clean Air Act (CAA; 42 U.S.C. 7401 et seq.) and the CCAA require all areas of California to be classified as attainment, nonattainment, or unclassified (the term "unclassifiable" is used in the federal CAA) as to their NAAQS and CAAQS status. The CAA and CCAA require the EPA or CARB to designate portions of the state where the NAAQS or CAAQS are not met, based on air quality monitoring data, as "nonattainment areas." Because of the differences between national and state standards, the designation of nonattainment areas may be different under federal and state legislation. Both the CCAA and CAA require local air pollution control districts to prepare air quality attainment plans for pollutants for which the area is designated nonattainment. As shown in **Table 4.3-2**, Amador County is designated non-attainment for 8-hour O₃ under the NAAQS and 1- and 8-hour O₃ under the CAAQS. Amador County has been designated as an unclassified or attainment area for all other criteria for air pollutants.

Air Monitoring Data

CARB and EPA operate an extensive air monitoring network to measure progress toward attainment of the NAAQS and CAAQS. The closest air quality monitoring station to the proposed Project is the Jackson Clinton station, approximately two miles southeast of the WWSP site. The Jackson Clinton station monitors O₃, and other criteria pollutants are not measured at any of the monitoring stations nearby. **Table 4.3-3, Air Quality Data Summary (2020-2022) for Jackson Clinton Station** shows a 3-year summary of monitoring data (2020 through 2022) for these pollutants from the Jackson Clinton station.

TABLE-4.3-3 AIR QUALITY DATA SUMMARY (2020-2022) FOR JACKSON CLINTON STATION

POLLUTANT	STANDARD ^A	MONITORING DATA BY YEAR ^B		
		2020	2021	2022
Ozone				
Highest 1-Hour Average (Ppm)	0.090 ppm	0.109	0.094	0.1181
State Standards Exceedance Days	0	1	0	2
Highest 8-Hour Average (Ppm)	0.070 ppm	0.088	0.080	0.074
State Standard Exceedance Days	0	3	6	1
National Standard Exceedance Days	0.070 ppm	3	4	1

Notes: ppm = parts per million; μ g/m3 = micrograms per cubic meter

- 1. Generally, state, and national standards are not to be exceeded more than once per year.
- 2. Data after 2017 may be preliminary.
- 3. A violation occurs only if a standard is exceeded. Because 0.091 rounds to 0.09, it is not considered a violation. A recorded concentration of 0.095 or greater would constitute a violation of the state standard. Sources: CARB, 2024

Criteria Air Pollutants

CARB maintains several ambient air quality monitoring stations within the AAD that provide information on the average concentrations of criteria air pollutants in the region. Monitored ambient air pollutant concentrations reflect the number and strength of emission sources and the influence of topographical and meteorological factors. The ambient air quality standards for the six criteria pollutants are set to protect public health and the environment within an adequate margin of safety (as provided under §109 of the FCAA). 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

Ozone 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 (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature, so peak O_3 levels occur typically during the warmer times of the year. Both reactive organic compounds (ROCs) and NO_x are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops, and other sources using solvents. Relatedly, VOCs 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 is generally accompanied by symptoms including chest pain, coughing, sneezing, and pulmonary congestion.

Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths (U.S. EPA, 2019a). The concentration of O_3 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 O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 parts per billion (U.S. EPA, 2019b).

In addition to human health effect, O₃ has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone 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. CO 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, chest pain, and even death.

CO is not readily dispersed throughout the atmosphere; therefore, it is considered a localized air quality issue, close to the emission source. Motor vehicles are the predominant source of CO emissions. High CO levels develop primarily during winter months when light winds combine with the formation of ground-level temperature inversions, typically from evening through early morning. These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. Overall, CO emissions have been reduced in the last few years because of cleaner tailpipe emissions from newer model cars, use of oxygenated fuel, and modifications to cleaner-burning fuel in fleet mixes. Although the MCAB is classified as being in NAAQS and CAAQS CO attainment, it remains a pollutant of concern at major signalized intersections (greater than 100,000 vehicles per day) that exhibit prolonged vehicle idling times.

Nitrogen Dioxide

 NO_2 is a brownish, highly reactive gas present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant, NO_x . The main effect of increased NO_2 is the likelihood of respiratory problems. Under ambient conditions, NO_2 can irritate the

lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. NO_x plays a major role, together with ROGs, in the atmospheric reactions that produce O_3 and acid rain that may affect 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. NO_2 emissions are also a major component of acid rain. Health effects related to NO_2 include lung irritation and lung damage. People with asthma, as well as children and the elderly, are generally at greater risk for the health effects of NO_2 . NO_x and NO_2 are emitted primarily by combustion sources, including both mobile and stationary sources. NO_2 is also emitted from a variety of sources, ranging from wildfires and prescribed burns to water-heating and space-heating systems powered by fossil fuels.

Sulfur Dioxide

The major health concerns associated with inhalation of SO_2 are effects on breathing, respiratory illness, alterations in pulmonary defenses, and aggravation of existing cardiovascular disease. Children, the elderly, and people with asthma, cardiovascular disease, or chronic lung diseases—such as bronchitis or emphysema—are most susceptible to adverse health effects from exposure to SO_2 . Observed health effects include decreased lung function, respiratory symptoms, and increased emergency department visits and hospitalizations for all respiratory causes. SO_2 is also a precursor to sulfate particles, which are constituents of $PM_{2.5}$ and are associated with acidification of lakes and streams, accelerated corrosion of buildings and monuments, and reduced visibility. Inhalation exposure to $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects (EPA, 2017). SO_2 and SO_x emissions are not typically a concern for land use development projects such as the proposed Project.

Particulate Matter (PM₁₀ and PM_{2.5})

Particulate matter (PM) is a complex mixture of extremely small particles and liquid droplets made up of various components, including acids, organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential to cause health problems. 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, and no threshold has been identified below which no damage to health is observed. PM particles that are smaller than 10 micrometers in diameter, PM₁₀, are of most concern because these particles pass through the throat and nose, enter the lungs, and cause serious health effects. PM₁₀ particles are typically found near roadways and industrial operations that generate dust. Fine PM particles, PM_{2.5}, are less than 2.5 micrometers in diameter and are found in smoke and haze. Ultrafine particulate matter, which has a diameter less than 0.1 micrometer (PM_{0.1}), is not currently federally regulated, although it is a subset of PM₁₀ and PM_{2.5} emissions. It is generally recognized that smaller particles are more harmful to human health. Unlike larger particles, PM_{0.1} can penetrate pulmonary tissue, enter the bloodstream, and circulate throughout the body.

Lead

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. There is no known safe exposure level to lead. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. Lead poisoning can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract and can reduce mental capacity. Gasoline-powered automobile engines were a

major source of airborne lead from the use of leaded fuels which have been mostly phased out since 1996 and resulted in dramatic reductions in ambient concentrations of lead. Because lead persists in the environment forever, areas near busy highways continue to have high levels of lead in dust and soil.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production and refining, sewage treatment plant operations, and confined animal feeding operations. H_2S is extremely hazardous in high concentrations and can cause death.

Sulfates

Sulfates are the fully oxidized, ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. Emissions of sulfur compounds result primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO₂ during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place in California due to regional meteorological features. CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above standards include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility, and because they are usually acidic, they can harm ecosystems and damage materials and property.

Vinyl Chloride

Vinyl chloride is a colorless gas that does not occur naturally. It is formed when other substances, such as trichloroethane, trichloroethylene, and tetrachloroethylene, are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) for a variety of plastic products, including pipes, wire and cable coatings, and packaging materials. PVC-based projects are commonly used in the installation of water conveyance for residential and commercial developments.

Toxic Air Contaminants

In addition to the criteria pollutant's discussion above, TACs and HAPs also create environmental concerns. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health and cause cancer, birth defects, neurological damage, and death. 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 low concentrations. Hundreds of different types of TACs exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no threshold exists below which exposure can be considered risk-free. Examples of TAC sources in the WWSP area include combustion of fossil fuels, industrial processes, consumer products, and gas stations. Other TAC sources include industrial processes such as petroleum hydrocarbon refining and chrome plating and commercial activities such as gasoline stations, dry cleaners, and motor vehicle exhaust. The EPA maintains a list of 187 TACs, also known as HAPs, which are also included on CARB's list of TACs. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases.

According to the California Almanac of Emissions and Air Quality (CARB, 2013), many researchers consider diesel particulate matter (DPM) to be a primary contributor to health risks from TACs because particles in diesel exhaust carry a mixture of harmful organic compounds and metals rather than being a single substance such as most TACs. Unlike most TACs, outdoor DPM is not monitored by CARB because no routine measurement method has been identified. However, using CARB's PM₁₀ database, ambient PM₁₀ monitoring data, and results from several studies, CARB has made preliminary estimates of DPM concentrations throughout the state (California Office of Environmental Health Hazard Assessment [OEHHA] 2001).

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile. Serpentine rock often contains chrysotile asbestos. Serpentine rock and its parent material, ultramafic rock, are abundant in the Sierra Foothills, Coast Ranges, and the WWSP site, which is known to have potentially naturally occurring asbestos.

Asbestos is commonly found in ultramafic rock, including serpentine, and near fault zones. The amount of asbestos typically present in these rocks ranges from less than 1 percent to about 25 percent, and sometimes more. Asbestos is released from ultramafic and serpentine rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. It is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time.

Additional sources of asbestos include building materials and other man-made materials. The most common sources heat-resistant insulators, cement, furnace or pipe coverings, inert filler material, fireproof gloves and clothing, and brake linings. Asbestos has been used in the United States since the early 1900s; however, asbestos is no longer allowed as a constituent in most home products and materials. Many older buildings, schools, and homes still have asbestos containing products.

Naturally occurring asbestos was identified by CARB as a TAC in 1986. CARB has adopted two statewide control measures that prohibit the use of serpentine or ultramafic rock for unpaved surfacing and control dust emissions from construction, grading, and surface mining in areas with these rocks. Various other laws have also been adopted, including those related to the control of asbestos-containing material during the renovation and demolition of buildings.

All types of asbestos are hazardous and may cause lung disease and cancer. Human health risks are dependent on the duration of asbestos exposure. The longer a person is exposed and the greater the intensity of the exposure, the greater the risk of health problems. Asbestos-related diseases, such as lung cancer, may not occur for decades after breathing asbestos fibers. Cigarette smoking increases the risk of lung cancer from asbestos exposure.

Valley Fever

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley fever varies with the season and most commonly affects people who live in hot, dry areas with alkaline soil. This disease affects both humans and animals

and is caused by the inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). These spores are found in the top few inches of soil, and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, which grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are outdoors and are exposed to wind, dust, and disturbed topsoil are at an elevated risk of contracting Valley fever (CDPH, 2023).

Most people exposed to the CI spores will not develop the disease. Of 100 persons who are infected with Valley Fever, approximately 40 will exhibit some symptoms and two to four will have the more serious disseminated forms of the disease. After recovery, nearly all, including the asymptomatic, develop a life-long immunity to the disease (Guevara, 2014). African Americans, Asians, women in the 3rd trimester of pregnancy, and persons whose immunity is compromised are most likely to develop the most severe form of the disease (U.S Centers for Disease Control [CDC], 2013). In addition to humans, a total of 70 different animal species are known to be susceptible to Valley Fever infections, including dogs, cats, and horses; with dogs being most susceptible (Los Angeles County Public Health [LACPH], 2007).

The WWSP site is in an area that has reported cases of Valley fever. In 2018 the highest number of new cases were reported in Amador County, with a total of seven cases, or a case rate of 17.5 cases per 100,000 people. These incidence rates for Amador County are among one of the highest in the state. Given the fact that fugitive dust-causing activities associated with the proposed Project would occur, the potential for construction activities to encounter and disperse CI spores and create the potential for additional Valley Fever infections is high. Mitigation measures that reduce fugitive dust will also reduce the chances of dispersing CI spores.

Odors

Odors are generally 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, anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, 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, it is quite subjective. Some individuals can smell very 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; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also 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 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 concentration of the odorant 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 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.

Potential existing sources of odor in the vicinity consist of industrial and agricultural land uses. The proposed Project has designated a portion of the Specific Plan for a WWTP to identify known sources of odors from the digestion and degradation of waste in sewer water during its treatment process.

Sensitive Receptors

Schools, hospitals, and convalescent homes are considered sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air-quality related health problems. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, increasing their potential exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The land uses surrounding the WWSP site include open space, agricultural, commercial, high school, residential, and industrial. The nearest residences are adjacent to the proposed Project along Arroyo Place and Westview Drive. Proposed WWSP residential land uses would most likely be added in phases of buildout, and residences from the early phases could become sensitive receptors during later construction phases. Argonaut High School is located southeast of the WWSP site. An elementary school is proposed on the east side of the WWSP site, adjacent to the high school. There is a daycare located east of the WWSP site along Mariposa Avenue and a wellness clinic to the north near Highway (SR) 88 and Martell Road. Existing residential development and other sensitive receptors are located along roadways that would accommodate the increase in vehicle traffic resulting from the proposed Project.

4.3.4 Impacts

Project-related air quality impacts fall into three categories: short-term due to construction, long-term due to project operation, and cumulative. Impacts in each category can be classified as having regional or local effects.

Method of Analysis

The discussion below presents the methodologies used to conduct the air quality analysis and assess the significance of the proposed Project.

Construction

Short-term construction activities would result in the generation of PM_{10} and $PM_{2.5}$, ROG, NO_x , and CO from fossil-fueled construction equipment and vehicles, as well as PM_{10} and $PM_{2.5}$ from fugitive dust. The California Emissions Estimator Model, Version 2022.1.1.22 (CalEEMod) is a model that estimates

construction emissions of CAPs from land uses by utilizing the most relevant EPA, CARB, and/or district-specific emission factors. CalEEMod was used to estimate emissions from construction-related sources of the proposed Project. The model calculates construction emissions for land use development projects based on building size, land use and type, disturbed acreage, and allows for input of project-specific information. Project-generated criteria pollutants were modeled based on information provided in the Project Description and default CalEEMod settings and parameters attributable to the construction period and location of the proposed Project. Since a detailed construction schedule and equipment list were not available, construction emissions were estimated based on proposed land uses. In addition, details regarding the size and construction scope for the proposed WWTP and associated emissions are addressed qualitatively. A detailed list of assumptions used to estimate construction emissions, CalEEMod results, and output files are included in **Appendix C**.

Operation

Criteria Pollutant Emissions

The proposed Project would generate operational emissions of the criteria pollutants, including ozone precursors (ROG and NO_x), CO, PM₁₀, PM_{2.5}, and SO_x. CalEEMod was used to estimate the area, energy, and mobile emissions associated with operation of the proposed Project. Input values for the model included CalEEMod defaults and site-specific data, if available. Currently, details are not readily available regarding the exact size components of the WWSP WWTP; therefore, these emissions are addressed qualitatively. A detailed list of assumptions used to estimate operational emissions is included in **Appendix C**. The operational effects on air quality were analyzed for 2045, consistent with the traffic analysis, even though the proposed Project would likely be built in phases between 2025 and 2045. Area, energy, and mobile emissions were modeled based on proposed land use types as described in **Section 2.0**, Project Description, and trip generation presented in **Section 4.14**, Transportation. The trip generation data includes data for internal trips and VMT. Operational emission results from CalEEMod are presented below, and CalEEMod output files are included within **Appendix C**.

CO Hot Spot Analysis Methodology

The *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) was used to determine impacts connected with CO Hot Spots. In 1997, the EPA approved the CO Protocol for use as an alternative hot spot analysis method in California. The CO Protocol is the standard method used for project-level CO analysis by Caltrans. This protocol outlines a screening process for determining which intersections are likely to have significant impacts. Projects that would lead to worsening the level of service (LOS) of a signalized intersection to E or F represent a potential for a CO violation and would require further analysis; projects that do not worsen signalized intersections to LOS E or F would require no more analysis. Refer to Section 4.14, Transportation for more information on the proposed Project's contribution to LOS.

Toxic Air Contaminants

CARB has identified DPM as a TAC. DPM is generated during construction by on- and off-road construction vehicles. DPM is also generated in substantial quantities by high-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic. Health risks from TACs are a function of the concentration of emissions and duration of exposure. The primary source of TACs during construction is DPM from construction equipment exhaust. The evaluation of

TACs is conducted qualitatively due to the short-term nature of construction and the distance from the closest sensitive receptors.

The Project site is in an area that may have naturally occurring asbestos (NOA). CARB and AAD have specific regulations regarding proper fugitive dust control measures to lessen the potential for exposure from NOA during construction grading and surfacing. It is generally considered that the health risks from exposure to NOA is less than significant with implementation of the CARB and AAD regulations for NOA.

The Project site is in a county with known cases of Valley Fever. The potential impacts are addressed qualitatively and consider potential actions that can reduce the incidence of exposure to the community.

Although the proposed Project would not generate substantial quantities of TACs during operation, there is the potential that proposed sensitive receptors within the WWSP site, including residential land uses, could be exposed to TACs from onsite sources such as emergency generators and the proposed WWSP WWTP, as well as DPM from on-road diesel vehicles. The impacts of these TACs are discussed qualitatively since details needed to conduct a quantitative analysis were not available. This would include information on the specific location, exhaust flow rate, pollution control devices, and operating characteristics.

Odors

Odor analyses typically evaluate the potential for a proposed project to generate odors or be affected by odors from nearby sources. The proposed WWSP WWTP is considered an odor source. Potential odor impacts were evaluated by examining distances from existing and proposed odor sources (areas designated for industrial uses, such as the WWTP) to the proposed Project. The analysis also considers prevailing wind direction and policies designed to minimize odor impacts. Odor sources typically include industrial land uses, such as sewage treatment plants, landfills, recycling facilities, and electricity generation facilities.

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, the following thresholds of significance have been used to determine whether implementation of the proposed Project would result in significant air quality impacts.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- 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 non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in **Appendix G** of the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. AAD has not established CEQA thresholds of significance. Therefore, this analysis includes a qualitative discussion of air quality impacts supported by anticipated construction and operational emissions.

Impact Analysis

Impact 4.3-1

WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Potentially Significant	MM AQ-01; MM AQ-02; MM AQ-03	Significant and Unavoidable	

The Amador County General Plan designates the proposed Project site as Regional Service Center (RSC) and medium density (RM) residential-related land uses. As described in Chapter 3.0, under the discussion of the Land Use Element and related policies, the RSC designation is assigned to areas suitable for large-scale community-wide service centers with residential, commercial, industrial, and public service uses. In addition to maintaining the County's historic and rural character, this designation also creates places where residents and visitors can walk and bike to public and commercial services, stores, restaurants, and parks. The RM designation is assigned to areas suitable for higher-density single-or multi-family residential uses in developed areas with public water and sewer service. Implementation of the WWSP would change designations to include new land use designations, including residential, low, medium, and high density, as well as public/quasi-public, community-commercial, parks, recreation, and open space.

Except for the assessment of air quality, GHG, energy demands, and changes in rural character, other CEQA-compliant issue areas evaluated in this DEIR determined that the proposed Project was consistent with the General Plan and other federal, state, and local plans and policies. However, for air quality, since proposed changes in designated land uses may be growth-inducing, the proposed Project is inconsistent with the General Plan and regional air quality plans, including the SIP. There are not sufficient details available at this time to determine if emissions from the proposed Project would result in increased or decreased air emissions as compared to General Plan land use designations. Details required to compare General Plan land uses and the proposed Project include the schedule for construction-related activities, changes in vehicular traffic trips and vehicle miles traveled, operation of the proposed WWSP WWTP, onsite roadway paving and striping, and application of interior building finishes based on building square footage. The lack of detail describing land use changes from the General Plan and quantifiable emissions associated with the proposed Project are not accounted for in the SIP. Subsequently, growth associated with implementation of the WWSP has the potential to hinder the AAD and CARB from attaining NAAQS and CAAQS for O₃. Therefore, inconsistency with the General Plan, AAD, and SIP policies is considered a **significant** impact.

Mitigation measures listed under Impact 4.3-2 and presented in Section 4.6.5 Mitigation Measures below would reduce air quality emissions, but not to levels consistent with the current SIP. If the proposed Project is approved and included in the General Plan, it will eventually be included in the next

SIP update describing implementation of a revised emissions budget and attainment strategy. Since CARB, as SIP lead agency, has jurisdiction and the County does not have jurisdiction or control over amending the SIP, even with mitigation, this impact remains **significant and unavoidable**.

Impact 4.3-2

WOULD THE PROJECT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA				
POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR				
STATE AMBIENT AIR QUALITY STANDARD?				
Significance Before Mitigation	Mitigation Measures Significance After Mitigation			
Potentially Significant	MM AQ-01; MM AQ- 02; MM AQ-03	Significant and Unavoidable		

Past, present, and future development projects contribute to a region's air quality conditions on a cumulative basis. Therefore, by its very nature, air pollution has a largely cumulative impact. No single project is sufficient in size to, by itself, result in the non-attainment of the NAAQS or CAAQS. If a project's individual emissions contribute toward an exceedance of the NAAQS or CAAQS, then the project's cumulative impact on air quality would be significant. In developing attainment designations for CAPs, the EPA and CARB consider the region's past, present, and future emission levels. The Project site is in an area designated nonattainment for O_3 (federal and state). To improve air quality and attain health-based standards, reductions in emissions are necessary within nonattainment areas.

Construction

Construction of the proposed Project would emit CAPs. This would primarily be ROG, NO_x, CO, PM₁₀ and PM_{2.5} from combustion of fossil-fueled construction equipment and vehicles. The preparation and grading of the WWSP site would generate fugitive PM₁₀ and PM_{2.5} emissions. ROGs would result from asphalt paving of roadways and parking lots. ROGs would also be emitted during architectural coating of buildings and painting lines on asphalt and concrete surfaces. Best estimates of the construction emissions from the proposed Project based on the proposed land uses were calculated using CalEEMod. Since there are no specific details regarding construction phasing, **Table 4.3-4**, **Construction Emissions** shows the best estimate of construction emissions, which indicates that these activities may produce large amounts of ROG, NO_x, PM₁₀ and PM_{2.5}. Since AAD is in non-attainment for O₃, peak emissions of ROG and NO_x especially in the warmer summer months, may contribute to exceedances of the NAAQS and CAAQS. Quantifying these impacts will depend on phasing and identification of specific equipment used during construction of the proposed Project. In addition, the VOC content of the coatings and paints used for buildings and pavement striping may also contribute to ROG emissions, depending on the timing of their application. Therefore, construction emissions are considered potentially **significant**.

Implementation of **Mitigation Measure AQ-1** would require the application of construction best management practices (BMPs) to reduce construction emissions to the maximum extent feasible. This includes requirements to use construction equipment and vehicles that emit lower levels of CAPs, as well as measures aimed at reducing fugitive dust, such as applying water to exposed surfaces and covering material hauling trucks. Even with implementation of this mitigation measure, emissions from construction may result in high ROG and NO_x emissions on peak days, which may contribute to O_3 exceedances. Therefore, even with implementation of **Mitigation Measure AQ-1**, this impact remains **significant and unavoidable**.

TABLE 4.3-4 CONSTRUCTION EMISSIONS

CONSTRUCTION	CRITERIA POLI	UTANTS				
YEAR	ROG	NO _x	СО	SO _x	PM ₁₀	PM _{2.5}
ILAN	Maximum Pou	ınds per Day				
2025	2.52	22.30	21.55	0.03	1.07	0.88
2026	3.20	27.35	29.61	0.06	10.52	4.73
2027	4.48	25.70	57.28	0.06	10.45	4.66
2028	4.20	16.23	54.53	0.04	5.65	1.59
2029	4.04	15.30	51.44	0.04	5.63	1.56
2030	3.88	14.69	48.66	0.04	5.61	1.55
2031	3.56	13.86	45.86	0.04	5.59	1.52
2032	3.41	13.22	43.24	0.04	5.53	1.50
2033	3.29	12.58	40.95	0.04	5.51	1.48
2034	3.13	12.01	38.66	0.04	5.50	1.47
2035	2.88	11.44	36.48	0.04	5.49	1.46
2036	2.79	11.02	34.59	0.04	5.48	1.45
2037	2.67	10.52	32.88	0.04	5.47	1.44
2038	2.56	10.18	31.36	0.04	5.46	1.43
2039	2.43	9.96	29.99	0.04	5.46	1.43
2040	156.13	0.90	4.28	0.00	0.91	0.22
Total Construction Emissions (tons)	23.01	29.65	65.04	0.08	11.55	3.82
Source: Appendix C	•	•	•	•	•	•

Operation

Implementation of the WWSP combined with proposed development within the region could lead to cumulative air quality impacts. Operational activities of the proposed Project in the year 2045 would result in ROG, NO_x, PM₁₀, and PM_{2.5} emissions from vehicle trips associated with residents, visitors, and workers at the WWSP site, onsite roadway paving/striping, application of interior finishes and the undefined size and scope of public/quasi-public land uses, in particular the WWSP WWTP. These sources along with commercial buildings may have stationary sources that require air permits needed to allow for the potential to emit criteria air pollutants. Consumer products (e.g., cleaning products, aerosol sprays, automotive products) used by residents, visitors, and workers would also contribute ROG and NO_x emissions. Combustion of wood in fireplaces and wood burning stoves contributes a significant amount to ROG, NO_x, PM₁₀, and PM_{2.5} emissions. Lesser sources of precursors would include energy use (fuel combustion for heating and cooling buildings).

Table 4.3-5, 2045 Operation Emissions shows the cumulative 2045 emissions associated with operation of the proposed Project. Currently, there are no quantified estimates for emissions associated with the WWSP WWTP and any stationary sources, such as emergency generators and boilers, from public, quasipublic, and commercial uses. These stationary sources may be subject to AAD permitting regulations, which would require installation of Best Available Control Technology (BACT). As a result, estimation of these industrial, stationary, and area source emissions is too speculative since details on operational size, hours of use, and pollution control technology would be required to confirm emissions. Operation of the WWSP WWTP would result in the direct emissions of criteria air pollutants through employee

vehicle trips, infrequent use of backup generators primarily during emergencies or power outages, and emissions of VOCs and combustion products associated with the WWSP WWTP operations. This includes combustion of natural gas for boilers to heat aerators, combustion of digester waste gas in boilers or a flare, release of various VOCs during process operations, release of H₂S or SO₂, and release of chlorine. Removal of waste material and land application of biosolids would generate fossil fuel combustion emissions from vehicles used to transport the material and potential generation of fugitive dust during biosolids land application.

Completion of construction and full operation, without land moving construction activities, would occur in the year 2045 when final roadway paving/striping and interior finishes are completed (CalEEMod default). Further, the estimates represent peak summer emissions. As discussed above, since the proposed Project is not specifically identified in the SIP, the contribution to cumulative air quality impacts is considered potentially **significant**. With the implementation of **Mitigation Measures AQ-2** and **AQ-3**, cumulative emissions of NO_x and ROG would be reduced, but it is unknown if these would reduce emissions sufficiently to reach NAAQS and CAAQS attainment levels.

	TABLE 4.3-5	2045 OPERATION EMISSIONS
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	CRITERIA POLLUTANTS					
SOURCES	ROG	NOx	СО	SOx	PM ₁₀	PM _{2.5}
	Maximum	Pounds	per Day			
Mobile	40.07	28.70	405.95	1.04	115.83	29.69
Area	1,108.85	21.34	1,368.82	2.40	182.22	181.37
Energy	0.25	4.40	2.21	0.03	0.35	0.35
Maximum Daily Emissions Total	1,149.18	54.44	1,776.98	3.47	298.40	211.41
Total Annual Emissions (tons)	57.10	7.35	119.75	0.28	27.82	12.70
Source: Appendix C.						

Implementation of Mitigation Measures AQ-2 and AQ-3 would reduce vehicular, stationary, and area source emissions generated by the proposed Project. The WWSP includes policies that promote alternative forms of transportation and pedestrian access to commercial and office uses. This includes Policies 4.1 and 4.2, which aim to create pedestrian-oriented neighborhoods with a grid system of streets and sidewalks, bike paths, and trails that encourage pedestrian and bicycle travel. Policy 4.10, which encourages commercial and office areas to be accessible via public transit routes, was feasible. Policies 6.1 through 6.7 encourage efficient transportation and mode shifts towards walking and biking, which can reduce vehicle emissions. However, because air emissions associated with the proposed Project are not accounted for in regional air quality attainment plans, including the SIP, and some potential sources were not quantified to estimate emissions, implementation of the WWSP would contribute to regional air quality degradation. Therefore, the proposed Project's contribution, in combination with other reasonably foreseeable developments, would be cumulatively considerable and result in significant and unavoidable air quality impacts.

The ambient concentration of criteria pollutants is a result of complex atmospheric chemistry. Photochemical grid-based models simulate chemical interactions and three-dimensional dispersion patterns on a regional, statewide, and national scale. These models are complex and require significant expertise, knowledge, and resources as they build on third-party models and processing tools that

characterize meteorology, emissions, and other environmental conditions, such as land cover, radiative properties, and boundary conditions. Use of these models is typically speculative because the data are not readily available at the level of refinement needed for air quality analysis prepared pursuant to CEQA, and even if such an analysis were to be completed, consideration would need to be given to ensure the results would be meaningful based on modeling and data limitations.

 NO_x and ROG are precursors to ozone, and NO_x , ROG, and SO_x are precursors to secondarily formed $PM_{2.5}$. Chemical and physical processes transform some of these precursors into criteria pollutant concentrations in the atmosphere. Multiple variables determine whether emissions of air pollutants from a project would move and disperse in the atmosphere so that concentrations of criteria pollutants would become elevated and result in health impacts. A specific concentration of precursor emissions does not equate to an equivalent concentration of the resultant O_3 , or secondary particulate matter, in that area. Thus, resulting health effects of ambient air concentrations are based on a complex relationship of multiple variables and factors. The calculated health effects depend on the concentrations of pollutants to which the receptors are exposed, the number and type of exposure pathways, and the intake parameters from a receptor, which vary by age and sensitivity (e.g., presence of pre-existing conditions). Health effects would be more likely for individuals with greater susceptibility to exposure, and the location of receptors relative to proposed Project impacts would affect where the receptors are exposed.

The following is a summary of the health effects of O_3 , $PM_{2.5}$, and PM_{10} . Meteorology and terrain play major roles in O_3 formation, and conditions for maximum O_3 generation occur on days with low wind speeds, stagnant air, a warm temperature, and cloudless skies. Short-term exposure (lasting a few hours) to O_3 at levels typically observed in the MCAB can have health effects. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Health effects of $PM_{2.5}$ include mortality (all causes), hospital admissions (respiratory, asthma, cardiovascular), emergency room visits (asthma), and acute myocardial infarction (non-fatal).

CO hot spot concentrations are directly related to traffic congestion, increasing with slow or idling traffic. In accordance with the EPA-approved protocol for assessing impacts associated with transportation-related CO hot spot concentrations, only those intersections with a signalized intersection LOS of E or F after mitigation require further analysis to determine CO concentration levels. Per this protocol, intersections operating at LOS C or better after mitigation do not have the potential to result in CO hot spot concentrations that would cause NAAQS or CAAQS exceedances or pose health risks to sensitive receptors. Because implementation of the proposed Project would cause the following intersections to be degraded to LOS E or F after mitigation has been applied (**Appendix F**), these facilities require further consideration to determine the potential for impacts associated with CO hot spot concentrations:

- Wicklow Way at State Route 88 (LOS of F for both AM and PM Peak Hour)
- Wicklow Way at the main Walmart entrance (LOS of E for PM Peak Hour)

The Transportation TM (**Appendix F**) suggests that these intersections will likely need upgraded signalization in the future. However, the Transportation TM does not indicate the resulting LOS if traffic lights were implemented at these intersections. Reviewing peak hour traffic volumes at these

intersections, even in the cumulative plus project scenario, the total number of trips is less than 1,000. This number of trips is unlikely to cause an exceedance of CO levels. Since these intersections are currently unsignalized and will likely be signalized in the near future, the proposed Project would not expose sensitive receptors to substantial concentrations of CO and, therefore, would result in a **less-than-significant** impact.

Impact 4.3-3

WOULD THE PROJECT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Potentially Significant	MM AQ-01; MM AQ-03; MM AQ-05; MM AQ-06	Significant and Unavoidable	

Construction

During project construction, DPM and gasoline fuel combustion emissions, classified as TACs, could be emitted from construction equipment. Due to the variable nature of construction activity, generation of TAC emissions, in most cases, would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors. Chronic and cancer-related health effects estimated over short periods of time are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to carcinogenic agents. There is considerable uncertainty in trying to evaluate cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (California Office of Environmental Health Hazard Assessment [OEHHA], 2015). Furthermore, construction impacts are most severe adjacent to construction activities and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB, 2005). Since the intensity and duration of construction are not known, it could potentially result in significant exposure of TACs to sensitive receptors, including existing and future residences, daycare centers, and schools. Implementation of Mitigation Measure AQ-1 requires the use of Tier 4 final construction equipment to minimize the amount of DPM and other TACs emitted. However, due to the proximity of existing residents, schools, and potential new sensitive receptors generated as part of the proposed Project, this impact remains significant and unavoidable.

Valley Fever During Construction

The potential for Valley Fever cases associated with the proposed Project construction is high. Cal/OSHA regulations address worker health and safety issues related to Valley Fever. There is the potential even after implementation of the fugitive dust mitigation measures for spores to reach nearby sensitive receptors. Since Valley Fever is known to be present in the area, nearby sensitive receptors may already have developed immunity. **Mitigation Measure AQ-6** requires that prior to the start of construction, project Applicants or their contractors draft a Valley Fever Management Plan, consult with the California Department of Public Health (CDPH) and Amador County Department of Public Health regarding BMPs, and implement feasible measures recommended by these agencies. The proposed Project's resultant exposure to CI spores could potentially expose sensitive receptors to substantial pollutant

concentrations. Therefore, even with implementation of **Mitigation Measure AQ-2**, which represents BACT for reducing potential exposure to CI spores, this impact could still be **significant and unavoidable**.

Asbestos During Construction

Ultramafic rock and serpentine rock, which can contain NOA, may be present on the proposed Project site. Construction activities have the potential to disturb the ground and may release NOA as fugitive dust. CARB's ATCM requires implementation of fugitive dust control mitigation measures during construction/maintenance activities to minimize potential emissions or resuspensions of NOA. These measures enforce compliance with NOA-related ATCM and the AAD is notified of construction activities and approves asbestos dust mitigation plans prior to the commencement of ground-disturbing activities. Implementation of **Mitigation Measure AQ-5** would require the County or construction contractors to prepare and implement an asbestos dust mitigation plan. Therefore, with implementation of asbestos control mitigation measures under the CARB ATCM, exposure to sensitive receptors is considered **less than significant**.

Operation

Local communities' risks from air pollutants may include exposure to TACs and PM_{2.5} concentrations. TACs are a defined set of airborne pollutants that may pose a potential hazard to human health, and PM_{2.5} can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and cardiovascular systems, and contributing to heart attacks and deaths). Common stationary sources of TAC and PM_{2.5} emissions include gasoline stations, dry cleaners, boilers, emergency generators, the proposed WWSP WWTP, and other sources, subject to AAD requirements. The other, often more significant, source type is on-road trucks and cars on highways and roads. Implementation of the proposed WWSP would have the potential to introduce new sources of TAC and PM_{2.5} emissions as well as siting new sensitive receptors, such as new homes near existing sources of TAC and PM_{2.5} emissions.

If future individual projects result in exposure-sensitive receptors to pollutants, including TACs and PM_{2.5}, then these future projects would be required to implement mitigation measures to reduce impacts to the maximum extent feasible. **Mitigation Measure AQ-3** requires stationary and other sources subject to AAD rules and regulations to obtain ATCs and PTOs. While AAD permit regulations limit TACs from individual sources and facilities, due to the lack of quantitative data, it is unknown how multiple sources may combine to result in exposure to new and existing sensitive receptors, therefore, this impact is **significant and unavoidable**.

Impact 4.3-4

WOULD THE PROJECT RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY				
AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE?				
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation		

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they can still be unpleasant, leading to

considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Construction

The proposed Project would result in diesel exhaust emissions from onsite construction equipment during construction. Diesel exhaust emissions can result in temporary and intermittent odors at offsite sensitive receptors. These odors are generally not detectable beyond the project's property line due to the rapid deposition of diesel exhaust emissions. The oxidation/decomposition of organic material in newly exposed sediment may temporarily generate odors during construction of the proposed Project. Once construction activities have been completed and exposed sediment has dried out or become vegetated, these odors will cease; therefore, impacts associated with construction odors are considered less than significant.

Proposed Odor Sources within the Project Site

Implementation of the proposed Project would involve development of commercial land uses that may be minor odor sources (e.g., dry cleaners, diesel backup generators, diesel delivery vehicles, restaurants, etc.). These sources are typical of a suburban environment, and thus, the proposed Project would not be considered a new odor source. However, the proposed WWSP WWTP which would be considered a major odor source. The main odor sources for wastewater treatment plants typically come from the headworks area, where wastewater enters the facility and large solids and grit are removed; the primary clarifiers, where suspended solids are removed; and the aeration basins, when poor mixing characteristics lead to inadequate dissolved oxygen levels. Air districts with CEQA significance thresholds for odors generally recommend that WWTPs are located 2 miles from sensitive receptors.

Exposure of Proposed Sensitive Receptors to Offsite Odor Sources

Because of the proximity of the WWSP WWTP, increased vehicular traffic, industrial and agricultural uses to sensitive receptors less than 2 miles from the emitting source, odor impacts are considered **potentially significant.** Implementation of **Mitigation Measure AQ-4** would decrease WWSP WWTP-related odors, however, due to the proximity to residential receptors, even after mitigation this may not eliminate odors, and therefore, this impact would remain **significant and unavoidable**.

4.3.5 Cumulative Impacts

Impact 4.3-5

WOULD THE PROJECT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE IN CRITERIA POLLUTANTS?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Significant	MM AQ-01; MM AQ 02; MM AQ-03	Significant and Unavoidable	

Past, present, and future development projects contribute cumulatively to a region's air quality conditions. Therefore, by its very nature, air pollution has a cumulative impact. No single project is sufficient in size to solely result in NAAQS or CAAQS non-attainment. If a project's individual contribution results in a NAAQS or CAAQS exceedance, then the project's cumulative impact on air quality would be significant. In developing attainment designations for CAPs, the EPA and CARB consider the region's past, present, and future emission levels. The proposed Project site is in an area designated

as non-attainment for O_3 (federal and state). To improve air quality and attain health-based standards, reductions in emissions are necessary within non-attainment areas. AAD does not have any air quality impact significance thresholds, there are not adequate details within the General Plan defining the proposed Project, and it is not considered in the SIP; therefore, implementation of the proposed Project combined with proposed developments within the region could result in cumulative air quality impacts.

As presented in **Table 4.3-4**, the proposed Project would result in ROG, NO_x , CO, PM_{10} , and $PM_{2.5}$ emissions in 2045 from emissions generated by vehicle trips associated with residents, visitors, and workers at the Project site, onsite roadway paving/striping, building interior finishes, use of fireplaces and wood stoves, and energy use associated with fuel combustion for heating and cooling of buildings (CalEEMod default). Consumer products (e.g., cleaning products, aerosol sprays, automotive products) used by residents, visitors, and workers would also contribute to ROG and NO_x emissions.

Implementation of **Mitigation Measures AQ-1 through AQ-3**, which lessen vehicular and area source emissions, would reduce emissions generated by the proposed Project. The WWSP includes policies that promote use of alternative forms of transportation and pedestrian access to commercial and office uses. Because air emissions from the proposed Project are not accounted for in regional air quality attainment plans and the SIP, development would contribute considerably to degradation of regional air quality. Therefore, the proposed Project in combination with other reasonably foreseeable developments, would result in cumulatively considerable air quality impacts that are **significant and unavoidable**.

4.3.6 Mitigation Measures

MM AQ-1 Construction Mitigation Measures

The County and/or the project develop/contractor will ensure that mitigation measures are implemented or documented to identify infeasibility, as outlined below. All requirements will be included in applicable bid documents, purchase orders, and construction contracts, requiring prior to any ground disturbance.

- 1. Control fugitive dust required by AAD Rule 218 as enforced by AAD.
- Require diesel-fueled off-road construction equipment to be equipped with EPA Tier 4 finalcompliant engines, or better, unless a unique piece of equipment is not available as a Tier 4 engine.
- 3. Use zero-emission and hybrid-powered equipment to the maximum extent possible, as long as this equipment is available from at least two commercial rental facilities in the MCAB.
- 4. Provide certificates of compliance with applicable CARB equipment and vehicle fleet regulations to the AAD.
- 5. Require all on-road heavy-duty trucks to conform to the most stringent emission standards.
- 6. Minimize idling time either by shutting equipment off when not in use or by reducing idling to no more than 2 minutes. Provide clear signage for this requirement at site entrances. The AAD will conduct random monthly compliance checks on idling time requirements.

- 7. It is required that all construction equipment be maintained and properly tuned in accordance with manufacturer's specifications. Equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day and/or as necessary per weather conditions.
- 9. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- 10. All visible mud or dirt track out onto adjacent public roads shall be removed using wet power vacuum street sweepers, at least once per day. Use of dry power sweeping is prohibited.
- 11. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 12. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 13. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- 14. All trucks and equipment, including tires, shall be washed prior to site departure.
- 15. Unpaved roads providing site access located 100 feet or more from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- 16. Publicly visible signs shall be posted with the telephone number and name of the contact person regarding dust complaints. This person shall respond and take corrective action within 48 hours. The AAD's General Air Pollution Complaints number shall also be posted on a publicly visible sign.
- 17. Limit simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- 18. Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have a maximum air porosity of 50.
- 19. Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- 20. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- 21. Minimize amount of excavated material or waste materials stored onsite.
- 22. Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, expected to be inactive for at least 10 calendar days.

23. Use low-VOC architectural coatings and pavement paints.

MM AQ-2 Land Use and Building Operation Mitigation Measures

The County and/or the project develop/contractor will ensure the following operational measures are implemented to the maximum extent feasible:

- 1. Consider the location of building air intakes away from potential roadways, stationary sources, and the WWSP WWTP.
- To reduce ROG emissions, require use of low-VOC-content architectural and pavement striping coatings.
- 3. Provide low-NOx -emitting and/or high-efficiency water heaters.
- 4. Ensure all wood-burning devices are EPA Phase II-certified.
- 5. Ban wood burning fireplaces in new residential units.
- 6. Provide electrical outlets around the exterior of dwelling units to encourage use of electric landscape maintenance equipment.
- 7. To reduce emissions from traffic, implement the following measures:
- a. Coordinate with local transit operators to extend or expand service to the WWSP area.
- b. Provide transit stops within the WWSP area.
- c. Sidewalks and bikeways should be installed throughout the WWSP site to connect to nearby existing and planned open space areas, parks, schools, and residential and commercial areas to encourage walking and bicycling.
- d. Ensure all residential units, including multi-family units, are wired for installation of electric vehicle charging outlets.
- e. Require that all commercial and government building parking areas contain electrical vehicle charging stations.

MM AQ-3 Stationary Sources and Other Air Permitted Sources Mitigation Measures

All stationary sources or other permitted sources require the issuance of an ATC prior to final approval by the County for a grading or building permit. The operator of the stationary source will ensure they obtain a PTO once construction is complete to ensure that criteria for pollutants and TAC emissions apply BACT and comply with AAD rules and regulations.

MM AQ-4 Wastewater Treatment Plant Mitigation Measures

When more information regarding the design of the WWSP WWTP is available, the County will prepare an operational air emissions inventory of all criteria pollutants. Obtain required AAD permits. The

County will also prepare an assessment of odor mitigation measures to ensure that odor complaints do not occur more than five times per year. If more than five complaints are received, the County (WWTP operators) will be required to evaluate installation of additional odor controls. Installation of odor controls may be selected from the following technologies:

- 1. Activated carbon filter/carbon adsorption in primary clarifiers, headworks building, aeration basin influent channel, and/or all waste gas exhaust systems;
- 2. Biofiltration/bio trickling filters for all waste gas exhaust systems;
- 3. Fine bubble aerator to wastewater treatment tanks or ponds to increase efficiency and dissolved oxygen to prevent odor-generation anaerobic activity;
- 4. Hooded enclosures on grit dumpsters and belt filter presses, primary clarifier weir covers, and/or channel seals;
- 5. Wet and dry scrubbers on waste gas exhaust systems from treatment tanks;
- 6. Caustic and hypochlorite chemical scrubbers on waste gas exhaust systems from treatment tanks;
- 7. Ammonia scrubber on waste gas exhaust from treatment tanks;
- 8. Energy efficient blower systems to increase treatment efficiency and dissolved oxygen levels:
 - a. Thermal oxidizer to oxidize all waste gas exhaust;
 - b. Capping/covering storage basins and anaerobic ponds to avoid release of odors;
 - c. Mixed flow exhaust to dilute waste gas;
 - d. Wastewater circulation technology;
 - e. Orient exhaust stack and vent location considering the location of sensitive receptors;
 - f. Vegetation barriers around the perimeter of the WWTP;
 - g. Other odor reducing technologies.

MM AQ-5 Naturally Occurring Asbestos Management Plan

If it is confirmed that an area to be disturbed has serpentine or ultramafic rock, the construction contractor will comply with Asbestos ATCM by obtaining an approved Asbestos Dust Mitigation Plan or Exemption. Ground-disturbing activities greater than 1 acre within potential NOA-containing areas will be required to comply with CARB's ATCM for NOA. The plan will specify actions to be taken during construction and grading activities to minimize NOA emissions. The plan will also address specific emission sources, including track-out onto the paved public road; active storage piles; inactive disturbed surface areas and storage piles; traffic on unpaved onsite roads; earthmoving activities; offsite material

transport; and post-project stabilization of disturbed soil surfaces. Specific measures to be implemented will include, but are not limited to:

- 1. Removing visible track out,
- 2. Keeping active storage piles covered or wet,
- 3. Controlling inactive areas or storage piles,
- 4. Maintaining trucks and wet loads to prevent spillage, and
- 5. Limiting vehicle speeds.

The County and its contractors will submit the plan prior to implementation of construction or grading activities and will not proceed with until AAD has approved the plan, accepted mitigation measures, or an exemption is received.

MM AQ-6 Valley Fever Management Plan

The County/Applicant or their construction contractor(s) shall prepare a Valley Fever Management Plan (VFMP). The VFMP shall be submitted to CDPH and Amador County Department of Public Health for review prior to the start of construction. The VFMP shall include, but not be limited to, the following elements, as currently suggested by the CDPH:

Adopt site plans and work practices that reduce workers' exposure and minimize primary and secondary exposure to the community through direct dispersal of spores or secondary dispersal from contaminated workers or equipment bringing spores to the community. The site plans and work practices may include:

- 1. Minimize area of disturbed soil.
- 2. Use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust.
- 3. Stabilize all spoils piles by tarping or other methods.
- 4. Provide air-conditioned cabs for vehicles that generate heavy dust and make sure workers close windows and vents.
- 5. Suspend work during heavy winds.
- 6. Provide onsite sleeping quarters, if required, away from dust sources.
- 7. Reduce transporting spores offsite, by:
- a. Providing clean tools, equipment, and vehicles.
- b. Providing coveralls, change rooms, and showers to clean workers' clothing, likely to be heavily contaminated with dust, where possible.

Identify a health care provider for occupational injuries and illnesses knowledgeable about the diagnosis and treatment of Valley Fever. This helps to ensure proper diagnosis and treatment, as well as tracking potential outbreaks that may affect the community.

Train workers and supervisors about the risks of Valley Fever, activities that may increase risk, measures to reduce exposure, and how to recognize symptoms. This helps to ensure proper diagnosis and treatment, as well as tracking potential outbreaks that may affect the adjacent community.

Encourage workers to report Valley Fever symptoms promptly to a supervisor. Not associating these symptoms with workplace exposures can lead to a delay in appropriate diagnosis and treatment. This helps to ensure proper diagnosis and treatment, as well as tracking potential outbreaks that may affect the community.

4.3.7 References

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4.4 BIOLOGICAL RESOURCES

4.4.1 Introduction

This section addresses potential impacts to biological resources that may occur because of implementation of the proposed Wicklow Way Specific Plan (WWSP or proposed Project) and describes the existing environmental setting of the proposed Project site, identifies associated regulatory requirements, evaluates potential impacts from the construction of the proposed Project, and identifies mitigation measures. Evaluation of potential impacts is based on a review of existing resources, data, and applicable laws, regulations, guidelines, and standards. This section focuses on potential impacts on biological resources from full buildout of the proposed Project. Potential impacts to drainage and water quality are addressed in Section 4.10 Hydrology and Water Quality.

A Notice of Preparation (NOP) was released for a 30-day public comment period on January 26, 2024. Comments received in response to the NOP include impacts to creek habitats; impacts to red tail hawk habitat; loss of oak woodland, wetlands and vernal pool assessments, and compliance with CDFW requirements for impacts to biological resources. A copy of the NOP and comments received is included in **Appendix A**.

4.4.2 Regulatory Setting

Federal

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implement the Federal Endangered Species Act (FESA) of 1973 (16 USC Section (§)1531 et seq.). Threatened and endangered species on the federal list (50 CFR Subsection 17.11, 17.12) are protected from "take" (direct or indirect harm) unless a Section 10 Permit is granted to an individual or a Section 7 consultation and a Biological Opinion with incidental take provisions are rendered to a lead federal agency. Under FESA, habitat loss is considered an impact on the species.

Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act of 1918 (16 USC Subsection 703-712), migratory bird species and their nests and eggs are protected from injury or death. Project-related disturbances must be reduced or eliminated during the nesting cycle. Fish and Game Code Subsections 3503, 3503.5, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. Fish and Game Code §3511 lists protected birds that cannot be taken except under specific permitting.

Bald and Golden Eagle Protection Act

The Bald Eagle Protection Act was enacted in 1940 and later amended to include golden eagles (16 USC Subsection 668-668). The Bald and Golden Eagle Protection Act prohibits take, possession, and commerce of bald and golden eagles, parts, feathers, nests, or eggs, with limited exceptions. The statute imposes criminal and civil sanctions as well as an enhanced penalty provision for subsequent offenses.

Wetlands and Waters of the U.S.

Projects that involve work in navigable waters of the U.S., including the discharge of dredged or fill material, must first obtain authorization from the United States Army Corps of Engineers (USACE), under Section 404 of the Clean Water Act (CWA).

State

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) implements State regulations concerning fish, wildlife, and associated habitats. The California Endangered Species Act (CESA) of 1970 (California Fish and Game Code [Fish and Game Code] §2050 et seq., and CCR Title 14, Subsection 670.2, 670.51) prohibits the take of species listed under CESA (14 CCR Subsection 670.2, 670.5). A CESA permit must be obtained if a project results in take of listed species during construction or operation. Under CESA, CDFW is responsible for maintaining a list of species that are threatened, endangered, or of special concern (Fish and Game Code 2070).

Waters of the State

CDFW requires notification prior to commencement, and possibly a Lake or Streambed Alteration Agreement (SAA) pursuant to Fish and Game Code Subsection 1601-1616, 5650, if a project results in the alteration or degradation of a stream, river, or lake in California. The Regional Water Quality Control Board (RWQCB) may require a State Water Quality Certification (CWA Section 401 permit) before other permits are issued.

California Environmental Quality Act Guidelines §15380

The California Environmental Quality Act (CEQA) Guidelines §15380(b) and (d) provide that a species not listed on federal or State lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition of FESA and the section of the Fish and Game Code dealing with rare or endangered plants or animals.

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (Fish and Game Code §1900 et seq.) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. The California Native Plant Society (CNPS) inventories native flora of California and ranks species according to rarity. Plants with California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B are considered special-status species. CRPR 1A plants are presumed extinct, and CRPR 1B plants are considered rare or endangered in California and elsewhere. CRPR 2A plants are presumed extirpated in California but are more common elsewhere, and CRPR 2B plants are rare, threatened, or endangered in California but are more common elsewhere. CRPR 3 is a watch list for plants about which more information is needed. CRPR 4 is a watch list for plants of limited distribution.

California Sensitive Natural Communities

CDFW provides a current list of vegetation Alliances, Associations, Special Stands, and California Sensitive Natural Communities (CSNC). State and Global rarity ranks are indicated for Alliance and some Associations. Natural Communities with ranks of 1-3 are considered Sensitive. Unranked Associations

considered Sensitive are marked with a Y in the rightmost column. A "?" indicates our best estimate of the rank when we know we have insufficient samples over the full expected range of the type, but existing information points to this rank. Pending additions can be found at the bottom of the full Natural Community list.

California Fish and Game Code Sections 3503 and 3503.5

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests because of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs or young.

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code prohibit take of fully protected birds, mammals, reptiles, amphibians, and fish. Species listed under these statutes may not be taken or possessed at any time, and no incidental take permits can be issued for these species except for scientific research purposes, for relocation to protect livestock, or as part of a Natural Community Conservation Plan (NCCP).

Oak Woodlands Conservation Act

The Oak Woodlands Conservation Act (California State Senate Bill 1334) became law on January 1, 2005, and was added to the CEQA statutes as §21083.4. The conversion of oak woodlands on agricultural land used to produce or process plant and animal products for commercial purposes is exempt from mitigation under this law. One or more of the following mitigation measures are required should a project be determined to significantly impact oak woodlands:

- 1. Conserve oak woodlands using conservation easements;
- 2. Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings;
- 3. Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodland conservation easements; and
- 4. Other mitigation measures were developed to protect oak woodlands.

Local

Amador County General Plan

The Amador County General Plan (Amador County, 2016) contains policies for protecting biological resources as stated in the Open Space Element. These policies focus on encouraging and supporting natural resource conservation through planning practices and techniques, along with ensuring goals and alignment of County policies consistent with state and federal laws protecting habitats, sensitive environments, and special-status species. Goals and policies applicable to the proposed Project are

listed below, and a discussion of the project's consistency with these policies is provided in Section 4.4.4.

- **Goal OS-3:** Protect wildlife habitats, including sensitive environments and aquatic habitats, consistent with State and federal law.
- Policy OS-3.1: Encourage preservation of oak woodlands in accordance with Public Resources Code §21083.4.
- **Policy OS-3.2:** Encourage conservation of corridors for wildlife movement, particularly in oak woodland areas and along rivers and streams.
- **Policy OS-3.3:** Support voluntary conservation easements to protect wildlife habitat, including oak woodlands.
- **Policy OS-3.4:** Use site planning techniques, including, but not limited to, buffers, setbacks, and clustering of development to protect sensitive environments, including wetlands, riparian corridors, vernal pools, and sensitive species.
- **Policy OS-3.5:** Protect aquatic habitats from the effects of erosion, siltation, and alteration.
- Policy OS-3.6: Encourage the use of appropriate native species for reclamation and revegetation for development projects. Restrict introduction of invasive exotic species. The County will amend Chapter 15.40 of the County Code (governing grading and erosion control) to include a section addressing the requirement to limit the potential for introduction and spread of invasive species during soil disturbance and construction activities.
- **Goal OS-4:** Protect special status species, including threatened and endangered species, consistent with State and federal law.
- **Policy OS-4.1:** Ensure that new development complies with State and federal laws concerning special status species preservation.

Wicklow Way Specific Plan

The WWSP includes policies that relate to biological resources in Chapter 9 – Natural Resource Management. These policies are intended to guide future development on the WWSP site.

Open Space Policies

- **Policy 9.1:** Provide an interconnected open space plan that includes trails, limited public facilities and mitigation areas.
- **Policy 9.2:** Incorporate oak woodlands into the WWSP as a viable open space area for the enjoyment and education of WWSP area residents while protecting sensitive resources.
- **Policy 9.3:** Preserve, conserve, and enhance Rock Creek and its tributaries, associated floodplains and riparian habitat located within the boundaries of the WWSP.
- **Policy 9.4:** Ensure that open space is properly managed in perpetuity.
- **Policy 9.5:** Locate Class I bicycle paths and paved and unpaved trails throughout the open space.

- **Policy 9.6:** Delineated wetlands shall be preserved to the greatest extent possible within open space areas and corridors, or otherwise provided for in protected areas.
- **Policy 9.7:** Where preservation is not feasible, mitigation measures shall be carried out as specified in the WWSP EIR.
- Policy 9.8: Open space areas adjacent to buildings and development parcels shall maintain a fuel modification and vegetation management area to provide minimum fire breaks as required by State and local laws and ordinances. Additionally, development parcels adjacent to open space areas may be required to provide emergency access to the open space using gates, access roads or other means approved by the Amador County Fire Department. Ownership and maintenance of open space areas, including fuel modification requirements and fire hazard reduction measures shall be outlined in the WWSP Open Space Operations & Management Plan to be prepared at the time specific development is proposed.
- **Policy 9.19:** Preserve existing WWSP area oak woodlands within open space preserves to the maximum extent practical.
- **Policy 9.10:** Preserve oak woodlands and isolated oak trees in residential and non-residential development parcels wherever practical.
- **Policy 9.11:** Oak trees impacted in residential and non-residential development areas are encouraged to be preserved wherever practical, provided preservation does not:
 - Cause a reduction in the number of lots or a significant reduction in the size of residential lots.
 - Require mass grading that eliminates level pads or requires specialized foundations.
 - Require the use of retaining walls or extended earthen slopes greater than 4-feet in height, as measured from the bottom of the footing to the top of the retaining wall.
 - Require the preservation of any trees certified by an arborist to be dead or in poor or hazardous or non-correctable condition or trees that pose a safety risk to the public.
 - Cost more to preserve the tree than to mitigate for its loss, based on the Isolated Oak Tree
 Mitigation requirements listed below.
- Policy 9.12: Trees shall be interspersed throughout parking lots so that in fifteen (15) years, forty (40) percent of the parking lot will be in shade at high noon.
- Policy 9.13: As part of any small lot tentative subdivision map application submittal, prepare and submit a site map, a tree preservation program, an arborist's report, and both a canopy survey of oak trees in the development parcel as well as a survey of individual free-standing oak trees. The surveys will show trees to be preserved and trees to be removed, consistent with the mitigation measures identified in the WWSP EIR.

Water Quality Policies

Policy 9.14: Protect and enhance existing water quality in the Plan Area through storm water best management practices and low-impact development measures.

- **Policy 9.15:** Natural drainage courses within the Plan Area along Rock Creek and tributaries shall be preserved as required by county, state and federal regulatory agencies and incorporated into the overall storm water drainage system.
- **Policy 9.16:** Trails located within open space corridors and areas shall be designed to include soil erosion control measures to minimize sedimentation of nearby creeks and maintain the natural state of drainage courses.
- Policy 9.17: New drainage outfalls within or near Rock Creek, or improvements to existing outfalls, shall be designed and constructed utilizing low-impact development (LID) practices in conformance with the most current National Pollutant Discharge Elimination System (NPDES) regulations. Consistent with these practices, storm water collection shall be decentralized, its quality improved and its peak flow contained in detention facilities that will slowly release it back into the creek drainage outfalls and improvements shall be unobtrusive and natural in appearance.

4.4.3 Environmental Setting

Regional Setting

The proposed Project site is located in unincorporated Amador County, directly to the west of the City of Jackson, CA. In the surrounding area, Pardee Reservoir is located to the south-west of the site, the City of Sutter Creek is located to the north, and the City of Ione is located approximately 6.5 miles to the west (Figures 2-1 and 2-2). The on-site terrain is relatively gentle rolling terrain, with elevations on the site ranging from approximately 1,500 feet above mean sea level in the east to 1,400 feet above mean sea level in the south. The land immediately surrounding the site to the south and west is largely undeveloped and consists of environments similar to those found on the Project site, primarily a mixture of open grass and wooded areas. Development in the vicinity of the site, primarily to the north and east, consists of commercial, agricultural grazing, and residential development. Immediately adjacent to the project site to the north is a Walmart and other larger-scale commercial developments such as a Save Mart and a Dollar Tree, and a high school is located to the east. Climate for the Project site consists of hot, dry summers and cool, wet winters. Annual precipitation averages approximately 28.55 inches, with no or insignificant snowfall (WRCC, 2016).

Hydrology

The Hydrology of the area surrounding the Project site is located within the Upper Mokelumne HU8 watershed. Jackson Creek is located approximately half a mile to the south of the Project site. Some hydrologic resources also exist on-site. Rock Creek is located along the northern boundary of the Project site. Two additional unnamed drainage features for Rock Creek are also located on site. One is connected to Rock Creek on site, and the second runs through the middle of the site to later join Rock Creek off site approximately 3 miles to the south-west. Previous surveys of the site conducted in 2008 identified three vernal pools in the eastern portion of the Project site (Quad Knopf, 2008). These features were not identified during a survey conducted in November 2021.

Wetlands and Waters of the U.S.

A survey to initially identify potentially jurisdictional wetlands and Waters of the U.S. was conducted as part of the November 2021 site visit. This survey identified 1.91 acres of seasonal wetlands, 4,787 linear feet of an unnamed perennial stream, 1,432 linear feet of an unnamed intermittent stream, and 1,018

linear feet of Rock Creek, a perennial stream, with the potential to be a jurisdictional Water of the U.S. See **Table 4.4-1 Aquatic Resource Types and Acreages on the Project Site**. A formal wetland delineation has not been completed for the proposed Project.

TABLE 4.4-1 AQUATIC RESOURCE TYPES AND ACREAGES ON THE PROJECT SITE

HABITAT TYPE	DIMENSIONS
Seasonal wetlands	1.91 acres
Perennial stream (south stream)	4,787 linear feet
Intermittent stream (north stream)	1,432 linear feet
Rock Creek	1,018 linear feet
Stream Total	7,237 linear feet

Seasonal Wetlands

1.91 acres of seasonal wetlands are located along perennial and intermittent streams within primarily annual grassland habitat. These seasonal wetlands contained indicators of hydrology such as algal growth, hoofprints, saturated soils, and wetland indicator plants such as spike rush (*Eleocharis* sp.) among other species.

Perennial Stream

A 4,787-linear-foot portion of a perennial stream is located throughout the southern half of the project site. The perennial stream is unnamed and serves as a tributary to Rock Creek. The perennial stream contributes water to Rock Creek off-site to the west of the Project site. The perennial stream has a continual headwater contribution and perennial flow from a spring or seep found off-site near a high school sports field to the east of the Project site. The stream bottom is largely unvegetated, consisting of mixed gravel and rocky substrate. The slopes of the bank are somewhat gradual, with evidence of scour to the top of the ordinary high-water mark (OHWM). The perennial stream has canopy cover and shade for approximately half its length from oak woodland habitat canopy vegetation.

Intermittent Stream

A 1,432-linearfoot portion of an intermittent stream is located along the northern portion of the Project site. The intermittent stream is unnamed and is a tributary of Rock Creek. The intermittent stream contributes water to Rock Creek on-site at its westernmost extent. The intermittent stream has a seasonal headwater contribution from runoff from the housing development found off-site near a high school. The intermittent stream also appears to have a groundwater contribution, as evidenced by standing water being present at the time of the November 2021 site visit. The stream bottom is largely vegetated, consisting of mixed soils, sediments, annual grassland species, and spike rushes. The slopes of the bank are somewhat gradual, with evidence of faint scour to the top of the OHWM and algal growth along the channel. The intermittent stream has canopy cover and shade for a small portion of its length from scattered oaks.

Rock Creek

A 1,018-linear-foot portion of Rock Creek is located along the northern boundary of the project site. Rock Creek is a tributary of Lake Amador, located approximately 4.5 miles to the southwest of Jackson Creek. Rock Creek is a perennial stream, with water going subsurface during the driest portions of the year. The onsite stream bottom is unvegetated, consisting of mixed gravel, cobbles, and rocky substrates. The slopes of the bank are somewhat gradual, with evidence of scour to the top of the OHWM and evidence of high flow events from woody debris deposition above OHWM. Rock Creek is found within riparian forest habitat, with banks being covered in thick Himalayan blackberry patches.

Formerly Identified Vernal Pools

Vernal pool habitat was identified within the southeastern portion of the proposed Project site in a 2008 environmental impact report (EIR). A study conducted in 2008 identified three vernal pools in an area on the east side of the site between the intermittent and perennial streams (Quad Knopf, 2008). However, a survey conducted in November 2021 did not identify these previously mapped wetlands and there was no topographical boundary to these areas that would indicate water accumulation. These areas appear to have been degraded by normal farming and grazing practices and no vernal pool habitat was identified during the November 2021 survey. Current on-site aquatic resources will be verified during the state and federal regulatory agency jurisdictional wetland review process.

Project Site Setting

The proposed Project site is approximately 201 acres. Onsite topography consists of mild to moderate slopes. Site is undeveloped with no structures; however, livestock fencing is present and is located along perimeter stretches. Vegetation onsite primarily consists of oak woodland and annual grassland, with areas of riparian forest to the north lining the edge of Rock Creek. Figure 2-2 presents an aerial photograph of the site.

Habitat Types

Three distinct habitat types have been identified on the proposed Project site and are shown on **Figure 4.4-1, Habitat Types**. A summary of these habitat types and their acreages can be found below in **Table 4.4-2 Habitat Types and Acreages on the Project Site**.

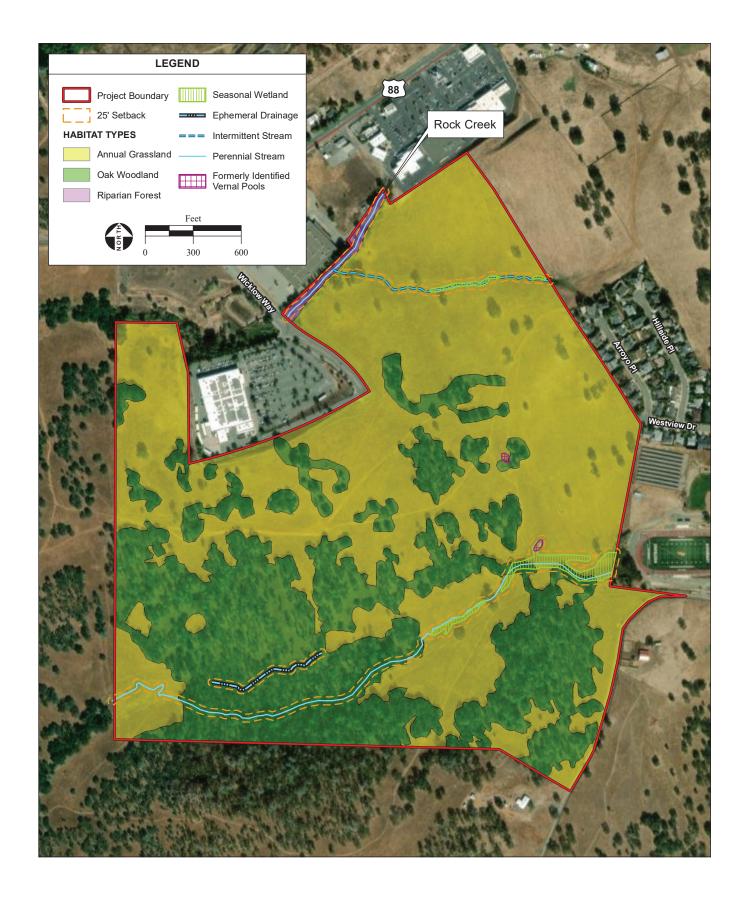


TABLE 4.4-2 HABITAT TYPES AND ACREAGES ON THE PROJECT SITE

HABITAT TYPE	DIMENSIONS
Oak woodland	74.07 acres
Annual grassland	126.52 acres
Riparian Habitat	1.21 acres
Total	201.8
Seasonal Wetlands	1.91 acres
Intermittent stream (north stream)	1,432 linear feet
Perennial Stream (south stream)	4,787 linear feet
Rock Creek	1,018 linear feet
Linear Feet Total	7,237 linear feet

Annual Grassland

Annual grassland habitat is the dominant habitat type present throughout the proposed Project site. Trees are largely absent within this community type, and it is generally dominated by non-native annual grasses and forbs. Sparsely distributed native oak species are found within this habitat type, with some being very large, especially to the north of the Project site in the most open areas of annual grassland. Small areas of annual grassland habitat are found within the oak woodland habitat in the southern third of the Project site. Cattle use this habitat type, especially for grazing, and evidence of hoof-prints and hoof-incision-based erosional features was observed. Weedy forbs and non-native grasses were the dominant ground cover of this habitat type. These species included tarweeds (*Hemizonia* sp.), filaree (*Erodium* sp.), dogtail grass (*Cynosurus echinatus*), barley (*Hordeum* sp.), and oats (*Avena* sp.).

Oak Woodland

Oak woodland habitat covers approximately a third (74 acres) of the proposed Project site. Blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and gray pine (*Pinus sabiniana*) trees comprise most of the canopy in this habitat type. The herbaceous forbs and grasses described in the annual grassland habitat type are present as ground cover. There are very few immature trees and shrubs within this habitat type, likely due to shade cover and livestock grazing. Sizes of trees within this habitat type vary greatly, from small trees less than 5 inches in diameter at breast height (dbh) growing densely to larger trees of varying health and condition measuring in excess of 36 inches dbh. There are several large old-growth oaks present onsite, which are mainly valley oaks. This habitat type supports many species through the production of food, habitat, duff, and other valuable functions. Approximately 10 mature oaks are present within the 74 acres of onsite oak woodland.

Riparian Habitat

Riparian habitat lines the northern border of the proposed Project site and is strongly associated with Rock Creek. This habitat type is present along the bed bank and channel of Rock Creek and exhibits an understory and canopy of densely wooded young to mid-aged oaks, cottonwoods (*Populus* sp.), and

willows (*Salix* sp.). This habitat type is highly overgrown with Himalayan blackberry (*Rubus armeniensis*) and is generally rocky throughout.

Critical Habitat

No USFWS Critical Habitat or other habitat designated by local conservation plans occurs onsite.

Essential Fish Habitat

The Upper Mokelumne watershed encompasses the proposed Project site and is considered Essential Fish Habitat (EFH) for Chinook salmon (NOAA, 2022). The site, however, is located above dams that prevent Chinook salmon from upstream migration to the site. The dams also intersect the watershed capturing any sediment from the upstream reaches.

Special-Status Species

The results of this analysis, based upon a review of CNDDB, IPaC, and CNPS records, found 23 special-status wildlife species and six special-status plants potentially present onsite. **Table 4.4-3, Sensitive Plant Species Potentially Present and Table 4.4-4, Sensitive Animal Species Potentially Present** summarize species' potential to occur onsite. Species that do not have the potential to occur onsite or are not considered special status are not discussed further. No special-status species were observed during the November 2021 survey.

Plants

No sensitive special status plants were observed during the November 2021 site survey. **Table 4.4-3** summarizes sensitive plant species potentially present onsite, special status plants were identified through database queries, literature review, and CNDDB mapped occurrences.

TABLE 4.4-3 SENSITIVE PLANT SPECIES POTENTIALLY PRESENT

SCIENTIFIC NAME	COMMON NAME	FEDERAL / STATE STATUS	CRPR RANK	PROJECT POTENTIAL TO OCCUR	NOTES	
Arctostaphylos myrtifolia	Ione manzanita	FT -	1B.2	No	2021 site visit not present / site conditions deemed unsuitable	
Eryngium pinnatisectum	Tuolumne button-celery		1B.2	Yes	12 records within County / suitable habitat onsite	
Chlorogalum grandiflorum	Red hills soaproot		1B.2	Low	Site conditions suitable, however few nearby records	
Erythranthe marmorata	Stanislaus monkeyflower		1B.1	Low	Site near historical records, however specific locations not recorded. Not enough records to determine suitable habitat	
Balsamorhiza macrolepis var. macrolepis	Big-scale balsam root		1B.2	Yes	Records show found within same USGS Quad / site conditions within range of suitable habitat.	
Sphenopholis obtusata	Prairie wedge grass		2B.2	Yes	Nearby recent records / site within suitable habitat	
Abbreviations:			CA Rare Plant Rank (CRPR)			
Federal/State Status			1B.1 - Rare, threatened, or endangered in California and elsewhere, (over			
(-) - No applicable classification	(-) - No applicable classification			80 percent of occurrences threatened / high degree and immediacy of threat)		
FE - Federal Endangered Species			1B.2 -Rare, threatened, or endangered in California and elsewhere, (20-80		endangered in California and elsewhere, (20-80	
FT - Federal Threatened Species			-	currences threa	tened / moderate degree and immediacy of	
FC - Candidate for Federal Listing			threat)			
CE - California Endangered Species			2B.2 - Rare, threatened, or endangered in California but more common elsewhere (20-80 percent occurrences threatened / moderate degree and			
CT - California Threatened Spec	CT - California Threatened Species			of threat)	, , , , , , , , , , , , , , , , , , , ,	

Plant Species Accounts

The following species have the potential to occur onsite. Species not included do not have potential to occur.

Tuolumne Button-celery

Tuolumne Button-celery (*Eryngium pinnatisectum*) is an herbaceous perennial plant not listed under FESA or CESA but designated as CRPR 1B.2. This plant grows in vernal pools and similar wet habitats in the Sierra foothills and grasslands. Flowering occurs from June - August. Suitable conditions likely exist near onsite streams.

Red Hills soaproot

Red Hills soaproot (*Chlorogalum grandiflorum*) is an herbaceous perennial plant not listed under the FESA or CESA but designated as CRPR 1B.2. This plant grows in chaparral, woodland, and forest habitats in loam and sandy loam soils. Flowering occurs from May – June. Suitable habitat occurs onsite.

Stanislaus monkeyflower

Stanislaus monkeyflower (*Erythranthe marmorata*) is an herbaceous annual plant not listed under FESA or CESA but designated as CRPC 1B.1. There are few records of this plant, though it has been found to grow in seeps and along stream banks. Flowering occurs from March – May. Suitable habitat may occur onsite along streambanks.

Big-scale balsam root

Big-scale balsam root (*Balsamorhiza macrolepis var. macrolepis*) is an herbaceous perennial with a taproot not listed under FESA or CESA but designated as CRPR 1B.2. This plant grows in open, dry woodlands and grasslands. Flowering occurs from March – July. Suitable habitat is present onsite in open areas.

Prairie wedge grass

Prairie wedge grass (*Sphenopholis obtusata*) is a perennial grass not listed under FESA or CESA but designated as CRPR 2B.2 The are two local records within two miles of the site. This plant grows in cismontane woodlands and in wet meadows and sheep. There is potential for this species to occur onsite.

Wildlife

No sensitive, special-status wildlife was observed during the November 2021 survey. **Table 4.4-4**, summarizes sensitive wildlife potentially present onsite, special-status plants identified through database queries, literature review, and CNDDB mapped occurrences.

TABLE 4.4-4 SENSITIVE ANIMAL SPECIES POTENTIALLY PRESENT

SCIENTIFIC NAME	COMMON NAME	FEDERAL / STATE STATUS	OTHER STATUS	PROJECT POTENTIAL TO OCCUR	NOTES
Mammals					
Erethizon dorsatum	North American porcupine		S3	Yes	Nearby recent records
Corynorhinu s townsendii	Townsend's big-eared bat		S2; SSC; BLM: S; USFS: S	No	Known to roost in tree cavities
Invertebrate s					
Danaus plexippus	Monarch butterfly	FC-	S2	Low	No known roosting sites
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT-	S3	No	Site lacks host plant
Stygobromu s gradyi	Grady's cave amphipod	-	S1	No	No caves onsite

SCIENTIFIC NAME	COMMON NAME	FEDERAL / STATE STATUS	OTHER STATUS	PROJECT POTENTIAL TO OCCUR	NOTES
Stygobromu s grahami	Graham's cave amphipod	-	S2	No	No caves onsite
Amphibians					
Spea hammondii	Western spadefoot	FC-	S3	Yes	No breeding sites
Ambystoma californiense	California tiger salamander	FT CT	S2S3	No	No breeding sites
Rana boylii	Foothill yellow-legged Frog	FE CE	S1S2 S3	Yes	Limited to onsite streams
Rana draytonii	California red-legged frog	FT-	S2/S3	Yes	Limited to onsite streams
Reptiles					
Actinemys marmorata	Northwester n pond turtle	FC-	S3	Yes	Limited to onsite streams
Birds					
Haliaeetus leucocephal us	Bald eagle	-CE	S3	No	Likely limited to fly overs
Aquila chrysaetos	Golden eagle		S3; FULL	No	Likely limited to fly overs, no suitable nesting habitat.
Falco mexicanus	Prairie falcon		S4; WL	Very low	May nest in buildings or in abandoned sticks nests.
Passerculus sandwichens is beldingi	Belding's savannah sparrow	-CE	BCC; S3	No	Endemic to Southern California, however, species can be found in the area.
Icterus bullockii	Bullock's oriole		ВСС	Yes	Suitable nesting habitat
Larus californicus	California gull		BCC; S4	No	No suitable nesting habitat
Geothlypis trichas sinuosa	Common yellowthroat		BCC; S3	Low	Suitable nesting habitat, likely present
Baeolophus inoranatus	Oak titmouse		всс	Yes	Suitable nesting habitat
Chamaea fasciata	Wrentit		ВСС	Yes	Suitable nesting habitat
Pica nuttalli	Yellow-billed magpie		BCC; S3S4	Yes	Suitable nesting habitat
Agelaius	Tricolored	СТ	BLM: S;	No	No suitable nesting habitat

SCIENTIFIC NAME	COMMON NAME		FEDERAL / STATE STATUS	OTHER STATUS	PROJECT POTENTIAL TO OCCUR	NOTES
tricolor	blackbi	rd		SSC; BCC		
Fish						
Oncorhynch us tshawytscha	us Cninook		FE CE	AFS: TH	No	Upper Mokelumne - below Camanche watershed designated ESH, no nearby records (all below downstream dams).
Abbreviations: Federal/State St (-) — No applica classification FE - Federal Endangered Spe FT - Federal Thre Species FC - Candidate for Federal Listing CE - California Endangered Spe CT - California Threatened Spe CDFW Full- CDFW Fully Protected SSC - CDFW Spec Special Concern WL - CDFW Wat Species	cies eatened or cies cies	USFS: S BLM: S - BCC: US State Ra S1: Critic occurrer S2: Impe steep de S3: Vuln populati S4: Appa populati	Bureau of Lai FWS Birds of C ink cally Imperiled nces, steep de eriled – At hig eclines, severe erable – At m ions or occurr arently Secure	d – At very his clines, sever hirisk of extire threats, or coderate risk ences, recense – At a fairly ences, but w	e threats, or oth pation due to re other factors. of extirpation du t and widesprea low risk of extir	tive Status ation due to restricted range, few populations or

Wildlife Accounts: The following species have the potential to occur onsite. Species not included below do not have the potential to occur onsite.

North American porcupine

North American porcupine (*Erethizon dorsatum*) is a medium-sized mammal not listed under FESA or CESA but designated as state rank S3. This rodent lives in grasslands, coniferous forests and mixed forests. There are nearby records within 1000 feet of the site. This species has potential to occur onsite.

Monarch Butterfly

Monarch Butterfly (*Danaus Plexippus*) is a migrating butterfly that is proposed to be listed under FESA; however, it is not listed under CESA and is designated as state rank S2. The butterfly relies on 15 native species of milkweed in California as a food source for the caterpillar life stage. There is low potential for this species to occur onsite as there are no known overwintering roosts.

Western spadefoot toad

Western Spadefoot (Spea hammondii) is a small, stout toad that is listed as potentially threatened under FESA. It is not listed under CESA and designated state rank S3. This nocturnal toad lives in upland and mixed woodland area with sandy to gravelly soils. This toad needs slow-moving water lacking predators for breeding. The project area contains both upland and breeding habitats and this species has the potential to occur.

Foothill yellow-legged frog

Foothill yellow-legged frog (*Rana boylii*) is a medium-sized frog listed as endangered under FESA and CESA and designated state rank S1S2S3. This diurnal frog is found in rivers and streams in the Sierra foothills. It requires rocky streams with slow-moving water for breeding. Onsite riparian areas have potentially suitable habitat for this species.

California red-legged frog

California red-legged frog (*Rana draytonii*) is a medium-sized frog listed as threatened under FESA but not under CESA and designated state rank S2S3. This diurnal frog is found near ponds in forests, woodlands, grasslands, coastal scrub, and vegetated stream banks. It breeds in slow-moving streams and ponds from November - April. Onsite riparian areas show potentially suitable habitat.

Northwestern pond turtle

Northwestern pond turtle (*Actinemys marmorata*) is a medium-sized turtle that is a candidate for protection under FESA, but not CESA and designated state rank S3. This turtle lives in intermittent waters, including marshes, streams, rivers, ponds, and lakes, and can spend up to 200 days out of water in ground squirrel burrows. There are four CNDDB records in the area. Onsite stream and adjacent upland habitats have potential for this species to occur.

Prairie falcon

Prairie falcon (*Falco mexicanus*) is a small raptor on the CDFW Watchlist and is not listed under FESA or CESA and designated state rank S4. This bird of prey uses open fields for hunting. It is generally known to nest on cliffs; however, it has been documented to nest in buildings and in abandoned stick nests. Onsite habitat is marginal for this species and has low potential for occurrence.

Bullock's oriole

Bullock's oriole (*Icterus bullockii*) is a medium-sized bird considered by the USFWS to be a bird of conservation concern and it has no FESA or CESA listing or state rank. This bird breeds in riparian and open woodlands. This species has a high potential for nesting onsite.

Common yellowthroat warbler

Common yellowthroat (*Geothlypis trichas*) is a small warbler considered by USFWS to be a bird of conservation concern and it has no FESA or CESA listing but is designated state rank S3. This bird prefers marshy areas but has been found in dry upland pine forests, drainage ditches, hedgerows, orchards, fields, burned-over oak forests, shrub-covered hillsides, river edges, and disturbed sites. There is onsite nesting potential for this species.

Oak titmouse

Oak Titmouse (*Baeolophus inoranatus*) is a small grey songbird considered by USFWS to be a bird of conservation concern and it has no FESA or CESA listing or state rank. This bird prefers oak woodlands and savannahs. There is potential for onsite nesting for this species.

Wrentit

Wrentit (*Chamaea fasciata*) is a small songbird considered by USFWS to be a bird of conservation concern and it has no FESA or CESA listing or state rank. The wrentit breeds in oak woodlands, mixed hardwood forests, and evergreen forests. There is onsite potential breeding and nesting habitat for this species.

Yellow-billed magpie

Yellow-billed magpie (*Pica nuttalli*) is medium-sized corvid considered by USFWS to be a bird of conservation concern and it has no FESA or CESA listing but is designated state rank S3S4. This bird lives in the open oak woodlands of the Central Valley, in the Sierra Nevada foothills. They nest high up in large trees. There is potential for onsite nesting for this species.

Wildlife Movement Corridors

Rock Creek's length onsite provides densely sheltered areas for wildlife movement. The intermittent and perennial stream channels provide mixed coverage and open areas for wildlife movement. Terrestrial habitat types provide habitat for birds, small mammals, deer, and potential transient species common in disturbed or low-quality habitats present onsite to the north and east.

4.4.4 Impacts

Method of Analysis

The analysis of impacts on biological resources resulting from the proposed Project is based on background and historic record searches, review of previous field investigations, reconnaissance-level surveys, and biological reports. Background research included reviewing the CNDDB, IPaC, and CNPS databases to determine potential for occurrence of special-status plant or wildlife species in the vicinity of the proposed Project. A series of natural resource investigations were conducted for the proposed Project. Reports and results were reviewed to determine species observed and likely to occur. Botanical, aquatic resources, and wildlife surveys occurred in November 2021.

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, an impact on biological resources is significant if implementation of the proposed Project would do any of the following:

- 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, or 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, 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; and/or
- Conflict with the provisions of an adopted habitat conservation plan (HCP), NCCP, or other approved local, regional, or state HCP.
- This analysis assumes that the proposed Project would comply with the County's General Plan
 policies and WWSP Design Standards; therefore, such policies and standards are not specifically
 identified as mitigation.

Impact Analysis

A detailed description of mitigation measures is included in Section 4.4.6.

Impact 4.4-1

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?					
Significance Before Mitigation Measures Significance After Mitigation					
Significant MM BIO-1, BIO-2, BIO-3, BIO-4, BIO- 5 Less than significant					

Special-Status Species

An impact to special-status species would be considered substantial and significant if a project has the potential to result in direct or indirect harm to a species or individuals of a species. Indirect impacts include loss of habitat, particularly critical habitat. The majority of proposed Project impacts would occur within oak woodland and annual grassland habitats. Impacts would also occur at two stream crossings over an unnamed perennial stream in the southern portion of the site. These habitats (oak woodland, annual grassland, and perennial stream) contain features that could provide potential habitat for special-status species. Removal of native oak trees, annual grassland, and stream habitat associated with the proposed Project could displace special-status species and convert or degrade habitats on which they rely. This has a **significant impact**.

Mitigation measures (**MM BIO-01 through MM BIO-05**) require pre-construction surveys, avoidance, minimization, and mitigation measures. These measures reduce the significant impacts that could occur from the Project to less than significant as discussed below.

The proposed Project was determined to have the potential to disturb nesting birds, special-status reptiles, and amphibians through construction which could result in significant impacts. Similarly,

development associated with the proposed Project would be required to implement avoidance and minimization measures that would reduce impacts to these species.

Therefore, with implementation of specific mitigation measures identified for the proposed Project, cumulative impacts to special status species would be reduced to **less than significant**. Therefore, no additional mitigation is recommended based on the proposed Project's cumulative contribution to special-status species impacts.

Special-Status Plants

There were five special-status plant species identified as having the potential to occur onsite; Tuolumne button-celery, red hills soaproot, Stanislaus monkeyflower, Big-scale balsam root and Prairie wedge grass. There were no special status species observed during the November 2021 survey. Removal of special-status plants, or degradation of special status plant habitat during construction would constitute a **significant impact**.

MM BIO-1 requires pre-construction plant surveys to identify special-status plants onsite. If discovered, plants would be avoided. If avoidance is not possible, then appropriate mitigation would be implemented. **MM BIO-1** would reduce the overall potential for construction of the proposed Project to result in direct impacts to special-status species, or habitat loss or degradation that could result in significant impacts to special-status species. Therefore, with implementation of **MM BIO-1** the impacts would be reduced to **less than significant**.

Special-Status Mammals

One special-status mammal, the North American porcupine, was identified as having the potential to occur onsite. Porcupines prefer coniferous forests but have adapted to other habitat types such as oak woodlands and chapparal, out of necessity, due to loss of their preferred habitat. Direct harm to an individual of this species from construction activities would constitute a **significant impact**.

MM BIO-2 requires that any North American porcupine, if identified onsite, will be allowed to leave without harassment. Any encounters with a porcupine will be recorded and a record will be submitted to CDFW. After implementation of **MM BIO-2** impacts to special-status mammals would be reduced to **less than significant**.

Special-Status Birds

The proposed Project site provides suitable nesting and foraging habitat for six special status birds, including the prairie falcon, Bullock's oriole, common yellow throat, oak titmouse, wrentit, and yellow-billed magpie. Approximately 37 acres of oak woodland (potential nesting habitat) would be removed because of implementing the Project. Disturbance or destruction of active nesting sites during construction would constitute a **significant impact**.

MM BIO-3 requires pre-construction surveys for nesting birds. If an active nest is identified, appropriate avoidance buffers and monitoring are required. Avoidance measures would prevent significant disturbance such that take of these species would not occur. Implementation of **MM BIO-3** would therefore reduce impacts to special-status birds to a **less than significant** level.

Special-Status Fish

No special-status fish were identified as having the potential to occur on the property. Therefore, implementation of the proposed Project would have **no impact** on special-status fish.

Special-Status Amphibians and Reptiles

Three special status amphibians were identified as having the potential to occur onsite: foothill yellow-legged frog, California red-legged frog, and western spade foot toad. Additionally, one special status reptile, the western pond turtle, was found to have the potential to occur on the property. Two perennial streams (Rock Creek and an unnamed stream to the south) and their adjacent wetlands provide potential breeding habitat for special-status amphibians and feeding habitat for western pond turtles. The upland habitat surrounding these aquatic resources is considered potential nesting habitat for the western pond turtle. The project area is not within any designated critical habitat for these species. Disturbance or destruction of nesting sites or habitat for the northwestern pond turtle during construction would constitute a significant impact.

MM BIO-4 requires pre-construction surveys for special-status amphibians and reptiles. If found, appropriate avoidance buffers would be established, and exclusion fencing would be installed. Implementation of mitigation measures would therefore reduce impacts to special-status amphibians and reptiles to a **less than significant** level.

Special-Status Invertebrates

One special-status invertebrate was identified as having the potential to occur on the project site, the Monarch butterfly. This species is associated with specific host plants and native milkweed. Milkweed could occur in the oak woodland and grassland habitats onsite. Disturbance or destruction of roosting sites or habitat for the Monarch butterfly during construction would constitute a significant impact.

MM BIO-5 requires focused surveys for native milkweeds to determine if Monarch butterfly habitat is present. If found, milkweed population will be avoided to the extent possible. If avoidance is not possible, then replacement at a 1:1 ratio will be required in coordination with the County and CDFW. After mitigation, impacts to host plants, and thus to this special status invertebrate, would be reduced to a **less than significant** level.

Impact 4.4-2

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?					
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation			
Significant	MM BIO-6, MM BIO-7, MM BIO-8	Less than significant			

An impact on a sensitive natural community would be considered significant or substantial if sensitive habitat types were directly converted, disturbed through construction and maintenance, or indirectly disturbed by construction or ongoing implementation of the proposed Project. Indirect impacts may

occur due to narrow buffers from development, loss of connectivity of resources such as groundwater, non-discrete impacts such as pollution, and other project-related impacts.

Aquatic Habitats

Aquatic habitats such as streams, ponds, reservoirs, and emergent wetlands are considered sensitive. There are several aquatic habitats found onsite including seasonal wetlands, perennial, intermittent, and named creeks. Development areas have the potential to overlap with sensitive aquatic habitats. Additionally, proposed roadways would cross over aquatic habitats in multiple areas. If necessary, aquatic habitat crossings would consist of free-span bridges or arch culvert designs to avoid impacts to these resources. Loss, modification, or degradation of these habitat types would be considered a significant impact.

MM BIO-6 requires a CDFW LSAA prior to the issuance of a grading permit. In addition to minimization measures, the LSAA would also require a Riparian Mitigation Plan that defines mitigation for impacts to riparian habitat at a 2:1 replacement ratio onsite or a 1:1 ratio at an offsite mitigation bank.

MM BIO-8 requires that a minimum 50-foot development buffer zone be established and placed under a conservation easement. A 200-foot no vegetation removal buffer would also be established from avoided streams and marked with construction fencing. After mitigation, impacts to riparian habitats or other sensitive natural communities would be reduced to a **less than significant** level.

Oak Woodlands

Oak woodland habitat present onsite is protected by the Oak Woodlands Conservation Act and the Amador County General Plan and is considered a sensitive natural community by CDFW. Loss, modification, or degradation of this habitat would be considered a significant impact. Per the General Plan, at a minimum, one acre of oak woodland habitat providing similar functions and values would need to be placed under conservation easement for every acre of oak woodland habitat lost. Replanting of oaks to offset oak woodland habitat loss is also considered to be acceptable mitigation per the General Plan. The proposed Project would impact approximately 37 of the existing 74 acres of oak woodlands. Of the 74 acres, 37 would be preserved onsite in a designated Open Space preserve with a conservation easement. Figure 4.4-2, Oak Woodland Preservation Area. presents potential onsite oak woodland preservation areas. Amador County may require additional mitigation measures, including planting and/or contribution to conservation funds, as summarized below and outlined in MM BIO-7.

MM BIO-7 requires proposed Project design to minimize impacts to oaks. For unavoidable impacts, the oak woodland would be replaced through onsite planting or through contribution of funds for oak woodland restoration. Minimization measures such as establishment of buffers and installation of construction avoidance fencing are required to reduce potential indirect impacts to avoided oak trees. For unavoidable impacts to 37 acres of oak woodland, 37 acres of oak woodland would be required to be preserved onsite with a conservation easement. In addition to avoiding and preserving oak woodlands onsite, Amador County may require additional mitigation measures. Additional mitigation measures could include planting oak trees and or contributing funds to the Oak Woodlands Conservation Fund as established by subdivision (a) of §1363 of the Fish and Game Code. Amador County may also require contributions to an "Amador County Oak Woodland Conservation Fund" and

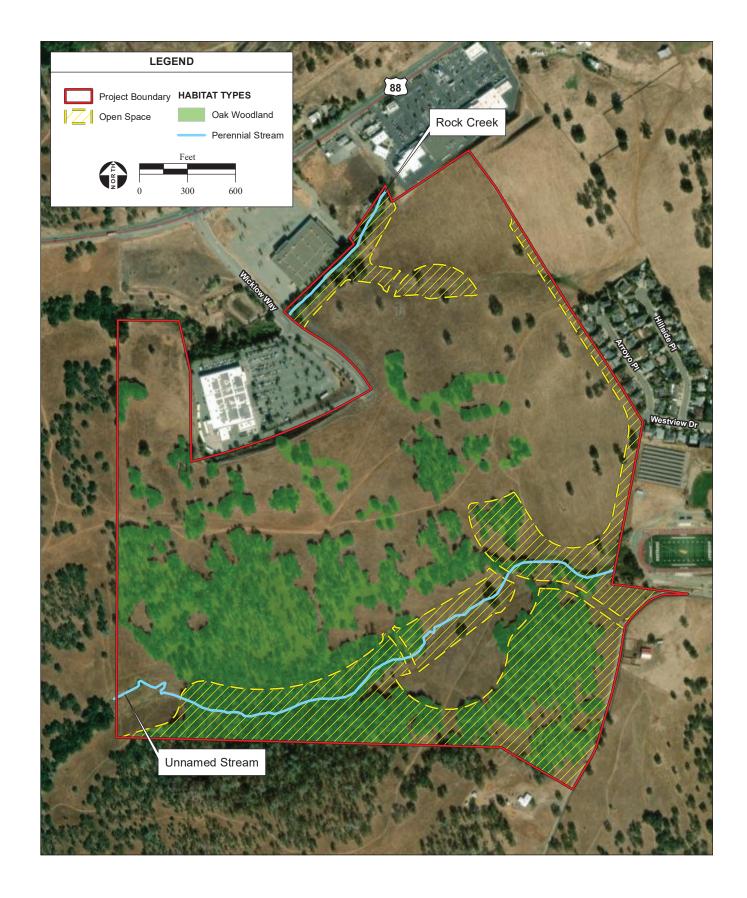
require the applicant to contribute replacement funds. After mitigation, impacts to oak woodland habitat would be reduced to a **less than significant** level.

Impact 4.4-3

WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT ON FEDERALLY PROTECTED WETLANDS AS DEFINED BY SECTION 404 OF THE CWA (INCLUDING, BUT NOT LIMITED TO, MARSH, VERNAL POOL, ETC.) THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL INTERRUPTION, OR OTHER MEANS?						
Significance Before Mitigation Measures Significance After Mitigation						
Significant	MM BIO-8	Less than Significant				

Impacts to state or federally protected wetlands or waters would be considered significant and substantial if a project resulted in the direct conversion of wetlands or resulted in runoff and erosion that degraded habitat quality. The proposed Project includes several stream crossings that could encroach into associated wetland and riparian habitat and result in placement of fill into aquatic resources. Work that alters a watercourse or supporting adjacent habitat, such as a riparian community, would be considered a significant impact.

MM BIO-8 requires the Project applicant to avoid disturbance to Rock Creek, an unnamed intermittent stream (north stream), and wetland areas that constitute waters of the U.S., including the unnamed perennial stream (south stream). In addition, a minimum 50-foot development buffer zone would be established and placed under a conservation easement. A 200-foot no-vegetation removal buffer would also be established from the avoided streams and marked with construction fencing. Unavoidable impacts to aquatic resources for stream crossings would require permits from the USACE (Section 404), RWQCB (Section 401), and, for certain impacts to rivers, lakes, and streams (as specified in Fish and Game Code Section 1602), CDFW (LSAA), prior to working near or entering the stream zone. After mitigation, impacts to aquatic resources would be reduced to a less than significant level.



Impact 4.4-4

WOULD THE PROJECT 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?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

Impacts to wildlife movement or nursery sites would be considered significant and substantial if the proposed Project resulted in the significant restriction of wildlife movement, alteration of a known wildlife corridor, or any adverse impact to known nursery sites. The site has significant riparian corridors and moderate terrestrial permeability. The majority of riparian pathways are avoided by setbacks required by mitigation measures, project design, and County setback codes. Wildlife movement is currently restricted somewhat to the north and east by existing commercial and residential developments. The proposed Project would avoid the riparian habitat of Rock Creek and the two drainages to the extent possible. Preservation of open space, oak woodland and grassland features are incorporated into project design. The presence of agriculture and grazing activities onsite and adjacent to the Project site may also foster wildlife movement. Furthermore, areas along Rock Creek composed of riparian habitat and the two onsite drainages may also foster wildlife movement. Jackson Creek occurs approximately 0.6 miles south of the Project site and may also contribute positively to the wildlife movement throughout the area. Thus, the proposed Project would have less than significant impacts on wildlife movement and no mitigation measures are required.

Impact 4.4-5

WOULD THE PROJECT CONFLICT WITH THE PROVISIONS OF AN ADOPTED HCP, NCCP, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HCP?					
Significance Before Mitigation Measures Significance After Mitigation					
No impact None required No Impact					

Conflict with existing conservation plans would be considered significant and substantial if the proposed Project resulted in construction or use of land contrary to the overall goals of an existing conservation plan. Conflict with specific allowable uses or compensatory requirements would also be considered significant. The Project site is not located within an HCP or a NCCP, and therefore, there will be **no impact**.

4.4.5 Cumulative Impacts

Impact 4.4-6

WOULD THE PROJECT RESULT IN IMPACTS IN THE CUMULATIVE SETTING?				
Significance Before Mitigation Measures Significance After Mitigation				
Significant	MM BIO-1 through MM BIO-8	Less than Significant		

A significant cumulative impact to biological resources would occur if the proposed Project, in combination with recent, ongoing, and foreseeable development, caused a cumulatively significant impact to biological resources. Potential cumulative projects in the vicinity of the proposed Project are presented in Chapter 4. Cumulative projects consist of infrastructure development, minor recreational development, and residential build-up smaller in scale than the proposed Project. Cumulative projects are anticipated within areas of existing development and are small and/or clustered in development.

Special-Status Species

Project-related impacts to special-status species would be mitigated through the implementation of mitigation measures that require avoidance, minimization, and mitigation to prevent the proposed Project from contributing to cumulative impacts. Therefore, cumulative impacts to special-status species would be **less than significant**.

Sensitive Habitat Types

The proposed Project includes Rock Creek, and unnamed perennial creek, and an unnamed intermittent creek, which support sensitive riparian habitats. In addition, onsite oak woodlands are considered a sensitive habitat and are protected. Loss of these sensitive habitats would contribute to cumulative impacts in the surrounding area and would be considered a significant impact. Implementation of avoidance, minimization, and mitigation measures including habitat preservation, restoration, and contribution to conservation funds would prevent the Project from impacting sensitive habitats and contributing to cumulative impacts. In addition, the proposed Project and any future projects in the area would be required to obtain appropriate environmental permits for impacts to sensitive habitats, including permits under Sections 401 and 404 of the CWA, Section 1602 of the Fish and Game Code, and Section 7 of the FESA. These permits would ensure habitat mitigation and replacement. Therefore, the proposed Project would result in **less than significant** cumulative impacts to sensitive habitats.

Wildlife Use and Movement

The proposed Project would preserve 37 acres of oak woodland habitat onsite within a 53.7-acre open space preserve. In addition, 37 acres of riparian habitat comprised of intermittent and perennial streams would be preserved. Wildlife corridors would therefore be maintained through the Project site and impacts would not result in loss of ecosystem services or other biological functions common in areas of high rural to urban development areas. The proposed Project, in addition to cumulatively considered projects, would not sever known wildlife corridors and would not result in activities that would connect developed areas across open habitat. Cumulative projects under environmental review have not revealed significant impacts to wildlife corridors or nursery sites such that mitigation was deemed necessary. There are no known significant impacts to wildlife corridors resulting from implementation of

the proposed Project. Therefore, cumulative impacts to wildlife use and movement would be **less than significant**.

Local Plans, Policies, and Conservation Plans

Cumulative projects, described in Chapter 4, are subject to the regulatory framework presented within Chapter 3 and Sections 4.1 – 4-17. Except for oak tree removal, subject to permit requirements, cumulative projects are not anticipated to conflict with local plans, policies, or regulations. Additionally, there are no proposed or approved conservation plans that govern the Project site. As described in each section, the analysis determines that there is a less than significant cumulative impact with the incorporation of appropriate mitigation measures. Therefore, no additional mitigation is recommended based upon the proposed Project's cumulative contribution to potential conflicts with policies, regulations, or conservation plans and impacts would be **less than significant**.

4.4.6 Mitigation Measures

MM BIO-1 Special-Status Plants

A focused rare plant survey for Tuolumne button-celery, Red Hills soaproot, Stanislaus monkeyflower, Big-scale balsam root and prairie wedge grass. shall be conducted to determine the presence/absence of any threatened or endangered plant species prior to any ground disturbance associated with implementation of the proposed Project. This survey shall be conducted by a qualified botanist between April and June. If no special-status plant species are found onsite, no further surveys or mitigation measures are required. However, if special-status plant species are found onsite, each population shall be mapped and acceptance from the appropriate federal and/or state agencies shall be required. To the maximum extent possible, plant populations shall be preserved and incorporated into Project plans. However, if these areas cannot be avoided, land supporting known populations of these species shall be purchased and incorporated into an ecological preserve. If no land supporting the species can be located, onsite populations must be preserved. At a minimum, offsite mitigation shall occur at a 1:1 ratio (one plant preserved for each plant impacted). A detailed preserve management plan that includes species, habitat, and preserve management strategies shall be developed and approved in consultation with the County and the appropriate state and/or federal regulatory agencies prior to approval of a grading permit. With the incorporation of mitigation measures, impacts to special-status plants would be reduced to a less than significant level.

MM BIO-2 Special-Status Mammals

This requires that any North American porcupine, if identified onsite, be allowed to leave without harassment. Any encounters with a porcupine will be recorded and a record will be submitted to CDFW. With incorporation of mitigation, impacts to special-status mammals would be reduced to **less than significant** levels.

MM BIO-3 Special-Status Birds

Prior to construction, but not more than 14 days before grading, demolition, or site preparation activities, a qualified biologist shall conduct a pre-construction nesting survey to determine the presence of nesting raptors. Activities taking place outside the breeding season (typically February 15 through August 31) do not require a survey. If active raptor nests are present in the construction zone or within 500 feet of the construction zone, temporary exclusion fencing shall be erected at a distance of 500 feet

around each nest site. Clearing and construction operations within these zones shall be postponed until juveniles have fledged and there is no evidence of a second nesting attempt as determined by a qualified biologist. To avoid impacts to common and special-status migratory birds, pursuant to the Migratory Bird Treaty Act and CDFW Codes, a nesting survey shall be conducted prior to construction activities if the work is scheduled between February 15 - August 31. If migratory birds are identified nesting within the construction zone, a 200-foot buffer around the nest site shall be designated. No construction activity may occur within this buffer until a qualified biologist has determined that the young have fledged. After mitigation, impacts to special-status birds would be reduced to a **less than significant** level.

MM BIO-4 Special-Status Amphibians and Reptiles

Prior to construction, but not more than 14 days before the start of grading, demolition or site preparation activities, a qualified biologist shall conduct a pre-construction survey to determine the presence of western pond turtles, California red-legged frogs (CRLF), and foothill yellow-legged frogs (FYLF) in or near onsite water sources or in upland habitat near water sources. If western pond turtles are found or the use of habitat is evident during the survey, the species shall be buffered from construction activities with the installation of non-climbable fencing (or other solid fencing/barrier) to exclude turtles from entering the active construction zone. If turtles are found within the construction zone, they shall be moved out of harm's way to appropriate areas by a qualified biologist as approved by CDFW and/or USFWS. Prior to construction within 100 feet of waterways, avoidance measures shall be implemented that include installing a temporary, solid fence (e.g., particle board or other solid structure) along established buffer lines at creeks/streams, thereby creating a solid barrier between the creek and the construction activities.

Prior to installation of the fence a USFWS-approved biologist shall survey the areas for CRLF and FYLF to ensure impacts to these species are avoided. The location of this exclusion zone shall be identified on the final grading plans and construction specifications. During construction, standard best management practices (BMPs) shall be employed that include the use of erosion control methods and use of straw over disturbed areas. Previously disturbed areas shall be hydroseeded with native plant species upon project completion. An onsite qualified biologist shall perform pre-construction surveys and spot-check monitoring during construction for CRLF and FYLF and proper installation and maintenance of exclusionary fencing. If a frog is found, the qualified biologist shall move the frog away from construction activities and place it in a safe, suitable habitat away from the project site. In addition, the biologist shall notify the appropriate agencies, such as CDFW and USFWS. After mitigation impacts to special status amphibians would be reduced to a **less-than-significant** level.

MM BIO-5 Special-Status Invertebrates

A focused host plant survey for native milkweed; Narrow-leaved milkweed (*Asclepias fascicularis*), Showy milkweed (*Asclepias speciosa*), Heartleaf milkweed (*Asclepias cordifolia*), and Woollypod milkweed (*Asclepias eriocarpa*) shall be conducted to determine the presence/absence of these threatened or endangered plant species prior to ground disturbance. The survey shall be conducted by a qualified botanist between April and June. If no host plant species are found onsite, no further surveys or mitigation measures are required. However, if host plant species are found onsite, each population shall be mapped and technical assistance from the appropriate federal and/or state agencies shall be required. To the maximum extent possible, plant populations shall be preserved and incorporated into

project plans. However, if these areas cannot be avoided, land supporting known populations of the species impacted shall be purchased and incorporated into an ecological preserve. If no land supporting the species can be located, onsite populations must be preserved. At a minimum, offsite mitigation shall occur at a 1:1 ratio (one plant preserved for each plant impacted). A detailed preserve management plan that includes species, habitat, and preserve management strategies shall be developed and approved in consultation with the appropriate state and/or federal agencies prior to approval of a grading permit. After mitigation, impacts to host plants, and thus to the special status invertebrate would be reduced to a **less-than-significant** level.

MM BIO-6 Aquatic Habitats

Prior to issuance of a grading permit, a CDFW LSAA shall be obtained, pursuant to Section 1602 of the Fish and Game Code, for each stream crossing or other activities affecting the bed, bank, or associated riparian vegetation of a creek. Coordination with CDFW shall take place to identify the appropriate mitigation for removal of riparian vegetation which may include creation of onsite habitat. A Riparian Mitigation Plan shall be developed and approved by CDFW. Mitigation shall require a 'no-net-losses of riparian and/or wetland habitat. The Project applicant shall be responsible for mitigating impacts to riparian habitat by either creating suitable onsite habitat (2:1 replacement ratio) and/or acquiring mitigation credits at a CDFW- approved mitigation bank. Mitigation credits shall be purchased at a 1:1 ratio. Work within the stream zone shall not commence until the Project applicant has submitted proof (a bill of sale) to CDFW of obtaining appropriate mitigation credits, or until CDFW has approved a site-specific revegetation plan created for onsite habitat. Upon entry into a CDFW LSAA, the Project applicant shall adhere to and implement the conditions of the agreement. Although the exact conditions of the agreement are not determined until entered into with CDFW, the following conditions are anticipated requirements and shall be implemented by the Project applicant:

- No work shall take place in a live stream channel. If work in a flowing stream cannot be avoided, the entire stream flow shall be diverted around the work site during excavation and/or construction operations. The work site shall be dewatered completely. Any dewatering/diversion plan shall be submitted to CDFW for approval prior to stream zone activities.
- Project spoils shall be located away from the stream zones in upland areas where they cannot be washed back into a waterway. Spoil site perimeters shall employ adequate erosion control methods. Staging/storage areas for equipment and materials shall be located away from the environmentally sensitive areas.
- A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and submitted to CDFW prior to the ground disturbing activities. The SWPPP shall identify specific BMPs which shall be implemented during construction to prevent discharges of sediment, oil, turbid water, and/or other potential toxic or hazardous substances to surface waters. The BMPs shall be installed and maintained so that they demonstrate effectiveness.
- All exposed/disturbed areas left barren of vegetation because of construction activities shall be seeded, mulched and fertilized with a blend of locally native grass species as approved by CDFW.
 Disturbed portions shall be restored to near original conditions to the fullest extent possible.

After mitigation, impacts to riparian habitats or other sensitive natural communities would be reduced to a **less-than-significant** level.

MM BIO-7 Oak Woodlands

The Project applicant shall exercise all reasonable efforts to refine site design to minimize impacts to oak trees. Building envelopes shall be identified that will retain existing oak trees to the maximum extent feasible. Oak trees to be retained and building envelopes shall be identified on any development map or plot plan submitted for grading and building permits. Either through CC&Rs created by the Project applicant or through later measures created by a homeowner's association, future home and business owners shall be restricted from removing oak trees except when the oak tree is dead or a public safety hazard, or the County approves removal for other reasons. In addition, Amador County, as lead agency under CEQA, shall require one, or a combination, of the following mitigation options to reduce impacts to less-than-significant levels:

- Acquisition of a conservation easement on a local property that contains a similar species composition and quality of native oaks. The Project applicant would negotiate terms with the landowner of the proposed easement and incur the costs associated with establishing a conservation easement to be held in perpetuity. Specifically, in accordance with §21083.4 of the Public Resources Code, the Project applicant shall preserve 37 acres of existing oak woodland as shown on Figure 4.4-2. This preservation would mitigate the loss of approximately 37 acres of oak woodland habitat at a 1:1 ratio. According to the County Code, preservation shall occur in Amador County or adjacent counties and may be accomplished by recording a conservation easement for 37 acres of oak woodlands to ensure that preservation as undisturbed oak woodlands in perpetuity. Alternatively, the Project applicant may coordinate with the County and provide funding for the purchase of conservation easements on 37 acres at an offsite location. As determined by the County, funding can be provided to the Amador Land Trust, the Oak Woodlands Conservation Fund, or other entity/fund approved by the County. The Project applicant may combine the placement of conservation easements with providing funding to preserve the requisite amount of oak woodland acreage.
- Redesign the proposed Project so that onsite plantings of oak trees would be sufficient to offset tree removal. Onsite planting would have to be maintained and monitored by the Project applicant for a period of not less than seven years and the Project applicant will be required to report on the status of onsite planting to the County on a yearly basis. Specifically, each removed oak tree shall be replaced with the same species at the following ratios: 1:1 replacement for trees 5 – 12 in. dbh; 3:1 replacement for trees greater than 12 in. dbh. Replacement trees shall be 15-gallon size or larger. The County may approve reduced ratios for larger replacement tree stock. The Project applicant shall also submit for County approval an Oak Tree Replacement Plan to be prepared by a qualified professional (e.g., certified arborist, registered professional forester, certified rangeland manager, or biologist). The Oak Tree Replacement Plan shall, at a minimum, detail the following: planting locations, oak species, irrigation, replanting, seven-year maintenance and inspection program, and funding for a sevenyear contract with a qualified professional, who would have decision making power to oversee oak tree care and maintenance and report progress on the Oak Tree Replacement Plan. As an alternative to or in combination with planting replacement trees, the Project applicant may coordinate with the County and contribute funding to provide for planting the appropriate

number of replacement trees and for developing an Oak Tree Replacement Plan for those trees. As determined by the County, funding can be provided to the Amador Land Trust, the Oak Woodlands Conservation Fund, or other entity/fund approved by the County.

- The Project applicant shall be required to contribute funds to the Oak Woodlands Conservation Fund, as established by subdivision (a) of §1363 of the Fish and Game Code. The amount of the contribution shall be determined by Amador County; or
- Amador County may wish to establish an "Amador County Oak Woodland Conservation Fund" and require the applicant to contribute to the fund in an amount determined by the County.

Before a grading permit is issued, the Project applicant shall provide proof to the County that one, or a combination, of the mitigation options described above (a, b, c, or d) has been completed and/or funded. Proof of mitigation fulfillment shall also be provided to CDFW. In addition, the following measures are required to minimize harm to individual oak trees that will not be removed:

- Install brightly colored temporary fencing at least four feet in height placed at the outermost edge of the dripline of each oak tree or dense stand of oak trees to remain in place until construction is completed.
- 2. Avoid grading within an oak tree's dripline, where possible. A certified arborist shall supervise grade cuts within an oak tree's dripline and any damaged roots encountered shall be root pruned and properly treated as soon as possible after excavation. Cut faces which will be exposed for more than three days, shall be covered with dense burlap fabric and watered daily to maintain soil moisture.
- 3. Supervise fills greater than one foot that are placed within the driplines of oak trees by a certified arborist. Aeration systems, oak tree walls, drains, and/or special paving may serve to mitigate presence of the fill material as determined by the arborist.
- 4. Avoid trenching within the driplines of oak trees. If necessary to install underground utilities within the dripline of an oak tree, the trench shall be either bored or drilled.
- 5. Avoid irrigation system installation within, or to reach within 15-feet, of an oak tree's dripline unless specifically authorized by the County.
- 6. Prohibit modifying drainage patterns onsite that could result in water collecting on or being diverted across an oak tree's drip line.
- 7. Install landscaping beneath oak trees to include materials such as boulders, cobbles, wood chips, etc. The only plant species which shall be planted within the driplines of oak trees are those which are native to California oak woodlands and that are tolerant of the natural semi-arid environs of the trees.
- 8. Avoid equipment damage to limbs, trunks, and roots of oaks trees during construction and development.

- 9. Avoid attaching signs, ropes, cables (except those installed by a certified arborist to provide limb support), or other items to oak trees. Small tags for purposes of preparing tree reports and inventories are allowed to be placed on oak trees.
- 10. Clear vegetation within the protective zone (see #1 above) of an oak tree by using hand tools or small hand-held power tools. Any major roots encountered shall be conserved to the greatest extent possible and treated as recommended by a certified arborist.
- 11. Prohibit items placed within an oak tree's dripline: storage equipment, supplies, vehicles, debris, construction wastewater, paint, stucco, concrete or any other clean-up waste, and temporary or permanent structures.
- 12. Prune oak trees supervised by a certified arborist. All pruning shall be conducted in accordance with guidelines published by the National Arborist Association.

After mitigation, impacts to oak woodland habitat would be reduced to a less than significant level.

MM BIO-8 Wetlands and Watercourses

The Project applicant shall avoid disturbance to Rock Creek, the north stream and wetland areas that constitute waters of the U.S., including the south stream, where feasible by establishing a minimum 50-foot buffer zone on all sides of the water source and preventing grading or removal of vegetation within 200 feet from the perennial stream bank. The development buffer zone shall be placed under a conservation easement and held by the Amador Land Trust or other entity appointed at that time. The 200-foot vegetation removal and grading prohibition buffer zone shall be clearly marked with brightly colored (orange, etc.) construction fencing installed and maintained so that it is visible to equipment operators during construction activities. If disturbance to Rock Creek, the north stream, the south stream, or other delineated potential waters of the U.S./wetland areas onsite cannot be avoided, prior to issuance of a grading/building permit, the Project applicant shall obtain formal authorization where required from the USACE (Section 404 permit), RWQCB (Section 401 permit), and, for certain impacts to streams (as specified in Fish and Game Code Section 1602), a CDFW LSAA prior to working near or entering into the stream zone. The stream zone is that portion of the stream channel that restricts the lateral movement of water, delineated as the top of the bank or outer edge of any riparian vegetation, whichever is more landward. Prior to obtaining Section 404 and 401 permits, a wetland delineation shall be conducted and verified by the USACE. After implementation of mitigation measures for riparian habitats or other sensitive natural communities, impacts would be reduced to a less-than-significant level.

4.4.7 References

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4.5 CULTURAL RESOURCES

4.5.1 Introduction

This section addresses the potential for implementation of the Wicklow Way Specific Plan (proposed Project) to impact cultural resources. Cultural resources include sites, artifacts, and features associated with human activities and can date to the historic or prehistoric period. Prehistoric resources are those associated with Native American activities and pre-date European contact. Historic resources can be structures, features, or artifacts that post-date European arrival in the region.

The information presented in this section is derived from three cultural resources surveys. The studies conducted for the proposed Project include:

Montrose Environmental Solutions, Cultural Resources Letter Report, August 2021 (MES, 2021)

- ASI Archaeology and Cultural Resources Management, Wicklow Subdivision Draft Environmental Impact Report Cultural Resources, July 2005 (ASI, 2005)
- Foothill Resources, Ltd. Archaeological Survey of a 200-Acre Parcel Near Martell, Amador County, May 1994 (Foothill Resources, Ltd., 1994)

4.5.2 Regulatory Setting

Cultural resources are buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, and/or scientific importance. Several laws and regulations at the state level govern archaeological and historic resources deemed to have scientific, historic, or cultural value. The pertinent regulatory framework, as it applies to the Proposed Project, is summarized below.

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 established the framework for local, state, and national efforts with regards to the preservation of historic and archaeological resources. Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The Section 106 process (36 CFR Part 800) involves efforts to identify historic properties potentially affected by the undertaking, assess effects and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. To help identify historic properties and provide community involvement, consulting parties are identified through coordination with the appropriate State Historic Preservation Officer (SHPO).

State

California Environmental Quality Act

CEQA requires that, for projects financed by or requiring the discretionary approval of public agencies in California, the effects that a project has on historical and unique archaeological resources be considered (Public Resources Code [PRC] § 21083.2). Historical resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific

importance (PRC § 50201). CEQA Guidelines (§ 15064.5) define three cases in which a property may qualify as a historical resource for the purpose of CEQA review:

- The resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR).
- The resource is included in a local register of historic resources, as defined in PRC Section 5020.1(k), or is identified as significant in a historical resources survey that meets the requirements of PRC § 5024.1(g) (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).
- The Lead Agency determines that the resource may be a historical resource as defined in PRC § 5020.1(j), 5024.1, or significant as supported by substantial evidence in light of the whole record. Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in 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, represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

Resources must retain integrity to be eligible for listing on the CRHR. Resources that are listed in or eligible for listing in the National Register of Historic Places (NRHP) are considered eligible for listing in the CRHR, and thus are significant historical resources for the purposes of CEQA (PRC § 5024.1(d)(1)).

PRC § 21083.2 defines a unique archaeological resource as 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 one or more of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains

(Sections 7050.5 and 5097.9 of the Health and Safety Code). When human remains are discovered, the protocol to be followed is specified in California Health and Safety Code, 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 or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with § 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of § 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in § 5097.98 of the PRC.

State CEQA Guidelines § 15064.5, subdivision (e), requires that excavation activities stop whenever human remains are uncovered and that the county coroner is called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Local

Amador County General Plan

The Conservation Element of the Amador County General Plan (Amador County, 2016) includes historical and archaeological resources. The General Plan includes goals and policies for the preservation of these resources. The applicable policies are presented below.

- **Goal C-7:** Preserve the county's historical resources.
- **Policy C-7.2:** Promote use of building envelopes or cluster development as a means of protecting historical resources when land is developed.
- **Policy C-7.3:** Support the preservation of historic structures, including rehabilitation and adaptive reuse of structures. Encourage property owners to preserve and maintain historic structures.
- **Policy C-7.4:** Promote preservation of historically significant Gold Rush, mining and other identified sites.
- **Policy C-7.5:** Collaborate with interested groups to develop interpretive materials for historically important sites.
- **Policy C-7.6:** Promote historic preservation as an engine for Amador County's tourist economy.
- **Goal C-8:** Preserve the county's cultural resources.
- **Policy C-8.1:** Balance the community's interest in the protection of cultural resources with the rights of individual property owners.

- **Policy C-8-2:** Encourage project design that will protect cultural and archaeological resources and consider using incentives to support protection of these resources when land is developed.
- **Policy C-8.3:** Educate local realtors, property owners, and developers regarding the need to protect and preserve cultural resources, with the objective of increasing cultural resource awareness among existing and new property owners.
- **Policy C-8.4:** Encourage other interested groups to develop interpretive materials for culturally and archaeologically important sites.

4.5.3 Environmental Setting

The majority of the Project site is undeveloped and consists of rolling hills, grasslands, and oak woodlands with mining features.

Prehistoric Setting

Much of what is known about the prehistory of the Sierra Nevada foothills comes from studies carried out in conjunction with dam and road construction projects. Archaeologists have developed a prehistoric chronology for the central Sierra Nevada foothills, often comparing it to the adjacent Central Valley (e.g., Moratto, 1984:316-325). The chronology is based on David Fredrickson's (1974) California adaptation of the Willey and Phillips (1958) period and stage integrative scheme.

Paleo-Indian Period (11,550 to 8550 B.C.) – This period is evidenced by the presence of fluted points, often compared to Clovis points, which are dated elsewhere in North America between 11,550 and 9550 B.C. Most have been found in the southern portion of the Central Valley in association with extinct lakes, but one was recovered from CA-AMA-369 near the City of Ione to the northeast of the Subject Property and one from CA-CAL-629/630, the Skyrocket site, in Calaveras County (Rondeau et al., 2007).

Lower Archaic Period (8550 to 5550 B.C.) – In the Central Valley, a significant period of alluvial deposition resulted from climate changes at the end of the Pleistocene Era. Artifacts characteristic of the Lower Archaic include stemmed points and flaked stone crescents, mostly occurring as isolated finds in the Central Valley. Foothill sites appear to have been frequently visited by seasonal camps. Foothill and Central Valley sites may be seasonal expressions of a single adaptive system.

Middle Archaic Period (5550 to 550 B.C.) – Warmer, drier conditions prevailed at the beginning of this period. Rising sea levels led to the development of the San Joaquin-Sacramento Delta and new wetland habitat. Fans and floodplains stabilized after an initial period of deposition, and stable Middle Horizon soils became buried in alluvial formations throughout central California. A number of important Middle Archaic deposits are associated with these buried land surfaces. It appears that two distinct settlement-subsistence patterns developed: one centered on the valley floor, the other in the foothills. In the foothills, deposits dating between 4050 and 2050 B.C. exhibit abundant pounding, chopping, scraping, and grinding tools, as well as paleobotanical evidence of acorn and pine nut exploitation. Local toolstone and small amounts of obsidian from the North Coast Ranges, Eastern Sierra, and Cascades were used to produce notched, stemmed, thick, leaf-shaped, as well as narrow concave base, darts. In the Central Valley, the archetypal Middle Archaic expression is the Windmiller Pattern, which dates between 1850 and 750 B.C. The Windmiller Pattern is characterized by organized cemeteries with westerly-oriented

extended burials, elaborate grave offerings, mortars and pestles, greater residential stability, new fishing technologies, and abundant fish remains.

Upper Archaic Period (550 B.C. to 1100 A.D.) – A cooler, wetter, and more stable climate characterizes this period, although the prolonged droughts associated with the Medieval Climatic Anomaly (MCA) began at about A.D. 900 and persisted until about A.D. 1350. Cultural diversity was more pronounced during this period, and new specialized technologies developed, including new bead and ornament types, ceremonial blades, and polished and ground stone plummets. Bulk harvesting and processing of food resources, including acorns, became important. It appears that valley people may have colonized well-watered foothill habitats at various times during this period. Based on analysis of Johnson's (1967) site distribution data for the Camanche Reservoir project and work at AMA-56 in 1960 and 2000, Eric Wohlgemuth (2005) argued that the lower Mokelumne River foothills had very little occupation during the MCA.

Emergent Period (1100 A.D. to Historic Period) – The relatively stable climate of the previous period generally continued, but several periods of flooding have been identified for the valley floor. This period is associated with the Augustine pattern in the Delta region. Introduction of the bow and arrow, increased variability in burial types and grave goods, and mound villages at places along rivers in the Delta region mark this period. Fishing and plant harvesting, including small seeds, appear to have increased in importance.

Ethnographic Setting

Ethnographically, the project area is in Northern Sierra Miwok territory. The Northern Sierra Miwok lived within the foothills and mountains of the Cosumnes and Mokelumne River drainages and were Utian speakers. Lexicostatistical chronologies suggest that the Miwok ancestors inhabited California's Delta Region for millennia, with expansion into the foothills occurring in the more recent past (Levy, 1978).

Subsistence activities of the Northern Sierra Miwok closely resembled those of other inhabitants of the Sierra Foothills. As winter snows thawed, small groups moved out of base villages, following deer into higher elevations. Seeds of many different plants, particularly grasses, were collected between May and August. While acorns from the valley oak were most important to the Plains Miwok, Sierra Miwok made the most extensive use of acorns from the interior live oak, blue oak, and black oak. Animals taken by the Northern Sierra Miwok included mule deer, black bears, grizzly bears, blacktail jackrabbits, cottontails, beavers, grey and ground squirrels, wood rats, valley quail, and mountain quail. Occasional forays were made down to the valley floor to hunt antelope and tule elk, which were not available in the Sierra Foothills (Levy, 1978).

The Spanish made occasional expeditions into the Central Valley beginning around 1769, with the first written description composed by Pedro Fages in 1772. Though the Northern Sierra Miwok appear to have largely escaped being removed to missions by the Spanish (unlike the Plains Miwok), they were not spared the ravages of European-spread disease. In 1833, an epidemic—probably malaria—raged through the region, killing an estimated 75 percent of the native population. The discovery of gold in 1848, near the Nisenan village of Colluma (Coloma), drew thousands of miners into the foothills and led to widespread killing and the virtual destruction of traditional Miwok culture (ECORP, 2005).

Historic Setting

Regional History – Following the settlement of San Diego in 1769, the Spanish made steady progress in the exploration and settlement of the coastal regions of Alta (Northern) California. By 1776, the Spaniards had established the Presidio of San Francisco and, by 1798, Mission San Jose. However, the Central Valley would remain largely uncharted until the early 19th century. Exploration of the foothills of the Sierra Nevada came with the Gold Rush of 1848–1849 and the following years. Local settlement and development activity skyrocketed, and rich mining districts formed in a line that followed the Mother Lode. SR-49 links many of those original mining communities.

Until recent times, socioeconomic development in the area occurred primarily within the context of mining. Not only did mining lead to the formation of Amador County in 1854 but was also the main pillar of the local economy for nearly 90 years thereafter. Almost all other businesses operated in support of the mining industry and its workers. Amador County was named for Jose Maria Amador, a placer miner who worked in the area in 1848. The County seat, Jackson, was named for Colonel Jackson, an early leader of the town. Jackson's economic viability hinged on its role as an important supply center and transportation hub for miners. Once the surface gold was largely played out, the discovery of quartz gold at Kennedy, Argonaut, Oneida, and other mines near Jackson provided prosperity for the area from the 1890s until World War II (Stanford University Press, 2002; Foothill Resources Ltd., 1994).

Project Area History – The first public road in Amador County, the Jackson and Ione Valley Road, was established in 1854 and crossed through the Project area. Mining started in the Project area during the Gold Rush and continued for many years. Stony Creek (now known as Rock Creek) and its tributaries all experienced mining activities. Thomas Brady, of Irish descent, patented a placer mine, built a cabin within the Project area, and continued mining operations until at least 1878. In the late 1850s, Gustavus Froelich, an immigrant from Prussia, established a ranch within the Project area. By 1866, he had expanded his operations to include a winery. By 1874, Froelich and his brother had patented 480 acres for ranching and farming. Eventually, the Froelich's sold their land to the Maher family, their neighbors to the west (Foothill Resources Ltd., 1994).

In 1867, Daniel and Sarah Maher (alternately spelled Meugher or Mayer), natives of Ireland, purchased a 640-acre ranch that overlapped the Project area. In the 1870s and 1880s, they expanded their holdings by acquiring land previously owned by the Froelichs and a small parcel owned by Fredrick Staats. The Maher family held the land until at least 1967. Sometime thereafter, they sold their holdings for subdivision and development (Foothill Resources Ltd., 1994).

The Monterichard Ditch, which crosses the Project area, was constructed in the late 1870s to bring water from Amador Canal to the nearby Monterichard Mine. The ditch provided water to the mine and mill until the mine closed in 1880 (Foothill Resources Ltd., 1994).

For more information regarding paleontological resources refer to **Appendix J**.

4.5.4 Impacts

Methodology

Records Search and Literature Review

A record search was completed on October 22, 2021, at the North Central Information Center (NCIC) at Sacramento State University (NCIC File No.: AMA-21-19). The NCIC search included the proposed Project Site and a ¼-mile buffer zone. The NCIC found that three archaeological surveys have included some portions of the Project Site. As a result of those efforts, eight resources have been identified within the Project Site and another three have been recorded within 0.25 miles, as listed in **Table 4.5-1**, **Known Cultural Resources Within 0.25 Miles of the Project Site**.

TABLE 4.5-1 KNOWN CULTURAL RESOURCES WITHIN 0.25 MILES OF THE PROJECT SITE

P-NO.	TRINOMIAL	SITE TYPE	DATE RECORDED	WITHIN PROJECT SITE?
P-03-411	CA-AMA- 371H	Old Highway	1999	No
P-03-541	CA-AMA- 420H	Ione & Eastern Railroad	1997, 1999, 2002, 2006, 2018	No
P-03-573	CA-AMA-48H	Kirkpatrick's Farm	1997	No
P-03-704		Monterichard Ditch	1994, 1999, 2005	Yes
P-03-705	CA-AMA-517	Rock Alignments	1994, 2005	Yes
P-03-706		Jackson Ione Valley Stage Road	1994, 2005	Yes
P-03-707	CA-AMA-518	Brady Site	1994, 2005	Yes
P-03-708		Rock Alignment	1994, 2009	Yes
P-03-709	CA-AMA- 519H	Staats Cabin	1994, 2005	Yes
P-03-710		Prospect Pit	1994, 2009	Yes
P-03- 1400		Rock Wall	2009	Yes
Source: NC	IC			

Previous Cultural Resources Surveys

Three cultural surveys/reports have previously been conducted on the proposed Project site (Subject Property), by ASI (2005), Foothill Resources Ltd. (1994), and Lindstrom (1981). The 1981 survey crossed the eastern portion of the Project site and identified one rock feature.

Foothill Resources surveyed the entire Project site and reported seven cultural resources largely associated with historic residential and mining activities: stone-lined cellars, oven/fireplace/ditches; mining debris; a structure foundation; a small prospect pit; a mining ditch; an old fence line; and a road segment. The rock feature originally identified in 1981 was not observed during that survey. Based on preliminary evaluations, Foothill Resources Ltd. (1994) suggested that P-03-705 (Rock alignment/enclosure), P-03-707 (Brady site), and P-03-709 (Staats Cabin) were potentially eligible for the

CRHR and recommended testing and further research for these three sites. They recommended that the remaining four resources (P-03-704, P-03-706, P-03-708, and P-03-710) were likely not eligible for the CRHR (Foothill Resources Ltd., 1994).

In June 2005, ASI conducted subsequent archeological site-specific surface investigations at the seven cultural resources identified by Foothill Resources. ASI's 2005 investigations discovered one additional resource: a dry-laid fieldstone fence/rock wall (P-03-1400). ASI concurred with most of Foothill's recommendations but recommended that P-03-704 (Monterichard Ditch) and P-03-706 (Jackson-Ione Valley Stage Road) are potentially eligible for the CRHR, and additional documentation should be completed for those additional two sites. Site P-03-1400 was recommended as not eligible for the CRHR (ASI, 2005).

Recent Cultural Resources Survey (2021)

In 2021, a MES crew led by Senior Archaeologist Charlane Gross conducted a cultural resources reconnaissance targeted at revisiting the five CRHR-eligible sites identified in 1994 and 2005 and assessing their current condition in comparison with what was previously recorded. The cultural resources report prepared for the survey is included in **Confidential Appendix I**.

The 2021 field visit confirmed that the resources recorded in 1994 and 2005 are largely unchanged. This is likely due to the environment; relatively low-relief topography would reduce the amount of slope wash that could fill in depressions, ditches, or other low points. However, in some places, particularly the ditches and roads, some sections do appear to have been partially filled in by sedimentation. The summaries and recommendations prepared for the 1994 and 2005 reports and the 2008 EIR appear to remain appropriate.

One new resource, the Monterichard Mine Road, was identified within the Project site during the fieldwork. A farmer who has used the Project site for grazing for many years showed the partially obscured, dirt, two-track road to the MES archaeologists and stated that he believes it was the access road to the Monterichard Mine, which lies west of the Project Site. Geographically, the road is positioned along a logical route to the Mine. The road was recorded, mapped, and photographed.

Summary of Previously Proposed Mitigation Recommendations

The following is a summary of the eight resources originally identified by previous investigations (Foothill Resources Ltd., 1994; ASI, 2005) and the one newly recorded site documented by MES (State Parks, 2021). This summary includes the CRHR eligibility status and mitigation recommendations based on information provided by ASI (2005) and included in the 2008 EIR. The CRHR eligibility status and mitigation recommendations are summarized in Table 4.5-2 Previously Recommended Mitigation Measures for Cultural Resources Within the Project Site.

TABLE 4.5-2 PREVIOUSLY RECOMMENDED MITIGATION MEASURES FOR CULTURAL RESOURCES WITHIN THE PROJECT SITE

P-NO.	TRINOMIAL	SITE TYPE	CRHR ELIGIBILITY STATUS	MITIGATION RECOMMENDATIONS
P-03-704		Monterichard Ditch	Eligible	Photo-documentation and cross-section profiles of the ditch; archival research and mapping
P-03-705	CA-AMA-517	Rock Alignments/ Enclosure (Maher Homestead)	Eligible	Phase 1 Mitigation: Vegetation removal, surface survey and metal detection, hand excavation of Feature 1; Phase 2 Mitigation (if Feature 1 is confirmed to be a habitation feature): field investigation and archival research
P-03-706		Jackson Ione Valley Stage Road	Eligible	Archival research and mapping
P-03-707	CA-AMA-518	Brady Site	Eligible	Phase 1 Mitigation: Vegetation removal, surface survey and metal detection, hand excavation of Feature 1; Phase 2 Mitigation (if Feature 1 is confirmed to be a habitation feature): field investigation and archival research
P-03-708		Rock Alignment/ Fence line	Not Eligible	None
P-03-709	CA-AMA-519H	Staats Cabin	Eligible	Phase 1 Mitigation: Vegetation removal, surface survey and metal detection, hand excavation of depression; Phase 2 Mitigation (if depression is confirmed to be a habitation feature): field investigation and archival research
P-03-710		Prospect Pit	Not Eligible	None
P-03-1400		Rock Wall	Not Eligible	None
		Monterichard Mine Road	Unknown (potentially eligible)	Vegetation removal, surface survey, detailed documentation, and mapping; archival research, CRHR evaluation and assessment of historical importance

P-03-704 (Monterichard Ditch)

ASI (2005) found that this segment of the Monterichard Ditch has a well-defined association with historic mining operations, and, more importantly, it was part of the larger Amador Canal system, which directed water to such well-known properties as the Kennedy Mine. As part of the Amador Canal system, which has been partly responsible for the economic development of Amador County, the Monterichard Ditch is recommended as eligible for the CRHR under Criteria 1, 2, and 3 as a contributing element of a larger archaeological site/district.

Proposed development on the Project site could result in damage or destruction of all or portions of the ditch that exist within the Project boundaries, which could result in a significant impact to the resource. The 2008 EIR recommended mitigation to address potential impacts to P-03-704 and includes:

- Prepare a photographic portfolio of the feature and draw periodic cross-sections, keying each to a large-scale map.
- Complete archival research to document the history of the Monterichard Ditch and prepare a
 map of the ditch using aerial photographs and historic maps. Submit the confidential report and
 map to the Amador County Museum and NCIC.

P-03-705 (rock alignments/enclosure)

These rock alignments may represent the remains of a nineteenth-century homestead, ranch, or perhaps mining occupation or use by the Maher family, who owned the land from 1867 until recently. As a potential rural domicile associated with a small placer mining operation over 50 years old, the site is recommended as eligible to the CRHR under Criterion 4. Because the site's association with the Maher family remains unproven, eligibility under Criteria 1 and 2 would have to be demonstrated via archaeological testing and archival research.

Proposed development within the Project site could result in damage or destruction of all or portions of this site, which could result in a significant impact to the resource. The 2008 EIR recommended phased mitigation to address potential impacts to P-03-705. Phase I mitigation includes:

- Clear the area with a weed whacker or mower, then conduct a visual pedestrian survey and a new metal detector survey of all features on the site.
- Hand excavates units at Feature 1 to determine the nature and function of the feature.
- Document methods and results of Phase I investigations (if Phase 2 is not implemented). Submit
 a confidential report to the Amador County Museum and NCIC.

If Phase 1 investigations reveal that Feature 1 lacks structural remains and/or associated cultural materials, and if archaeological features or cultural materials are not found elsewhere, then mitigation would be concluded. If Phase 1 investigations reveal that Feature 1 represents habitation, and/or, if other archaeological features or substantial archaeological deposits are discovered, then Phase 2 investigations shall be implemented and include:

- Complete additional field investigation and archival research to identify the time period of use and association with specific occupants.
- Incorporate resource into an open space preserve if Phase 1 and Phase 2 investigations confirm significant historical associations.
- Document results of Phase 1 and Phase 2 in a report in accordance with current professional standards. Submit confidential report to the Amador County Museum and NCIC.

P-03-706 (Jackson Ione Valley Stage Road)

ASI (2005) found that as one of the earliest public roads in the county, this section of the Jackson Ione Valley Stage Road appears eligible for inclusion on the CRHR under Criterion 1 as a contributing element

of a larger archaeological site/district. The ditch's eligibility under Criterion 4 is quite limited owing to its lack of archaeological data potential. The site's significance appears to be a function of its historical association(s) under Criterion 1.

Proposed development within the Project site could result in damage or destruction of all or portions of the road that exist within the Project boundaries, which could result in a significant impact to the resource. The 2008 EIR recommended mitigation to address potential impacts to P-03-706 and includes:

- Conduct archival research on the history of the road.
- Prepare a report using past cultural resource investigations, primary source materials, aerial photographs, and other historical maps.
- Plot the location of the road on a suitable base map (minimally the 7.5-minute USGS base).
- Submit confidential report to the Amador County Museum and NCIC.

P-03-707 (Brady Site)

P-03-707 may be the remains of Thomas Brady's nineteenth-century homestead. As a potential rural domicile associated with a small placer mining operation over 50 years old, the site is recommended eligible to the CRHR under Criterion 4. Eligibility under Criteria 1 and 2 would have to be demonstrated via archaeological testing and archival research.

Proposed development within the Project site could result in damage or destruction of all or portions of this site, which could result in a significant impact to the resource. The 2008 EIR recommended phased mitigation to address potential impacts to P-03-707 and Phase 1 mitigation includes:

- Clear the area with a weed whackers or mower, then conduct a visual pedestrian survey and new metal detector survey of all features within the site.
- Hand-excavate units at Feature 1 to determine the nature and function of the feature.
- Document methods and results of Phase I investigations (if Phase 2 is not implemented). Submit confidential report to the Amador County Museum and NCIC.

If Phase 1 investigations reveal that Feature 1 is a natural feature, then mitigation would be concluded. If Phase 1 investigations reveal that Feature 1 represents habitation and/or if other archaeological features or substantial archaeological deposits are discovered, then Phase 2 investigations shall be implemented and include:

- Conduct additional excavation and archival research to identify the time period of use and association with specific occupants.
- Document results of Phase 1 and Phase 2 in a report in accordance with current professional standards. Submit confidential report to the Amador County Museum and NCIC.
- Incorporate resources into an open space preserve if Phase 1 and Phase 2 investigations provide information on significant historical associations for the site.

P-03-708 (Rock Alignment)

This feature appears to represent an isolated segment of stone fence that possibly marked a former property boundary. Although the site possesses physical integrity, it has not been linked to recognizably important events or persons; thus, it fails to meet CRHR Criteria 1 or 2. The feature lacks distinctive characteristics or unique qualities that meet CRHR Criterion 3. The site has minimal data potential largely realized by the basic description and mapping conducted to date, thus it is not considered eligible under CRHR Criterion 4. Because the site does not qualify for eligibility to the CRHR, it is not considered a historical resource under CEQA and therefore no mitigation measures are required.

P-03-709 (Staats Cabin)

This site may be the remains of a nineteenth century homestead, ranch, or perhaps mining occupation or use, possibly associated with Fredrick Staats. As a potential rural domicile over 50 years old with substantial physical integrity, the site is recommended eligible to the CRHR under Criterion 4. Eligibility under Criteria 1 and 2 would have to be demonstrated via archaeological testing and archival research.

Proposed development in the Project site could result in damage or destruction of all or portions of this site, which could result in a significant impact to the resource. The 2008 EIR recommended phased mitigation to address potential impacts to P-03-709, and Phase 1 mitigation includes:

- Clear area with a weed whacker or mower, then conduct a visual pedestrian survey and a new metal detector survey of the depression.
- Hand-excavate units to determine whether the depression is a prospect pit, cellar, or occupation feature.
- Document methods and results of Phase I investigations (if Phase 2 is not implemented). Submit confidential report to the Amador County Museum and NCIC.

If Phase 1 investigations reveal that the depression is a prospect pit with limited data potential, then mitigation would be concluded. If Phase 1 investigations reveal that the depression is a cellar or occupation feature, then Phase 2 investigations shall be implemented and include:

- Conduct additional excavation and archival research to identify the time period of use and association with specific occupants.
- Incorporate resource into an open space preserve if Phase 1 and Phase 2 investigations provide information on significant historical associations for the site.
- Document results of the Phase 1 and Phase 2 investigations in a report in accordance with current professional standards. Submit confidential report to the Amador County Museum and NCIC.

P-03-710 (Prospect Pit)

This site is an isolated mine prospect pit. It possesses physical integrity and is likely more than 50 years old, but it cannot be linked directly to significant people or events in history (CRHR Criteria 1 or 2), does not meet design requirements (CRHR Criterion 3), and lacks information potential (CRHR Criterion 4). Because the site does not qualify for CRHR eligibility, it is not considered a historical resource under CEQA and therefore, no mitigation measures are required.

P-03-1400 (Rock Wall)

This site is a fieldstone fence located along an intermittent drainage. The stone wall, which likely marked a property boundary, dates to at least 1962, based on historic maps and aerial photographs. Although it possesses physical integrity, it is likely an isolated element of what was once a larger feature that is no longer extant. The site cannot be linked directly to significant people or events in history (CRHR Criteria 1 or 2), does not meet design requirements (CRHR Criterion 3), and lacks information potential (CRHR Criterion 4). Because the site does not qualify for CRHR eligibility, it is not considered a historical resource under CEQA, and therefore, no mitigation measures are required.

Monterichard Mine Road

This two-track, dirt road bisects the Project site and appears to lead to the Monterichard Mine, which is outside the Project site. The faint road is indiscernible in some places due to dense vegetation and erosion. The site has not been evaluated for CRHR eligibility. Given its likely association with the Monterichard Mine, the road may be eligible to the CRHR as a feature of a historic mining district.

Proposed development within the Project site could result in damage or destruction of all or portions of the road that exist within the Project boundaries, which could result in a significant impact to the resource. Recommended mitigation to address potential impacts to the site includes:

- Remove vegetation in areas where the road has become overgrown.
- Conduct detailed field recordation and mapping of the road alignment.
- Complete archival research to document the history of the road and its association with the Monterichard Mine.
- Prepare a map of the road alignment using field data, aerial photographs, and historic maps.
- Evaluate the road for CRHR eligibility and assess its historical importance.
- Prepare and submit a confidential report of findings and map to the Amador County Museum and NCIC.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on cultural resources is significant if implementation of the proposed Project would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.

CEQA *Guidelines* § 15064.5 defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Impact Analysis

Impact 4.5-1

WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE AS DEFINED IN § 15064.5?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant	MM CR-1 Treatment of Known Resources	Less than Significant	

There are nine cultural resources within the proposed Project site, five of which are eligible for listing on the CRHR and one that is potentially eligible for the CRHR (see **Table 4.5-2**). The proposed Project design has not been developed, and therefore, it is unclear whether these resources can be avoided or not. Impacts to the six CRHR-eligible could be significant. Mitigation Measure CR-1 would reduce impacts to a less-than-significant level.

Impact 4.5-2

WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE PURSUANT TO § 15064.5?				
Significance Before Mitigation	- INITIGATION MEASURES			
Significant	MM CR-2 Treatment of Undocumented Resources	Less than Significant		

Development of the proposed Project would require ground-disturbing impacts within the Project site that may impact as-yet unidentified archaeological resources. If encountered during grading, excavation, or construction, such resources could be damaged, destroyed, or removed, resulting in a direct loss and/or loss of integrity. This has a significant impact. Mitigation Measure CR-2 would reduce this impact to a less than significant level.

Mitigation Measure CR-2 requires that if any historical resources, unique archaeological resources, historic-era resources, or prehistoric resources are found, they be evaluated for significance and avoided, preserved, and/or recorded as appropriate. This is consistent with § 15064.5 of the CEQA Guidelines for determining significance and PRC Sections 21083 (b)-(f) regarding preservation and recording. In addition, Mitigation Measure CR-2 would ensure that work will cease if cultural resources are discovered during construction until such resources can be evaluated and treated as warranted by their significance. Mitigation Measure CR-2 would reduce this impact to a less than significant level.

Impact 4.5-3

WOULD THE PROJECT DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF FORMAL CEMETERIES?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant	ant MM CR-3 Treatment of Human Remains Less than Significant		

No human remains have been identified within the proposed Project site; however, there is always the potential that human remains could be encountered during grading, excavation, and/or construction. If such resources are encountered during construction, they could be damaged, destroyed, or removed, resulting in a loss of integrity or other criteria that would make them eligible to the CRHR. This is considered a significant impact.

If evidence of human remains is uncovered during Project development, Mitigation Measure CR-3 requires that all work cease within 100 feet of the find so that remains are not further damaged by equipment. Mitigation Measure CR-3 reduces impacts to human remains by requiring avoidance where feasible, or appropriate study, handling, and recordation if avoidance is infeasible, and outlines the procedures established in the California Health and Safety Code for human remains. Adherence to these measures would reduce potential impacts to human remains to a less than significant level.

4.5.5 Cumulative Impacts

Impact 4.5-4

WOULD THE PROJECT RESULT IN IMPACTS IN THE CUMULATIVE SETTING?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Significant	MM CR-1 Treatment of Known Resources MM CR-2 Treatment of Undocumented Resources MM CR-3 Treatment of Human Remains	Less than Significant	

Cultural resources have been recorded near the Project site and Project construction could result in the damage or destruction of as-yet unknown cultural resources. This is considered a significant cumulative impact.

Numerous state laws, regulations, and statutes seek to protect cultural resources. These would apply to development within the proposed Project site and surrounding region. Mitigation Measures CR-1 and CR-2 would reduce the proposed Project's contributions to cumulative cultural resource impacts by ensuring that all identified resources are evaluated for CRHR eligibility and that appropriate treatments are applied for any CRHR-eligible resource that cannot be avoided. Mitigation Measure CR-3 would further reduce proposed Project contributions to cumulative cultural resource impacts by ensuring that human remains discovered within the Project site are avoided or properly recorded and handled if discovered during construction. With mitigation, the proposed Project's contribution to cumulative impacts to historic and archaeological resources would be less than significant.

4.5.6 Mitigation Measures

MM CR-1 Treatment of Known Resources

Specific mitigation recommendations have been developed for the five CRHR eligible resources (Monterichard Ditch, Maher Homestead, Jackson Ione Valley Stage Road, Brady Site, and Staats Cabin) and the potentially eligible resource (Monterichard Mine Road).

The County shall require that the Project Applicant shall retain a qualified professional archaeologist who meets the U.S. Secretary of Interior (SOI) Standards for archaeology to implement the mitigation recommendations for any of the resources that will be impacted by construction of the proposed Project. A Treatment Plan or Plans shall be designed and implemented in accordance with the mitigation measures specified below. The Treatment Plan(s) shall be implemented and completed in advance of construction in the vicinity of each site and results shall be documented in accordance with current professional standards. The specific mitigation measures to be implemented at each site include:

Mitigation of Impacts to P-03-704 (Monterichard Ditch). Mitigation shall be conducted by the Project Applicant and shall include a photographic portfolio that documents this feature and individual photographs shall be keyed to locations depicted on a large-scale map. Cross section profiles of selected locations of the feature shall also be keyed to the feature map. Archival research shall entail collection of data regarding the feature's history; these data shall be presented in a written report. The location of this ditch shall be plotted on a suitable base map (minimal scale shall be the 7.5-minute USGS base) using aerial photographs and historic maps. The map shall be appended to the final confidential report.

Mitigation of Impacts to P-03-705 (Maher Homestead). Phased mitigation shall be implemented at this site by the Project Applicant. Phase 1 efforts shall include reduction of surface vegetation using a mower or weed whacker to facilitate observation of cultural features. The archaeological site shall be rescanned with a metal detector, and a portion of Feature 1 shall be exposed using hand excavation techniques. The purpose of these efforts shall be to determine the nature and function of Feature 1. If this feature lacks structural remains and/or associated cultural materials, and if archaeological features or cultural materials are not found elsewhere within this archaeological site, Phase 1 shall conclude the mitigation effort. If Feature 1 represents an occupation feature and/or if other archaeological features or substantial archaeological deposits are encountered, then Phase 2 shall be implemented. The results of the Phase 1 efforts shall be presented to the County in a brief, descriptive, and confidential report to allow the County to determine if additional investigative work is warranted.

Phase 2 efforts shall be qualitatively and quantitatively different from Phase 1 and include both field investigation and archival research; its goals shall be to address specific questions developed in a research design, which shall minimally include determining date(s) of occupation and/or use, identification of the archaeological site's occupants, and activities undertaken at the site. Results of Phase 2 efforts shall be presented to the County in a comprehensive, descriptive, and analytical, confidential report. If the results of the Phase 2 investigation reveal that the site is of sufficient historical importance to warrant preservation for continued enjoyment and education of area residents and visitors, the site shall be excluded from development, made part of this project's open space and recreational plan on the final subdivision map, and dedicated to the Amador Land Trust, or another appropriate entity, for preservation and maintenance.

Mitigation of Impacts to P-03-706 (Jackson Ione Valley Stage Road). Mitigation shall be conducted by the project applicant for this site. Because this feature is barely discernible on the ground and given that all identifiable archaeological information has been gathered, no further field investigation is justified to identify physical remains. A written report, documenting information from past field and research efforts and, as appropriate using primary source materials, shall be prepared to preserve the important historical information associated with this cultural resource. Using past cultural resource investigations in which the site has been identified, primary source materials, aerial photographs, and other historical

maps, the location of this road shall be plotted on a suitable base map (the minimum scale shall be the 7.5-minute USGS base). This report shall be submitted by the project applicant to the Amador County Museum for preservation and the North Central Information Center. In this way, information that is important to the history of the region shall be preserved. Due to the obscure nature of the archaeological site as shown by the documentation presented in ASI's report (ASI, 2005), the site does not warrant physical preservation; however, written preservation of the resource's historic associations will negate the information loss resulting from the build-out of the Project site.

Mitigation of Impacts to P-03-707 (Brady Site). Phased mitigation shall be implemented at this site by the project applicant. Phase 1 shall include reduction of surface vegetation using a weed mower or weed whip to facilitate observation of cultural features. The archaeological site shall then be reexamined on foot, and a metal detector will be used intuitively at locations judged likely to exhibit cultural materials. A portion of Feature 1 shall be exposed using hand excavation techniques to determine its nature and function. If the feature proves natural and substantial archaeological deposits are not encountered, Phase 1 shall conclude the mitigation effort. If Feature 1 represents habitation and/or if other archaeological features or substantial archaeological deposits are discovered, Phase 2 shall be implemented. Phase 1 results shall be presented to the County in a brief descriptive report to allow the County to determine if additional investigative work is warranted.

Phase 2 shall be qualitatively and quantitatively different from Phase 1 and include both field investigation and archival research; its goals shall be to address specific questions developed in a research design, which shall minimally include determining date(s) of occupation and/or use, identification of the site's occupants, and activities undertaken at the site. Phase 2 efforts shall focus on locations judged archaeologically significant during Phase 1 but shall address the entire recorded archaeological site. Results of Phase 2 shall be presented to the County in a comprehensive descriptive and analytical report. If the results of the Phase 2 investigation reveal that the site is of sufficient historical importance to warrant preservation for continued enjoyment and education of area residents and visitors, the site shall be excluded from development, made part of this project's open space and recreational plan on the final subdivision map, and dedicated to the Amador Land Trust, or another appropriate entity, for preservation and maintenance.

Mitigation of Impacts to P-03-709 (Staats Cabin). Phased mitigation shall be implemented at this site by the project applicant. Phase 1 shall include reduction of surface vegetation using a weed mower or weed whip to facilitate observation of cultural features. The archaeological site shall be rescanned with a metal detector, and a portion of the depression shall be exposed using hand excavation techniques. The purpose of these tasks shall be to determine the nature and function of the depression. If it is a mining prospect that lacks associated artifacts, Phase 1 shall conclude the mitigation effort. If the depression proves to be a cellar or occupation feature, Phase 2 shall be implemented. Phase 1 results shall be presented to the County in a brief descriptive report to allow the County to determine if additional investigative work is warranted.

Phase 2 shall be qualitatively and quantitatively different from Phase 1 and include both field investigation and archival research; its goals shall be to address specific questions developed in a research design, which shall minimally include determining date(s) of occupation and/or use, identification of the archaeological site's occupants, and activities undertaken at the site. Results of Phase 2 shall be presented to the County in a comprehensive descriptive and analytical report. If the

results of the Phase 2 investigation reveal that the site is of sufficient historical importance to warrant preservation for continued enjoyment and education of area residents and visitors, the site shall be excluded from development, made part of this project's open space and recreational plan on the final subdivision map, and dedicated to the Amador Land Trust, or another appropriate entity, for preservation and maintenance.

Mitigation of Impacts to Monterichard Mine Road. This site has not been evaluated for CRHR eligibility; however, given its likely association with the Monterichard Mine, the road may be eligible for CRHR as a feature of a historic mining district. Mitigation shall be implemented at this site by the project applicant. Mitigation shall include reduction of surface vegetation along the road using a weed mower or weed whip to facilitate observation of road. The road shall then be reexamined on foot, photographed, and mapped. Archival research shall be conducted to determine the age of the road and confirm its association with Monterichard Mine. Formal evaluation of the road shall be conducted by applying the four CRHR eligibility criteria. The site shall be assessed to determine if it has sufficient historical importance to warrant preservation. The results shall be presented to the County in a comprehensive descriptive and analytical report.

If the road is determined to be not eligible for the CRHR, the measures described above shall conclude the mitigation effort for this site. If road is determined eligible for the CRHR and is assessed to have sufficient historical importance to warrant preservation for continued enjoyment and education of area residents and visitors, the site shall be excluded from development, made part of this project's open space and recreational plan on the final subdivision map, and dedicated to the Amador Land Trust, or another appropriate entity, for preservation and maintenance.

MM CR-2 Treatment of Undocumented Resources

Should previously undocumented resources be uncovered during construction, all construction within 50 feet of the find shall halt immediately, and the Lead Agency and Project Applicant shall be notified. The County shall require that the Project Applicant shall retain a qualified professional archaeologist who meets the U.S. SOI Standards for archaeology to evaluate the find for eligibility to the CRHR, and, if recommended eligible, a Treatment Plan shall be designed to mitigate impacts to the degree possible. Recommendations in the Treatment Plan shall be developed by the archaeologist in consultation with the Lead Agency, Project Applicant and, if the resources are prehistoric, with the Native American community.

MM CR-3 Treatment of Human Remains

If human remains are uncovered during project construction, the County shall require that all work within 100 feet of the find shall halt immediately, and the County Coroner, Lead Agency, and Project Applicant shall be notified. California law recognizes the need to protect interred human remains, particularly Native American burials and items of cultural patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §7050.5 and §7052 and California PRC §5097. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code § 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code § 7050[c]). The Lead Agency shall contact the Most Likely

Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the Lead Agency and qualified professional archaeologist, shall develop a plan of action to avoid or minimize significant effects to the human remains prior to resumption of ground-disturbing activities.

4.5.7 References

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4.6 ENERGY

4.6.1 Introduction

This section describes the regulatory and environmental setting and potential impacts associated with implementation of the Wicklow Way Specific Plan (WWSP or proposed Project) related to energy demand and use and evaluates impacts related its forecasted energy use. This may include fuel and electricity consumption during construction and operation, as well as consistency with federal, State, and local plans for renewable energy or energy efficiency.

No specific comments related to energy demand or use were received in response to the Notice of Preparation (NOP) or at the Scoping Meeting. The NOP and written and verbal comments received are included in **Appendix A**.

4.6.2 Regulatory Setting

Federal

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Energy Policy Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products. Businesses are eligible for tax credits for buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are given for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

The Energy Policy Act of 2005 also established the first renewable fuel volume mandate in the United States. The original Renewable Fuel Standard program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007, the Renewable Fuel Standard program was expanded to include diesel and to increase the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

Corporate Average Fuel Economy

Established by the United States Congress in 1975, the corporate average fuel economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (USEPA) jointly administer the CAFE standards. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy. For further information regarding the current USEPA and NHTSA joint rulemaking for vehicle standards, see Section 4.3.2 Air Quality Regulatory Setting.

State

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The Act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures.

Integrated Energy Policy

In 2002, the Legislature passed Senate Bill 1389, which required the CEC to develop an integrated energy plan biannually for electricity, natural gas, and transportation fuels for the California Energy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles (ZEVs) and their infrastructure needs, and encourages urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

The latest update is the 2023 Integrated Energy Policy Report (CEC, 2024). The 2023 Integrated Energy Policy Report (IEPR) identifies actions the state and others can take to ensure a clean, affordable, and reliable energy system. The 2023 IEPR highlights the gap between clean electricity resources and projected goals and needs for EV chargers, heat pumps, and renewable electricity and storage. It notes that accelerated deployment of renewable resources and electrification has strained the electrical grid. It recommends strengthening ties between the development of electrification and decarbonization policies and regulations with electricity infrastructure planning and deployment processes. The report also notes that the growing number and size of projects applying for connections is overwhelming existing processes and there can be a lack of adequate capacity. The 2023 IEPR also notes that rate impacts should be managed while preparing the grid for increased renewables and demands from electrification. The report identifies the need for enhanced communication and streamlining of information and processes as actions move towards the ambitious goals of the state.

Renewables Portfolio Standard

California adopted standards to increase the percentage of energy from renewable resources that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide in their portfolio. The Renewables Portfolio Standard (RPS), established in 2002 under Senate Bill (SB) 1078, was accelerated in 2006 under SB 107 and expanded in 2011 under SB 2. Recently, SB 350, SB 100, and SB 1020 were added to renewables requirements, as discussed below. Under the RPS, qualifying renewables include bioenergy such as biogas and biomass, small hydroelectric facilities (30 megawatts [MW] or less), wind, solar, and geothermal energy. The CPUC and the CEC jointly implement the RPS program.

In November 2008, then-Governor Schwarzenegger signed Executive Order (EO) S 14 08, which expanded the State's RPS to 33 percent renewable power by 2020. In September 2009, then Governor Schwarzenegger continued California's commitment to the RPS by signing EO S 21 09, which directed CARB to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

SB 350, also known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015, and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- To increase from 33 to 50 percent by December 31, 2030, the procurement of California's electricity from renewable sources.
- To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

On September 10, 2018, then-Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also created new standards for RPS goals that were established by SB 350 in 2015. Specifically, SB 100 increases required energy from renewable sources for both Investor-Owned Utilities and Publicly Owned Utilities from 50 to 60 percent by 2030. Incrementally, these energy providers are also required to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

Senate Bill 1020 of 2022 (SB 1020) revises state policy requiring eligible renewable resources and zero-carbon resources to supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040; 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045; and 100 percent of electricity procured to serve all state agencies by December 31, 2035, as specified. It also contains provisions for cooperation between CPUC and Independent System Operators (ISOs) providing electricity for the purpose of transmission planning by allowing the exchange of confidential business information without risk of public disclosure requirements.

Low-Carbon Fuel Standard

The Low-Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S 1 07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, that started with a 0.25 percent reduction in 2011 and culminated in a 10 percent total reduction in 2020. In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Petroleum importers, refiners, and wholesalers can either develop their own low-carbon fuel products or buy LCFS credits from other companies that develop and sell low-carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen. The Port started participating in the LCFS program in January 2019 as an opt-in entity, generating credits by providing electricity to vessels through shore power, as well as providing charging infrastructure for battery-electric Class 8 on-road trucks, battery-electric cargo-handling equipment, and battery-electric light-duty vehicles.

Zero-Emission Vehicles

In March 2012, then-Governor Brown issued Executive Order B 16 12, establishing a goal of 1.5 million ZEVs on California roads by 2025. In addition to the ZEV goal, Executive Order B 16 12 stipulated that by

2015, all major cities in California must have adequate infrastructure and be "zero-emission vehicle ready;" by 2020, the state establish adequate infrastructure to support 1 million ZEVs; and by 2050, virtually all personal transportation in the state will be based on ZEVs; and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels in 2050.

On January 26, 2018, then-Governor Brown issued Executive Order B 48 18, establishing a goal of 5 million ZEVs on California roads by 2030, and spurred the installation and construction of 250,000 plugin electric vehicle chargers, including 10,000 direct-current fast chargers, and 200 hydrogen refueling stations by 2025.

In September 2020, Governor Newsom signed Executive Order N 79 20, which sets a new state goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035; that 100 percent of medium- and heavy-duty vehicles in the state be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks; and that 100 percent of off-road vehicles and equipment will be zero-emission by 2035 where feasible. This order calls on state agencies, including CARB, the CEC, the CPUC, the Department of Finance, and others, to develop and propose regulations and strategies to achieve these goals.

State Alternative Fuels Plan (AB 1007)

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the State Alternative Fuels Plan in partnership with CARB, and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80 percent reduction in GHG emissions associated with personal modes of transportation, even as California's population increases.

California Title 24 Part 6 Building Energy Efficiency Standards and Title 24 Part 11 Green Building Standards Code

The California Title 24 Building Energy Efficiency Standards are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is responsible for adopting, implementing, and updating building energy efficiency. The standards are updated every three years by the CEC. Title 24 Part 6 covers the building envelope, space-conditioning systems, water-heating systems, pools, and spas, solar-ready buildings, indoor, outdoor, and sign lighting, and electrical power distribution systems. The energy code provides either a prescriptive or performance approach for compliance. Some mandatory measures must be met regardless of which compliance approach is used.

California's Green Building Standards (CALGreen) Code, Title 24 Part 11, is focused on improving public health, reducing environmental impacts, and encouraging sustainable construction in residential and nonresidential buildings by enhancing the design and construction of buildings. Multiple agencies have the authority to propose building standards for CALGreen. The CALGreen Code includes mandatory measures to support the goals of the State's GHG reduction program as well as promote healthy indoor and outdoor air quality. It is updated triennially. In addition to mandatory building standards, the CALGreen Code includes voluntary "reach" standards known as the Tiers, which offer model building code language for local governments that wish to go beyond the minimum statewide requirements.

CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction.

Local

County of Amador

The Amador County General Plan includes goals and policies for energy consumption as detailed below:

- **Goal C-6:** Reduce energy use and promote renewable and locally available sources of energy.
- **Policy C-6.1:** Encourage new development to be pedestrian-friendly and located near existing activity centers to limit energy use associated with automobile transportation.
- **Policy C-6.2**: Encourage energy-efficient businesses and manufacturers of green products to locate in Amador County.
- **Policy C-6.3**: Promote increased energy efficiency and green building practices through the County's use of these practices and through use of incentives.
- **Policy C-6.4:** Encourage development of renewable energy generation options.
- **Policy C-6.5:** Support use of renewable and locally available sources of energy where feasible.

Amador County Energy Action Plan

The County's Energy Action Plan contains goals and policies for energy reduction which will indirectly result in greenhouse gas emissions reductions. The following policies are applicable to the proposed Project:

GOAL 1: INCREASE ENERGY EFFICIENCY IN EXISTING STRUCTURES

- Strategy 1.1: Expand outreach and education to increase participation in voluntary home energy efficiency programs.
- Strategy 1.2: Expand outreach and education to increase participation in voluntary nonresidential energy-efficiency programs.
- Strategy 1.3: Identify and promote programs that help finance energy-efficiency and renewable energy projects.

GOAL 2: INCREASE THE ENERGY PERFORMANCE OF NEW CONSTRUCTION

- Strategy 2.1: Improve compliance with Title 24 Green Building and Energy Efficiency Standards.
- Strategy 2.2: Provide incentives for buildings to exceed the current Title-24 Energy Efficiency Standards.
- Strategy 2.3: Reduce the heat island effect and related summer heat gain in residential and nonresidential projects.

GOAL 3: INCREASE RENEWABLE ENERGY USE

- Strategy 3.1: Evaluate the County's residential, non-residential, and municipal solar potential and assess barriers to increased solar energy use.
- Strategy 3.2: Develop a comprehensive renewable energy program that provides outreach, financing, and technical assistance.
- Strategy 3.3: Encourage new development projects to meet 70 percent of their energy needs from renewable resources.

GOAL 4: INCREASE ENERGY EFFICIENCY IN MUNICIPAL STRUCTURES AND OPERATIONS

Strategy 4.1: Improve the energy efficiency of existing municipal structures.

GOAL 5: INCREASE COMMUNITY WATER CONSERVATION AND EFFICIENCY TO REDUCE ASSOCIATED ENERGY USE

- Strategy 5.1: Encourage residents and businesses to conserve water used indoors.
- Strategy 5.2: Encourage residents and businesses to conserve water used outdoors.

Wicklow Way Specific Plan

The WWSP includes the following energy related policies:

- **Policy 9.20:** Incorporate alternative energy technologies into building design, whenever feasible, to include wind, solar, geothermal, or appropriate emerging technologies available at the time of construction.
- **Policy 9.21**: Commercial, Civic and Office Park uses shall install automatic lighting and thermostat features.
- **Policy 9.22:** Electrical outlets shall be provided along the front and rear exterior walls of all single-family homes to allow for the use of electric landscape maintenance tools.

4.6.3 Environmental Setting

Construction and operation of the proposed Project would require the use of electricity, and the use of fuel for vehicles and equipment, primarily in the form of gasoline and diesel. Electricity and natural gas will be used in buildings for space heating, space cooling, water heating, operating appliances, lighting, and other electricity consumptions. Therefore, these energy resources are discussed below in the context of the state and local settings for the proposed Project.

Federal

The United States has extensive energy resources, including an abundant supply of crude oil and natural gas. The United States has a diversified mix of electricity-generating resources, including natural gas, hydroelectric, nuclear, and renewable resources such as wind, solar, and thermal. The federal energy policies encourage efficient use of energy resources with implementation of automobile efficiency standards, alternative fuel use requirements, and energy efficiency standards and programs for consumer products and buildings. The proposed Project is in the western part of the United States and is regionally isolated from the eastern and central United States oil pipelines and refined petroleum

products. Therefore, most fossil fuels used in motor vehicles and off-road equipment in this region are derived from refineries located within the State of California. Electricity supply is more integrated, and large regional power agreements and load balancing occur throughout the Western United States and Western Canada.

State

California has extensive energy resources, including an abundant supply of crude oil and high production of conventional hydroelectric power, and the state also leads the nation in electricity generation from renewable resources (solar, geothermal, and biomass resources). In 2022, renewable resources accounted for 49 percent of California's in-state electricity generation, with natural gas at 42 percent and nuclear and other sources making up the remainder of the resources. California has the second highest total energy consumption in the United States but the fourth lowest energy consumption rate per capita in the United States due to its mild climate and energy efficiency programs. A comparison of California's energy-consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, accounting for about 38 percent of total energy consumed, followed by industrial, residential, and commercial sectors. California is the seventh largest producer of crude oil and the third largest in crude oil refining capacity in the United States. California is the second largest consumer of motor gasoline in the United States due to its large population, but early adoption of hybrid, electric, and alternative-fuel vehicles keep it from being the largest consumer (US EIA, 2023a). Total system electric demand in California is predicted to increase in coming years. Factors contributing to the projected increase include greater numbers of light-duty electric vehicles, increased manufacturing electricity consumption, and decreases in savings from energy efficiency programs as population increases. Regarding total consumption of electricity across all sectors, California consumed 247,250 gigawatt hours (GWh) of electricity in 2021 (US EIA, 2023b).

Transportation Fuels Supply

The energy consumed by the transportation sector accounts for roughly 84.5 percent of California's petroleum product demand (US EIA, 2023c). In 2022, taxable gasoline sales (including aviation gasoline) in California accounted for approximately 13.6 billion gallons of gasoline, and taxable diesel fuel sales accounted for approximately 3.2 billion gallons of diesel fuel (CDTFA, 2023).

In 2022, California consumed approximately 3.7 billion gallons of diesel fuel; of that, about 1.7 billion gallons were low-carbon diesel, consisting of 1.4 billion gallons of renewable diesel and 281 million gallons of biodiesel (CARB, 2023).

Other transportation fuel sources used in California include alternative fuels such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70 percent alcohol), natural gas (compressed or liquefied), liquefied petroleum gas (LPG), hydrogen, and fuels derived from biological materials (i.e., biomass).

CEC forecasts show that the demand for gasoline in California will range from 12.1 billion to 12.6 billion gallons in 2030, with most demand generated by light-duty vehicles. Although models used by the CEC for demand forecasting show an increase in light-duty vehicles along with population and income growth over the forecast horizon, total gasoline consumption is expected to decline, primarily due to increasing fuel economy (stemming from federal and state regulations) and gasoline displacement from

the increasing market penetration of ZEVs. For diesel, demand is forecasted to increase modestly by 2030, following the growth of California's economy, but would be tempered by an increase in fleet fuel economy and market penetration of alternative fuels—most prominently, by natural gas in the medium-and heavy-duty vehicle sectors (CEC, 2018).

According to the CEC (2022) sales of gasoline and diesel fuel in Amador County were 11 million gallons and 2 million gallons, respectively (CEC, 2023a). Note that the CEC only tracks fuel sales at the retail level, which allows for data to be collected on a county-by-county basis, whereas the California Department of Tax and Fee Administration (CDTFA) tracks all fuel sales—retail and non-retail—but only at the statewide level.

Local

Pacific Gas & Electric (PG&E) will provide electricity and natural gas for the proposed Project. **Table-4.6-1** shows the mix of power sources that comprise PG&E's electricity supplies.

TABLE 4.6-1 PG&E 2022 POWER CONTENT LABEL

ENERGY RESOURCES	PG&E POWER MIX	2022 CALIFORNIA POWER MIX
Eligible Renewables ¹	38.3%	35.8%
Biomass and Waste	4.6%	2.1%
Geothermal	0.5%	4.7%
Eligible Hydroelectric	1.8%	1.1%
Solar	22.0%	17.0%
Wind	9.4%	10.8%
Coal	0.0%	2.1%
Large Hydroelectric	7.6%	9.2%
Natural Gas	4.8%	36.4%
Nuclear	49.3%	9.2%
Other	0.0%	0.1%
Unspecified Sources of Power ²	0.0%	7.1%
Total	100%	100%

Notes:

RPS = Renewable Portfolio Standard

Source: PG&E 2023

4.6.4 Impacts

Method of Analysis

For this analysis, energy consumption of the proposed Project was evaluated in the context of *CEQA Guidelines* **Appendix F** discussed below. The analysis assumes that the project, if implemented, would comply with relevant federal and state laws and regulations, and County General Plan policies,

¹ Eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

² Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

ordinances, and improvement standards. Therefore, such policies, ordinances, and standards are not recognized as mitigation measures.

To determine whether a project would result in wasteful, inefficient, or unnecessary consumption of fuel or energy, and conversely, whether the project would fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation, or other project features, Appendix F of the CEQA Guidelines identifies six categories of potential energy-related environmental impacts:

- 1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, energy intensiveness of materials may be discussed.
- 2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- 3. The effects of the project on peak and base period demands for electricity and other forms of energy.
- 4. The degree to which the project complies with existing energy standards.
- 5. The effects of the project on energy resources.
- 6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

This analysis, relative to Impact 4.6-1, assesses the fuel and electricity consumption of the proposed Project during construction and operation by way of the six questions above. This analysis, relative to Impact 4.6-2, evaluates consistency with plans listed earlier in this section related to renewable energy and energy efficiency.

The analysis estimates the gasoline, diesel, and electricity consumption associated with the construction and operation of the proposed Project. **Appendix C** shows the calculations based on the methods and assumptions described below.

All gasoline use is assumed to originate from construction worker vehicles used in commuting to the proposed Project site. In addition, these construction worker vehicles were conservatively assumed to use gasoline, even though other options such as diesel, hybrid, electric, and other alternative fuels are possible. Based on the number of worker vehicle trips and the California Emissions Estimator Model (CalEEMod) default trip length, an estimate of total worker VMT was determined. This VMT is multiplied by the fuel efficiency of the vehicles based on CARB's Emission Factor model (CARB, 2021) fuel consumption for light-duty autos and light-duty trucks to yield the amount of gasoline used.

Construction diesel use was assumed to originate from the use of heavy-duty trucks (e.g., hauling trucks) and off-road equipment (e.g., excavators, cranes, and dozers). Similar to the estimate for gasoline use, the calculation for estimating diesel use is based on the number of hauling trips (roundtrip) multiplied by trip lengths to give the total VMT by medium duty trucks and heavy-duty trucks, all of which are

assumed to be diesel. For off-road equipment, the brake-specific fuel consumption factor (or the amount of fuel consumed per horsepower) was based on values used by CARB in its OFFROAD model. These brake-specific fuel consumption factors are multiplied by the horsepower, load factor, and hours of activity to determine the amount of diesel fuel used.

For operation, gasoline and diesel fuel are estimated from the VMT based on the vehicle class and fuel efficiency of the vehicles based on CARB's EMFAC 2021 fuel consumption to yield the amount of gasoline, diesel, and electricity from vehicles. CalEEMod provides an estimate of the natural gas and electricity use associated with buildings, as well as electricity used to provide water and wastewater.

Thresholds of Significance

The CEQA Guidelines Appendix F provides guidance for assessing potential impacts a project could have on energy supplies, focusing on conserving energy by ensuring that projects use energy wisely and efficiently.

Based on Appendix G of the State CEQA Guidelines, an impact on energy is significant if implementation of the proposed Project would do any of the following:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

CEQA Guidelines Appendix F states that the means of achieving energy conservation include the following:

- decreasing overall per capita energy consumption;
- decreasing reliance on fossil fuels such as coal, natural gas, and oil; and
- increasing reliance on renewable energy sources.

In addition, Amador County assesses whether a project would result in wasteful and inefficient use of energy based on compliance with Title 24, the California Green Building Code, and Principles for reducing transportation fuel use during operation.

Impacts

Impact 4.6-1

WOULD THE PROJECT RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant Mitigation Measure ENE-1 Less than Significant			

Construction

The proposed Project would result in a temporary increase of energy consumption during the construction period for worker commutes, off-road construction equipment, and truck trips. Based on the six categories of potential energy-related impacts outlined in Appendix F of the CEQA Guidelines listed above, the following analysis presents the estimated construction fuel and electricity use and qualitatively the other categories.

All aspects of fossil fuel consumption associated with the proposed Project construction were considered in this analysis. This includes traffic generated during construction, including worker commutes, material hauling, and off-road construction equipment. Proposed Project construction is estimated to use approximately 1,435,240 gallons of gasoline, 750,484 gallons of diesel fuel, and 593 megawatt-hours of electricity due to on-road vehicles. Off-road equipment is estimated to use 51,251 gallons of diesel fuel. These energy consumption numbers are presented in **Table 4.6-2**, **Construction Fuel and Electricity Consumption**. It is possible that some equipment and vehicles could use hybrid or alternative fuel technology; however, this analysis conservatively assumes maximum consumption of diesel and gasoline.

TABLE 4.6-2 CONSTRUCTION FUEL AND ELECTRICITY CONSUMPTION

ENERGY TYPE	OFF-ROAD	ON-ROAD	TOTAL
Gasoline (gallons)		1,435,240	1,435,240
Diesel Fuel (gallons)	517,251	750,484	1,267,735
Electricity (megawatt-hours)		593	593

Energy use during proposed Project construction would result in increased demand on local and regional supplies of diesel and gasoline. Given that California is the seventh-largest producer of crude oil and has the third-largest refining capacity in the nation, the amount of fuel consumed during construction would not have a substantial impact on the availability of these fuels in the state. Any impacts on local fuel supplies would be temporary and would not require an increase in fuel production capacity. Similarly, due to the relatively small demand on gasoline and diesel fuel during construction, which is less than 0.04 percent of California's total annual production of gasoline and diesel, there would not be a temporary disruption in local fuel supplies or requirement for additional fuel capacity to be constructed. Therefore, the impacts on gasoline and diesel fuel demand would be minimal.

Proposed Project construction would comply with existing energy standards and would use energy-efficient equipment in line with CARB fleet and equipment requirements, including modifications to existing regulations that would likely require the use of renewable diesel fuel. Thus, construction would not have an impact on energy resources due to its energy needs, and therefore, this impact would be less than significant.

Operation

The proposed Project would result in increases in energy demand due to the growth-inducing aspects. There will be an increase in energy demand from increased vehicle trips, building energy use, water use,

wastewater generation and processing, and potential use of stationary sources, such as emergency generators, and boilers. The estimated gasoline, diesel, natural gas, and electricity are estimated from several operational source categories. Estimated energy demands for the WWSP WWTP and stationary sources details regarding their design capacity, and energy consumption data are not available. **Table-4.6-3**, **Operation Fuel and Electricity Consumption** shows the gasoline, diesel, natural gas, and electricity from mobile sources, area sources, buildings, and water supply. Energy use from landscape equipment was not included in this analysis. The total estimated gasoline consumption is 159,514,990 gallons. The total estimated diesel fuel consumption is 30,895,194 gallons. Natural gas is estimated at 22.6 million standard cubic feet, and electricity is estimated at 316,823 megawatt-hours. With the implementation of Mitigation Measure ENE-1 and following a similar justification used to determine construction impacts, operational demands on fuel supplies, considering the future reliance on renewable energy and ZEVs, would not have an impact on energy resources, and therefore this impact would be **less than significant**.

TABLE 4.6-3 OPERATION FUEL AND ELECTRICITY CONSUMPTION

ENERGY TYPE	MOBILE	AREA	BUILDING	WATER SUPPLY	TOTAL
Gasoline (gallons)	159,514,990				159,514,990
Diesel Fuel (gallons)	30,895,194				30,895,194
Natural gas (million standard cubic feet)		5.6	17.0		22.6
Electricity (megawatt-hours)	311,212		5,370	242	316,823

Impact 4.6-2

WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant	Mitigation Measure ENE-1	Less than Significant	

This analysis considers whether the proposed Project would be consistent with applicable plans pertaining to renewable energy or energy efficiency. Construction of the proposed Project would result in a temporary increase of energy consumption as described above in **Impact 4.6-1**. During construction, the proposed Project would adhere to the state's standards designed to minimize fuel use for construction equipment and vehicles, such as the limit on equipment idling. All equipment used during construction would be required to follow state regulations for equipment fleets and the use of newer engines on a fleetwide basis. During operation, the proposed Project would adhere to state requirements for building energy efficiency and vehicle fleets. In addition, WWSP policies require water use efficiency and conservation for landscaping. The proposed Project location at the edge of suburban development is anticipated to reduce VMT for residents and employees as compared to current County average fuel demands and VMT. This will result in more efficient use of fossil fuels and/or electricity from mobile sources.

The proposed Project would be consistent with the Amador County General Plan Policies as well as the goals and policies established in the Amador County Energy Action Plan. Implementation with **Mitigation Measure ENE-1** requires adherence to energy efficiency, water conservation and green building practices and encourages future developments to be pedestrian friendly and located near existing activity centers, which reduces energy use from stationary and mobile sources. In addition, Amador County will require buildings to exceed Title 24 Energy efficiency standards.

Implementation of **Mitigation Measure ENE-1** would require the proposed Project to evaluate opportunities for using renewable energy to meet energy needs by up to 70 percent or considers the potential to store electricity to ensure that peak electricity demands come from stored renewable energy. This mitigation measure also requires reductions in construction energy use and identifies building energy efficiency standards. Based upon the commitments and requirements identified in **Mitigation Measure ENE-1**, potential impacts associated with meeting renewable energy standards and employing measures to ensure energy efficiency, this impact would be **less than significant.**

4.6.5 Cumulative Impacts

Impact 4.6-3

WOULD THE PROJECT CUMULATIVELY RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES DURING PROJECT CONSTRUCTION OR OPERATION?				
Significance Before Mitigation Measures Significance After Mitigation				
Significant	Mitigation Measure ENE-1	Less than significant		

The proposed Project construction and operation would require the use of diesel, gasoline, natural gas, and electricity. Amounts of gasoline and diesel fuel consumed during construction are well within fuel supplies available in the region and would not cause shortages of fuels needed for other projects. The electricity and natural gas use would be managed by PG&E. The electricity use projected for proposed Project construction and operation, when combined with electricity demands of other current and reasonably foreseeable projects, is within acceptable ranges considered by the CEC in its energy and electricity planning needs for the state, as outlined in IERP Reports. The proposed Project would not consume electricity in high enough quantities to affect CEC's current planning. The proposed Project would implement **Mitigation Measure ENE-1** to reduce energy consumption as well as consider sources of renewable energy or storage of electricity. Therefore, since the energy consumption of the proposed Project is within the projection of the state's current capabilities or integrated into the State planning for electricity supply, the impact would be less than cumulatively considerable and therefore **less than significant**.

4.6.6 Mitigation Measure

MM ENE-1 Energy Mitigation

The County and/or the project developer/contractor will ensure the following mitigation measure are implemented or prepare documentation of infeasibility of any of the specific mitigation measures outlined below. All requirements will be included in applicable bid documents, purchase orders, and

constructs, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

- Evaluate the potential to require renewable energy sources for the proposed Project. Document
 the types of renewable energy considered, potential megawatts of electricity that could be
 generated, an estimate of the energy required to meet 70 percent of the proposed Project
 needs, and cost to implement and install the renewable energy system or documentation of
 why renewable energy is infeasible.
- 2. Evaluate the potential to require electricity storage options at the proposed Project to meet electricity demands during peak period. Document the types of electricity storage options considered, potential megawatts of electricity that can be stored, and cost to implement and install the electricity storage or documentation of why electricity storage is infeasible.
- 3. Encourage buildings to install solar photovoltaic panels.
- 4. Encourage parking areas to consider installation solar photovoltaic panels.
- 5. Require all diesel-fueled off-road construction equipment used on land to be equipped with Tier 4 final compliant engines or better as a condition of contract unless a unique piece of equipment is not available as a Tier 4 engine.
- 6. Use zero-emission and hybrid-powered equipment, to the greatest extent possible. The performance criterion for meeting this standard assuming availability by at least two commercial rental facilities in the Mountain County Air Basin to the greatest extent possible.
- 7. Provide certificates of compliance with applicable CARB equipment and vehicle fleet regulations to the County prior to bringing any equipment onsite.
- 8. Require all on-road heavy-duty trucks to conform to the most stringent emissions standard as a condition of contract. This currently means 2015.
- 9. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes. Provide clear signage that posts this requirement for workers at the entrances to the site. The County will conduct random monthly surveys to check for compliance with idling times to ensure compliance with this measure.
- 10. Require all construction equipment is maintained and properly tuned in accordance with manufacturer's specifications. Equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 11. Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- 12. Provide electrical outlets around the exterior of the dwelling units to encourage the use of electric landscape maintenance equipment.

- 13. Reduce emissions from traffic by implementing the following measures, if feasible:
 - a. Coordinate with local transit operators to extend or expand service to the WWSP area.
 - b. Provide transit stops within the WWSP site.
 - c. Sidewalks and bikeways should be installed throughout as much of the project as possible and should be connected to any nearby existing and planned open space areas, parks, schools, residential areas, and commercial areas to encourage walking and bicycling.
 - d. Provide showers and lockers for employees bicycling or walking to work
 - e. Ensure that all residential units including multi-family units are wired for installation of electric vehicle charging outlets.
 - f. Require that all commercial and government building parking areas contain electrical vehicle charging stations.
- 14. Reduce GHG emissions associated with buildings consider a mix of the following options with a goal of reducing estimated GHG emissions from direct and indirect sources by 15 percent.
 - a. Building exceed Title 24 Building Envelope Energy Efficiency Standards
 - b. Establish onsite renewable energy systems such as solar power.
 - c. Install geothermal heat pumps or air heat pumps for space heating and cooling.
 - d. Implement CALGreen Tier 1 or Tier 2 measures from the code in place at the time of actual building construction.
 - e. Install tankless water heaters.
- 15. Require installation of Energy Star Rated appliances.
- 16. Use recycled water for landscaping and require installation of smart water meters.
- 17. Ban the use of fossil fueled landscaping equipment.
- 18. Require installation of electric vehicle charging stations in all parking lots.
- 19. Require installation of electric vehicle charging for all multi-family dwelling units.
- 20. Require installation of electric vehicle charging for all single-family residential units.
- 21. Use LED traffic lights and street lighting.

22. Require installation of cool roofs and cool wall paints on the exterior of buildings or other heat island effects reduction measures.

4.6.7 References

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4.7 GEOLOGY AND SOILS

4.7.1 Introduction

This section addresses potential impacts to geological and soil, paleontological, and mineral resources that may occur because of implementation of the proposed Wicklow Way Specific Plan (WWSP or proposed Project). It identifies associated regulatory requirements, describes the existing environmental setting of the WWSP site, evaluates potential impacts from the implementation of the WWSP, and identifies mitigation measures. This section evaluates potential impacts related to onsite geologic and seismic conditions within the WWSP site, as well as potential offsite impacts (the proposed Project does not include offsite improvements that would affect this analysis) described in Chapter 2 of this Draft Environmental Impact Report (EIR). Onsite characteristics such as topography, regional and local geology, and soil types are described. This section also addresses potential impacts on paleontological resources. Paleontological resources are plant and animal fossils from the Pleistocene era or older.

In response to the Notice of Preparation (NOP; **Appendix A**), the County did not receive any comments pertaining to geologic, soils, and seismic conditions; mineral resources; or paleontological resources. Refer to **Appendix A** of this EIR to view the comments received on the proposed Project in response to the NOP.

4.7.2 Regulatory Setting

Federal

Geology, Soils, and Seismicity

Installation of underground infrastructure/utility lines must comply with national industry standards specific to the type of utility. The discharge of contaminants must be controlled through the National Pollutant Discharge Elimination System (NPDES) permitting program for management of construction and municipal stormwater runoff. These standards contain specifications for installation, design, and maintenance to reflect site-specific geologic and soils conditions (refer to Section 4.10, Hydrology and Water Quality for further discussion).

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction activities. The Occupational Safety and Health Administration's (OSHA's) Excavation and Trenching Standard, Title 29 of the Code of Federal Regulations (CFR), Part 1926.650, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

Paleontological Resources

There are no federal laws, regulations, or policies governing paleontological resources applicable to the proposed Project.

State

Geology, Soils, and Seismicity

California Building Standards Code

The California Building Standards Code (CBSC) is Title 24 of the California Code of Regulations. The CBSC is published every three years. The 2022 CBSC became effective on January 1, 2023. Under California law, the California Building Standards Commission is responsible for coordinating all building standards, which must be centralized in Title 24 to be enforceable.

The California Building Code (CBC) is Part 2 of the CBSC. The purpose of the CBC is to establish minimum requirements to safeguard public health, safety, and general welfare and to provide safety to firefighters and emergency responders during emergency operations. CBC provisions are minimum building standards; therefore, local amendments must be equivalent or more restrictive. CBC provisions apply to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to buildings and structures in California. The CBC includes the American Society of Civil Engineers (ASCE) standards as a reference. The ASCE 7 Minimum Design Loads for Buildings and Other Structures provides structural load requirements for earthquakes and other hazards. ASCE 7 is referenced throughout the CBC, especially in Chapter 16 Structural Design.

Chapter 16 of the CBC outlines structural design requirements, including design for seismic hazards. Section 1613 mandates that every structure be designed and constructed to resist the effects of earthquake motions, with specific design requirements for different Seismic Design Categories of buildings.

Chapter 18 of the CBC details provisions for building and foundation systems, including geotechnical investigation requirements. Geotechnical investigations should include soil classifications and determination of location of expansive soils. The investigations should also include groundwater table depth and evaluation of geologic and seismic hazards depending on the determined Seismic Design Category of the proposed structure.

The California Historical Building Code is Part 8 of the CBSC. The purpose of this Code is to provide alternative regulations to the CBC for buildings designated as qualified historical buildings or properties. This Code requires a knowledgeable architect or engineer to conduct a structural capacity evaluation for historical structures. Historical structures must withstand 0.75 times the seismic forces and wind loads prescribed by the CBC requirements.

<u>Alquist-Priolo Earthquake Fault Zoning Act</u>

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972. The Act prohibits the placement of structures intended for human occupancy from being built across active fault traces in California. The Act requires delineation of earthquake fault zones (Alquist-Priolo zones) along active faults to regulate development on or near active fault traces. For the purposes of the Act, active faults are those that have ruptured in the last 11,000 years (California Department of Conservation [DOC], 2022). The Act addresses only the hazards of surface fault rupture and is not intended to regulate activities relating to

other earthquake hazards such as liquefaction, landslides, or tsunamis. Cities and counties are required to regulate development projects within Alquist-Priolo zones.

Seismic Hazards Mapping Act

This Seismic Hazards Mapping Act requires city, county, and local permitting agencies to regulate urbanization development and redevelopment projects within seismic hazard zones that have been delineated by the state geologist. Before a development permit can be granted to a proposed project located in a seismic hazard zone, a geotechnical investigation of the site must be conducted, and appropriate mitigation measures incorporated into the project design.

California Geological Survey Special Publication 117A

The California Geological Survey (CGS) initially published Special Publication 117 in 1997. The document was revised and re-released in 2008 as Special Publication 117A (DOC, 2008). This publication contains general guidelines for the evaluation and mitigation of seismic hazards, as well as guidelines for reviewing geotechnical reports. Special Publication 117A incorporates two documents that were published in response to Special Publication 117: Recommended Procedures for Implementation of CGS Special Publication 117-Guidelines for Analyzing and Mitigating Liquefaction Hazards in California and Recommended Procedures for Implementation of CGS Special Publication 117-Guidelines for Analyzing and Mitigating Landslide Hazards in California. These documents outline specific guidelines for liquefaction and landslide hazard evaluation and mitigation.

Paleontological Resources

No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered because of construction-related earth moving on state or private land.

California Environmental Quality Act

The purpose of CEQA is to 1) inform governmental decision makers and the public about the potential, significant environmental effects of proposed projects; 2) identify ways to avoid or reduce environmental damage; 3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when feasible; and 4) disclose to the public the reason why a governmental agency approved the project if significant environmental effects are involved (CEQA Guidelines, Article 1, Section 15002(a)). The CEQA Environmental Checklist Form includes one question regarding proposed project effects on paleontological resources:

"Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (CEQA Guidelines, **Appendix G**, Section VII, Part F)

The answer to this question must take account of the whole action involved, including onsite, offsite, direct, indirect, construction, operational, project-level, and cumulative impacts. If a project would result in significant adverse effects on paleontological resources, then alternative plans or mitigation measures must be considered. The level of consideration may vary with the importance of the paleontological resource.

California Public Resources Code

The California Public Resources Code (PRC) Section 5097.5 provides protection for paleontological resources located on public lands in California, which are defined as lands owned by, or under the jurisdiction of, the state, or any city, county district, authority, or public corporation, or any agency thereof. Under PRC Section 5097.5, it is a misdemeanor for a person to knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any vertebrate paleontological site, including fossilized footprints, or any other paleontological feature situated on public lands without the express permission of the public agency having jurisdiction of the lands.

Local

Geology and Soils

Amador County Code

Amador County has adopted the 2022 California Building Code (Amador County, 2023). Title 15, including Chapter 15.04 of the County Code provides regulations for building, including adoption of the CBC. Chapter 15.40 includes regulations governing grading and erosion control, including engineering requirements, grading plans, and best management practices (BMPs) related to erosion.

Amador County General Plan

Goals and policies from the County's General Plan related to geology and soils and applicable to the proposed Project are described below (Amador County, 2016).

Geologic and Seismic Hazards – Goals and Policies

- **Goal 1:** Protect people and property from seismic hazards.
- **Policy 1.1:** Enforce site-specific seismic design category requirements per the California Building Code (CBC) to minimize earthquake damage.
- **Policy 1.2**: Require minimum setbacks for habitable construction along streams between the stream bank and structure, based upon the susceptibility of the bank to seismic shaking-induced lurching.
- **Policy 1.3:** Discourage new construction of structures or improvements in or near a seismic risk area or geologic hazard area unless these projects meet design standards to minimize or eliminate seismic risk.
- **Goal 2:** Protect people and property from landslides, mudslides, and avalanches.
- **Policy 2.1:** Use the development review process to lessen the potential for erosion and landslides. Restrict site grading which steepens unstable slopes.
- **Policy 2.2:** Limit development in areas with high landslide, mudslide, or avalanche susceptibility.

Water Supply and Water Quality – Goals and Policies

Goal 3: Maintain and improve water supply planning and infrastructure.

Policy 3.1: Reduce erosion and sediment loads which might limit the lifespan of existing water storage facilities.

Policy3.2: Promote agricultural and development practices which limit soil erosion and runoff.

Natural Resource and Species Protection – Goals and Policies

Goal 4: Protect wildlife habitats, including sensitive environments and aquatic habitats, consistent with State and federal law.

Policy 4.1: Protect aquatic habitats from the effects of erosion, siltation, and alteration.

Amador County Multi-Hazard Mitigation Plan

In 2014, the Amador County Office of Emergency Service (OES) updated the Hazard Mitigation Plan (HMP) which identifies potential long-term risks to people and property from natural hazards and their effects. The Plan lays out a strategy that will enable Amador County to become less vulnerable to future disaster losses. The HMP was prepared to meet the requirements of the Disaster Mitigation Act of 2000 to maintain Amador County's eligibility for FEMA Pre-Disaster Mitigation (PDM) and Hazard Mitigation Grant Programs (HMGP). The HMP covers unincorporated Amador County; the incorporated communities of Amador City, Ione, Jackson, Plymouth, and Sutter Creek; the Amador Water Agency; and the Jackson Valley Irrigation District. The HMP includes an examination of the recorded history of losses resulting from natural hazards, an analysis of future risks posed to Amador County by these hazards (e.g., wildfires, floods, and drought), several mitigation goals, and an objective based on the results of the risk assessment and includes specific recommendations for actions that can mitigate potential future disaster losses.

Paleontological Resources

Amador County General Plan

The County of Amador General Plan (Amador County, 2016) does not discuss paleontological resources.

4.7.3 Environmental Setting

Regional Geology

The WWSP site is situated within the Sierra Nevada geomorphic province of California, near the boundary of the Great Valley province to the west (DOC, 2002). The Sierra Nevada province is a tilted fault block approximately 400 miles long (DOC, 2002). The Sierra Nevada province consists of rugged terrain and deep river canyons and includes massive granites and high crests characteristic of glacial sculpturing (DOC, 2002). The region is underlaid by metamorphic bedrock containing gold-bearing veins (DOC, 2002). The northern Sierra boundary is marked where bedrock disappears under the Cenozoic volcanic cover of the Cascade Range (DOC, 2002).

Geologic units in the vicinity of the site include (DOC, 2015):

 Undivided Mesozoic volcanic and metavolcanic rocks, andesite, and rhyolite flow rocks, greenstone, volcanic breccia, and other pyroclastic rocks, in part strongly metamorphosed. Includes volcanic rocks of Franciscan Complex: basaltic pillow lava, diabase, greenstone, and minor pyroclastic rocks;

- Marine sedimentary and metasedimentary rocks of Jurassic age, including shale, sandstone, minor conglomerates, chert, slate, and limestone; minor pyroclastic rocks; and
- Marine sedimentary and metasedimentary rocks of the Paleozoic, undivided Paleozoic metasedimentary rocks. Includes slate, sandstone, shale, chert, conglomerate, limestone, dolomite, marble, phyllite, schist, hornfels, and quartzite.

Topography

The WWSP site consists of gently rolling terrain, gradually sloping downward from east to west and ranging in elevation from approximately 1,500 feet above mean sea level in the east portion of the site to 1,400 feet above mean sea level in the south portion of the site. The County's elevation ranges from less than 250 feet above sea level at the western end of the County to a high of more than 9,000 feet in the easternmost portion of the County.

Soils

Soils at the Project Site

According to the United States Department of Agriculture (USDA), Natural Resources Conservation Service Soils Survey (NRCS), the site contains five different soils: Argonaut very rocky loam, Argonaut gravelly loam, Auburn silt loam, Auburn-Argonaut very rocky silt loams, and Auburn silt loam, moderately deep (NRCS, 2024). **Figure 4.7-1, Soil Types** shows the location of the soils described below. These map units consist of Argonaut and similar soils, Auburn and similar soils, rock outcrops, and minor components (NRCS, 2024). These soil types are moderately well-drained to well-drained and have high to very high runoff classes (NRCS, 2024).

Soil Constraints

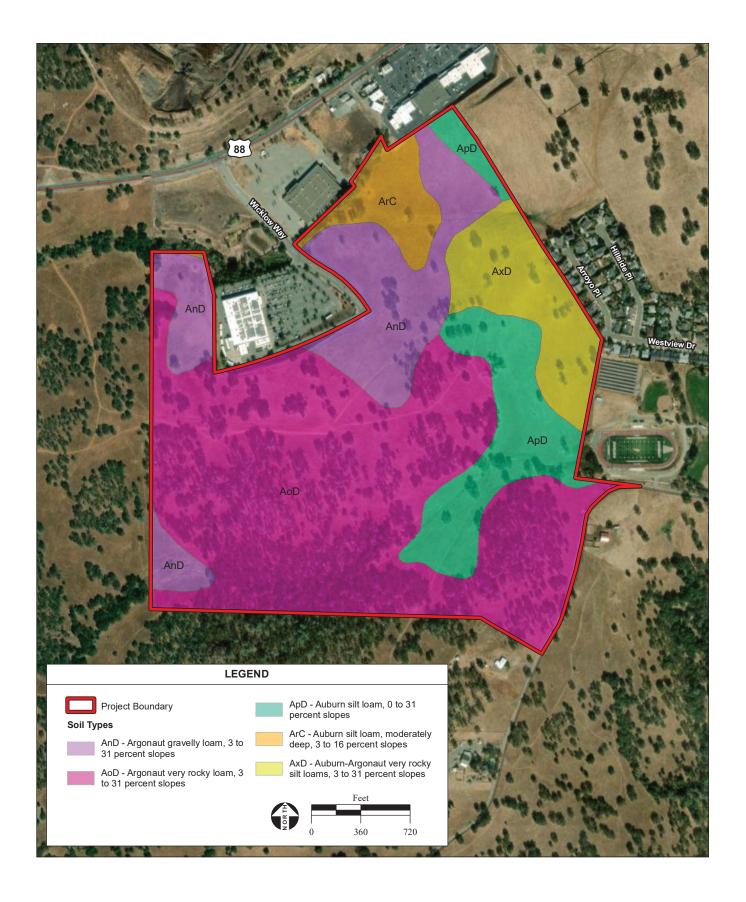
Runoff and Drainage

The onsite surface soils exhibit slow to very slow permeability (NRCS, 2024). These soils transmit water very slowly and must be considered in the grading plan to avoid ponding and drainage issues.

Erosion

Soil erosion is the removal and transportation of soil materials from the ground surface that results in deposition in a remote location. Soil erosion is the result of naturally occurring physical and chemical forces that break down, remove, and transport soil materials from the ground surface and result in deposition in a remote location. Common mechanisms of soil erosion include natural occurrences, such as wind and storm water runoff, as well as human activities that may include changes to drainage patterns and the removal of vegetation. Factors that influence the rate of soil erosion include the physical properties of the soil, topography and slopes, rainfall, and peak rainfall intensity. Erosion poses a hazard because it removes soils, which can undermine roads and buildings and produce unstable slopes, and it results in deposition of soil in reservoirs, lakes, drainages, and on roads.

The soils within the WWSP site have a moderate risk of erosion (NRCS, 2024).



Linear Extensibility

Linear extensibility is used to determine the shrink-swell potential of soils and is a suitable metric to determine the expansive potential of a soil. Expansive soils are of concern because building foundations may rise during the rainy season and fall during the dry season in response to the clay's shrinking and swelling; this can cause structural distortion. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is greater than 3 percent, shrinking and swelling can cause damage to buildings, roads, and other structures as well as to plant roots (NRCS, 2024). The soils on the WWSP site have a linear extensibility index of up to 6 percent, interpreted as having moderate potential for expansion.

Liquefaction

Liquefaction is the sudden loss of soil strength caused by seismic forces acting on water-saturated, granular soil, leading to a "quicksand" condition and generating various types of ground failure. Soils comprised of sand and sandy loams that are in areas with high groundwater tables or high rainfall are subject to liquefaction. Liquefaction can occur during seismic events with very strong ground shaking or greater (according to the Modified Mercalli Intensity (MMI) Scale (USGS, 2024a), a scale that maps subjective experience of earthquakes against earthquake intensity, i.e., a MMI intensity value of VII or higher). Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. The soils on the WWSP site are moderately well-drained to well-drained and the groundwater table is deep; therefore, there is a low risk of liquefaction (NRCS, 2024).

Lateral Spreading

Lateral spreading is a potential consequence of liquefaction. It occurs when liquefiable soil adjacent to a free face or located on a gentle slope is horizontally displaced through seismic ground shaking. Lateral spreading can cause damage to structures, foundations, and roads located on top of the soil affected by lateral spreading. Because soils at the site are not susceptible to liquefaction, they are similarly not susceptible to lateral spreading.

Soil Instability

Slope instability refers to soil movement, such as landslides or soil creep, which may result in ground failure or affect the structural integrity of buildings and infrastructure. Earth-moving activities can destabilize slopes by oversteepening the slopes and exposing the slope to increased erosion through removal of surface vegetation. However, landslides and slope instability are not known to occur in the vicinity of WWSP site (USGS, 2024b).

Subsidence and Collapse

Subsidence can occur when large amounts of groundwater or other liquids (such as petroleum) are withdrawn from underneath fine-grained sediments. No subsidence from groundwater or other withdrawal has been recorded at the site (DWR, 2024).

Collapse can occur when soils that are vulnerable to collapse (e.g., soils with high void space or air gaps between the soil grains that have soil binding agents that are sensitive to water) are disturbed and/or exposed to water. No collapsible soils exist at the site.

Seismicity

Regional and Local Faults

Although faults have been identified within the Sierra Nevada geomorphic province, no active faults are known to exist within Amador County. An active fault is a fault that shows displacement within the last 11,700 years (the Holocene Epoch) and therefore is considered more likely to generate a future earthquake than a fault that has not shown signs of recent activity. A fault that the California Geological Survey (CGS) determines to be sufficiently active and well-defined is zoned as an earthquake fault zone according to mandates of the Alquist-Priolo Earthquake Fault Zoning Act of 1972. These earthquake fault zone areas are located along active faults that are susceptible to the hazard of surface fault rupture. The site is not located within an Alquist-Priolo Earthquake Fault Zone and therefore is not mapped as an area of having a risk of surface fault rupture (DOC, 2024).

There are no mapped active faults within the county; however, as shown on **Figure 4.7-2**, **Regional Faults**, inactive faults have been identified within 20 miles of the WWSP site. A trace of the Foothills Fault, which was last active in the late Pleistocene (15,000 to 130,000 years ago), lies approximately 6 miles west of the Project site. Another trace of the Foothills Fault lies approximately 5 miles southeast of the WWSP site.

Seismic Hazard Probability

The Richter scale is the best-known scale for measuring the magnitude of earthquakes. The scale has a logarithmic base, so an earthquake with a recording of Magnitude 7 signifies a disturbance with ground motion 10 times as large as an earthquake with a recording of Magnitude 6. However, each whole number step in the magnitude scale corresponds to the release of about 32 times more energy than the amount associated with the preceding whole number value. Seismologists also designed a "moment magnitude" scale to be consistent with the Richter scale while providing a measure that differentiates between the largest earthquakes. Consequently, the Richter scale is still used but more precise measurements such as moment magnitude are now used to calculate the magnitude of an earth-shaking event (Michigan Tech, 2007).

According to the Uniform California Earthquake Rupture Forecast, the Project site and vicinity have a less than 0.1 percent likelihood of experiencing a magnitude 6.7 or larger earthquake in the next 30 years (USGS, 2015). Ground shaking severity at the site would depend on the distance from the fault rupture, the magnitude of the earthquake, and the site-specific soil conditions.

Mineral Resources

CGS has classified the site as MRZ-4, "areas of no known mineral occurrence where geologic information does not rule out either the presence or absence of significant mineral resources" (DOC, 1983; DOC, 2024b). It is not designated as an area of gold, aggregate, clay, or granite production (DOC 1983). In addition, the Amador County General Plan does not identify the site as containing any mineral resource zones (Amador County, 2016).

Paleontological Setting

Geologic Mapping

Geologic mapping by Wagner et al. (1981) and Holland and O'Neal (2019) indicate that the site is primarily underlain by Middle to Late Jurassic-age metamorphosed volcanic and marine volcaniclastic deposits of the Logtown Ridge Formation, as well as a small sliver of artificial fill deposits (**Figure 4.7-3, Geological Survey**). These units are described below and discussed in relation to their paleontological potential (Bargas, 2024).

Artificial Fill, Recent

Artificial fill materials are mapped by Holland and O'Neal (2019) in a single area along the border of the WWSP site in the vicinity of Wicklow Way and the existing Walmart department store (**Figure 4.7-3**). Such deposits are presumably derived from prior construction activities and are thus not naturally forming. These disturbed fill sediments could potentially contain fossil materials that were unintentionally introduced during earlier excavations. However, such fossil materials would be removed from their original geologic and stratigraphic contexts and thus would not be of paleontological interest or significance. These deposits are likely underlain by the Jurassic-age Logtown Ridge Formation at shallow depths.

Logtown Ridge Formation (Jlg, Jlr), Middle to Late Jurassic

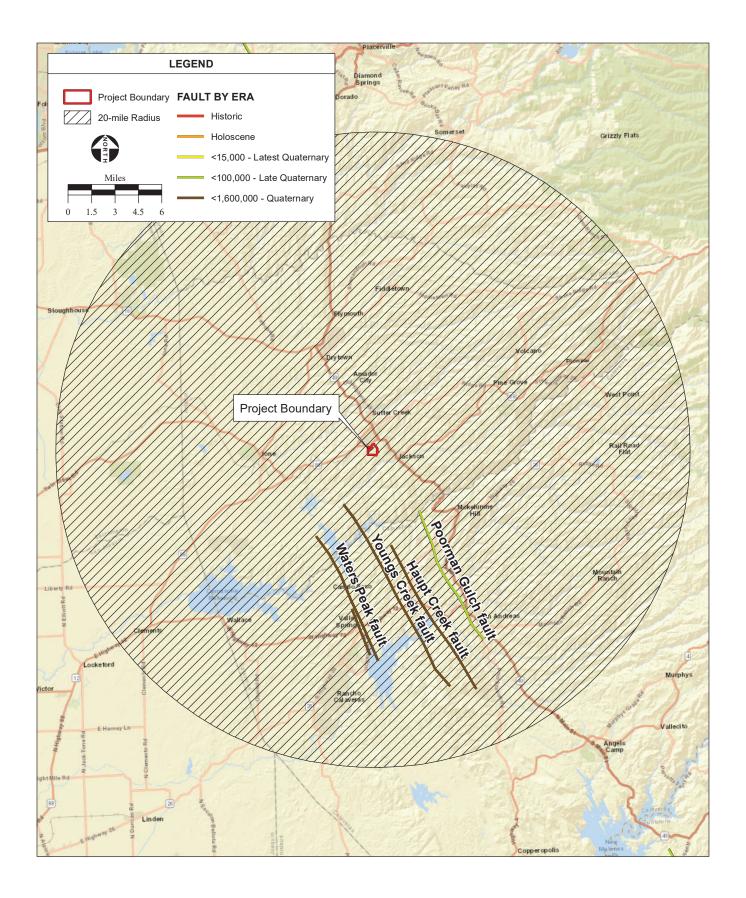
Holland and O'Neal (2019) have divided the portion of the Logtown Ridge Formation underlying the site into two distinct members: the Rabbit Flat Member (Jlr) and the Goat Hill Member (Jlg).

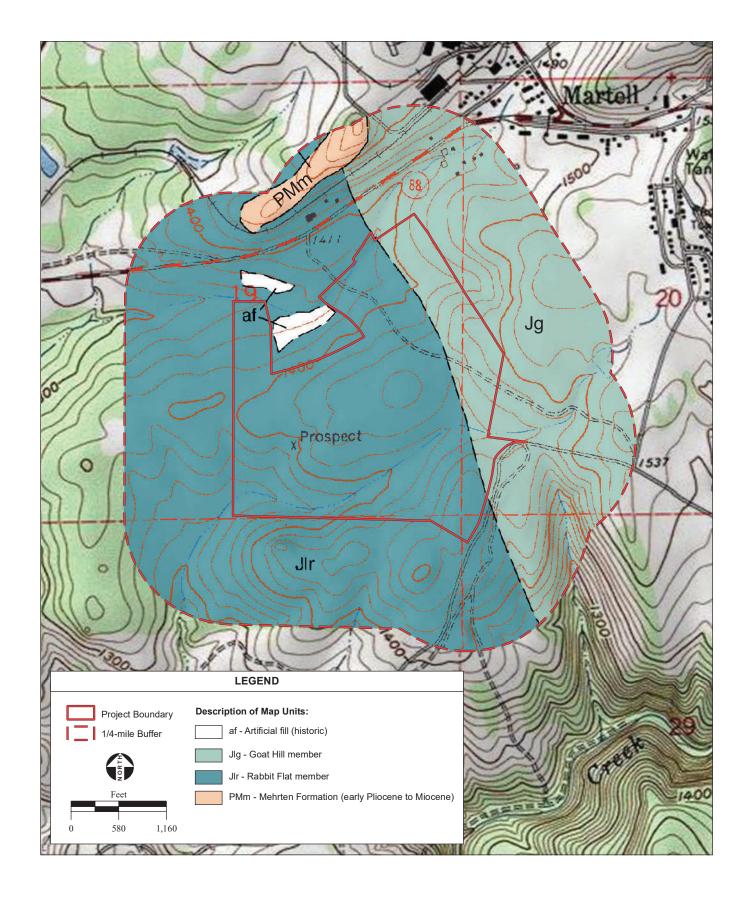
Rabbit Flat Member

The Rabbit Flat Member (JIr) of the Logtown Ridge Formation is exposed in the western two thirds of the site. The unit consists of coarse basalt breccias, massive sills, and bedded pyroclastic rocks deposited within a marine setting. Fossil remains of the ammonite *Psuedocadoreras* have been reported from this member by Imlay (1961), but the precise provenance of this specimen is not fully known, so it is not clear if the fossil actually originated from within the marine volcaniclastic deposits of the Rabbit Flat Member.

Goat Hill Member

The younger, Goat Hill Member (Jlg) conformably overlies the Rabbit Flat Member (Jlr) and locally can make up as much as half of the thickness of the Logtown Ridge Formation. The Goat Hill Member is primarily composed of well-bedded marine pyroclastic deposits and tuffs. Multiple fossils have been reported from the Goat Hill Member, especially the ammonite *Psuedocadoreras* (Eric et al., 1955; Imlay, 1961; Clark, 1964). Biostratigraphic study of these fossils has allowed for the assignment of the Goat Hills Member to the Callovian Age at the end of the Middle Jurassic Period (~161–165 Ma), with the unit likely spanning into the beginning of the Late Jurassic. These fossils are the only features that have allowed for the age determination of the Logtown Ridge Formation.





Records Searches

A search of online databases containing fossil locality records, including the Paleobiology Database (PBDB) and University of California Museum of Paleontology (UCMP), was utilized to determine if paleontological resources have been discovered within the vicinity of the site or from the Logtown Ridge Formation.

Both the PBDB and UCMP produced paleontological records from the Logtown Ridge Formation. However, these records did not make a distinction below the formation level (i.e., no distinction was made between the different members of the Logtown Ridge Formation).

The search of the PBDB produced five locality records. One locality (LSJU 9062) preserved body fossils of the ammonite *Peltoceras*, though Duffield and Sharp (1975) suggest that this specimen may have originated from the base of the overlying Mariposa Formation rather than the Logtown Ridge Formation. Three other localities (USGS Mesozoic Loc. 22175, 24710, and 27317) produced specimens of the Callovian-age ammonite *Pseudocadoceras grewingki* (later reassigned to *Cadoceras* by Arthur et al. 1993). Finally, both the PBDB and UCMP searches produced a single UCMP locality (UCMP A-4996) containing a single ammonite specimen identified as *Idoceras planula*. The UCMP database further recognizes this as a type specimen.

4.7.4 Impacts

Method of Analysis

Geology and Soils

Potential impacts to geology and soils were analyzed through the review and evaluation of available documents and mapping. The impact analysis for geology and soils focuses on geological impacts related to seismic activity, soil erosion, and soil stability. The evaluation is based on review of project plans, including grading plans; federal, state, and local regulations and guidelines; and relevant specific and general plans. NRCS information about onsite site soils was reviewed to identify constraints present on the WWSP site. Additionally, USGS fault maps were consulted to identify potential faults and seismic hazards from a regional perspective.

Potential impacts on mineral resources were analyzed through review of CGS mapping and the County General Plan Economic Development chapter to identify any potential mineral resources at the site.

Paleontological Resources

Fossils are generally defined here as the remains or trace remains (both physical and chemical) of prehistoric organisms (i.e., animals, plants, and microorganisms). These resources can be preserved as body fossils, such as bones, teeth, shells, and plant matter, or as trace fossils, such as burrows and footprints. Geologic deposits make up the context in which these fossil remains were originally buried and provide information about the environment in which an organism lived. In the broadest sense, a fossil can be defined as any remains documenting past life. Typically, to be considered within the scope of paleontology, fossils must be at least 11,700 years in age (i.e., dating from before the beginning of the modern Holocene Epoch). However, some Holocene-age remains are also considered of paleontological interest if they contribute to our understanding of the record of past life. Alteration or replacement

(e.g., permineralization, petrification, or "fossilization") of the original organic material is not required for determination of whether an object is a fossil or not.

Many agencies have adopted the Society of Vertebrate Paleontology standards to identify "significant paleontological resources." Their guidelines define significant paleontological resources as:

"... fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information.

Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)," (SVP, 2010).

In general, paleontological resources are preserved in sedimentary rocks; however, they can occasionally be preserved in low-grade metamorphic rocks and can, on rare occasions, be preserved in volcanic rocks. Because of the interwoven relationship between fossil remains and their geologic contexts, paleontological sensitivity is generally assigned to geologic units rather than to specific regions, areas, or localities. This assigned paleontological sensitivity classification or rank is based on the known or potential abundance of significant paleontological resources contained within that geologic unit. There are no superseding agency guidelines regarding paleontological sensitivity; therefore, many groups and agencies in California have developed their own sensitivity ranking systems. One of the most widely used was created by the Society of Vertebrate Paleontology (SVP) within the "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources" (SVP 2010). Under the SVP (2010) guidelines, geologic units are classified in one of four categories of paleontological resource sensitivity: no, low, undetermined, and high (see **Appendix H**).

Thresholds of Significance

Based on **Appendix G** of the State CEQA Guidelines, an impact on geology, soils, and seismicity, and mineral resources is significant if implementation of the proposed Project would do any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42; ii) Strong seismic ground shaking; iii) Seismic-related ground failure, including liquefaction; iv) Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable or that would become unstable because of the project, and potentially result in on or offsite 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 wastewater disposal systems where sewers are not available for the disposal of wastewater.

- 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 a value to the region or residents of the state.
- Result in the loss of availability of a locally important resource recovery site delineated on a local general plan, specific plan, or other land use plan.

The analysis considers the 2015 California Supreme Court's holding in CBIA v. BAAQMD that CEQA does not generally operate "in reverse." That is, CEQA generally does not require analysis of the impact of the existing environmental conditions on future users or residents of a proposed project. The Court determined, "it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (Id. at p. 377.) Evaluating "the environment's effects on a project... would impermissibly expand the scope of CEQA." (Id. at p. 387.) Thus, the court determined, "when a proposed project's risks exacerbate environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users." (Id. at p. 377.)

In applying CBIA's holding with respect to geology, soils, seismicity, and paleontological resources, a proposed project that places structures or people in areas subject to geological hazards would only result in significant impacts if it were to exacerbate these existing geological hazards or conditions. Therefore, the impacts analyses below focus on the extent to which the proposed Project, reasonably foreseeable distribution components, or alternatives could exacerbate any existing geologic hazards or conditions that may already be present within the impact area.

Because no mineral resources are present at the site, there are **no impacts** on mineral resources are these resources are not discussed further.

Impact Analysis

Impact 4.7-1

WOULD THE PROJECT DIRECTLY OR INDIRECTLY CAUSE POTENTIAL SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING (I) RUPTURE OF A KNOWN EARTHQUAKE FAULT, AS DELINEATED ON THE MOST RECENT ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING MAP, ISSUED BY THE STATE GEOLOGIST FOR THE AREA OR BASED ON OTHER SUBSTANTIAL EVIDENCE OF A KNOWN FAULT; (II) STRONG SEISMIC GROUNDSHAKING; (III) SEISMIC-RELATED GROUND FAILURE, INCLUDING LIQUEFACTION; (IV) LANDSLIDES?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

(i) No faults zoned pursuant to the Alquist-Priolo Earthquake Fault Zoning Act occur at or near the Project site. Thus, it is unlikely that seismic activity would cause surface fault rupture at the Project site. Further, neither the Project nor future projects it could enable would increase risk of seismicity. Therefore, the Project would result in **no impact** related to surface fault rupture.

- (ii) There are no known active faults near the Project site. However, there are fault traces known from the late Pleistocene within 5 miles of the Project site. Despite this proximity, the Working Group on Earthquake Probability assesses the likelihood of an earthquake involving strong ground shaking occurring onsite as very low. Further, neither the proposed Project nor future projects would increase the likelihood of seismicity. Therefore, the proposed Project would not result in impacts from strong seismic ground shaking.
- (iii) The risk of liquefaction at the is very low. First, onsite soil conditions are not conducive to liquefaction, as discussed above under Liquefaction. Second, strong ground shaking associated with large earthquake is unlikely. Therefore, although the proposed Project involves the placement of structures, these structures would not be placed on soils vulnerable to seismically induced liquefaction.

Further, construction of any future projects would require compliance with standard engineering practices, County requirements, and the CBC Design and Construction Standards III-3 (Soil Testing and recommendations from geotechnical report); this compliance would ensure that any impacts are minimized. Site-specific geotechnical evaluation must be submitted by project developers. The geotechnical evaluation would identify locations where special construction and design methods would be needed and would include recommendations for alleviating risks due to onsite liquefaction constraints. The developer would be required to comply with the recommendations set forth in the geotechnical evaluation, thus greatly reducing or eliminating any residual risk of liquefaction.

Operation of future projects enabled by the Project would not introduce any new risk of liquefaction.

Therefore, with compliance with standard engineering practices, County and CBC requirements, the proposed Project would have a **less than significant impact** pertaining to seismically induced liquefaction. No mitigation is required.

(iv) As discussed above under Soil Instability, onsite soils are not susceptible to landslide.

Although the proposed Project would involve earthwork that would reshape slopes or remove vegetation, because soils are not susceptible to landslide, the risk of landslide is low and therefore the impact is less than significant.

Further, construction of the proposed Project would adhere to requirements of standard engineering practices, County and CBC requirements, and CBC Design and Construction Standards III-3 (Soil Testing and recommendations from geotechnical report); this compliance would ensure that any impacts are minimized. Site-specific geotechnical evaluation must be submitted by project developers/applicants. The geotechnical evaluation would identify locations where special construction and design methods would be needed and would include recommendations for alleviating risks due to landslide constraints at the WWSP site. The developer would be required to comply with the recommendations set forth in the geotechnical evaluation. Operation of future projects enabled by the proposed Project would not introduce any new risk of landslide.

Therefore, with compliance with standard engineering practices, County and CBC requirements, the proposed Project would have a **less than significant impact** pertaining to landslides and no mitigation is required.

Impact 4.7-2

WOULD THE PROJECT RESULT IN SUBSTANTIAL SOIL EROSION OR LOSS OF TOPSOIL?		
Significance Before Mitigation Measures Significance After Mitigation		
Less than Significant	None Required	Less than Significant

Future development associated with implementation of the WWSP would require grading and leveling to accommodate residential, commercial, roads, and other uses as described in Section 2.0, Project **Description**. Approximately 147 acres of the total 201 acres at the WWSP site would be subject to grading activities during the construction process. Grading activities are necessary to prepare the WWSP site for infrastructure and structures. Construction activities, including grading, clearing, and landscaping, would result in the temporary disturbance of soil and would expose disturbed areas to potential storm events, which could generate accelerated runoff, localized erosion, and sedimentation during the time when soils remained exposed. In addition, construction activities could expose soil to wind erosion effects that could adversely affect both onsite and nearby soils and the re-vegetation potential of the area. As stated above under 4.7.3 Erosion, onsite soils have a moderate risk of erosion. However, the WWSP site does not have steep slopes. Therefore, the potential for loss of topsoil and erosion is small. A grading permit is required prior to site development, and all development must meet the requirements of the County's Construction Standards for field testing and the recommendations of geotechnical studies. Future permit applications and grading plans would be reviewed for compliance with construction standards designed to minimize erosion. Site-specific information from a geotechnical evaluation would be required to identify and address other erosion hazards, if any. The County requires a grading permit and a site-specific geotechnical study as a condition of project approval and issuance of building permits. Specifics of the grading plan could include, but not be limited to, sediment retention basins and energy dissipaters that would both reduce the power of erosion runoff entering stream channels and retain most suspended sediment. In addition, because of the size of the site, future site development would be required to comply with the State Water Resources Control Board (SWRCB) NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit). The SWRCB requires that all construction sites have adequate control measures to reduce the discharge of sediment and other pollutants to streams to ensure compliance with Section 303 of the Clean Water Act (CWA). See Section 4.10 Hydrology and Water Quality for more information on these issues and related mitigation requirements.

Operation of future projects enabled by the proposed Project would not increase erosion.

Because the developer/applicant for future projects would be required to comply with the policies and regulations of the County and State, impacts due to soil erosion would be **less than significant**. No mitigation is required.

Impact 4.7-3

WOULD THE PROJECT BE LOCATED ON A GEOLOGICAL UNIT OR SOIL THAT IS UNSTABLE, OR THAT WOULD BECOME UNSTABLE AS A RESULT OF THE PROJECT, AND POTENTIALLY RESULT IN ON OR OFFSITE LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION OR COLLAPSE?			
Significance Before Mitigation Measures Significance After Mitigation			
Less than Significant None Required Less than Significant			

Risk of liquefaction and landslide are discussed above under Impact 4.7-1. As discussed in Section 4.7.3, risk of liquefaction is low at the WWSP site. Because this risk is low, risk of lateral spreading is also low. No onsite subsidence exists, and the proposed Project does not involve removal of subsurface liquids. Therefore, the risk of subsidence is low. Similarly, there are no onsite collapsible soils. Therefore, risk of collapse is low. Therefore, the proposed Project would have a **less than significant impact** related to an onsite geological unit or unstable soils, or an area that would become unstable as a result of implementation of the proposed Project, therefore, no mitigation is required.

Impact 4.7-4

WOULD THE PROJECT BE LOCATED ON EXPANSIVE SOIL, AS DEFINED IN TABLE 18-1-B OF THE UNIFORM BUILDING CODE, CREATING SUBSTANTIAL DIRECT OR INDIRECT RISKS TO LIFE OR PROPERTY?			
Significance Before Mitigation Measures Significance After Mitigation			
Less than Significant	None Required	Less than Significant	

The NRCS indicates that onsite range from low to moderate shrink-swell capacity. New foundations, roads, and infrastructure could be damaged if they are placed on expansive soils without appropriate measures to minimize risks from expansive soils.

Despite these characteristics, onsite soils do not pose significant constraints to residential or commercial construction or infrastructure placement. Standard engineering practices and compliance with County and CBC requirements and CBC Design and Construction Standards III-3 (Soil Testing and recommendations from geotechnical report) would ensure impacts are minimized. As indicated above, future site-specific geotechnical evaluation would be submitted by project developers/applicants. The geotechnical evaluation would identify locations where special construction and design methods would be needed and include recommendations for alleviating constraints due to high shrink-swell, corrosion, or other potential soils constraints. The developer/applicant of future projects would be required to comply with the recommendations set forth in the geotechnical evaluation. Therefore, this impact would be less than significant, and no mitigation is required.

Impact 4.7-5

WOULD THE PROJECT HAVE SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS WHERE SEWERS ARE NOT AVAILABLE FOR THE DISPOSAL OF WASTEWATER?			
Significance Before Mitigation Measures Significance After Mitigation			
No Impact	None Required	No Impact	

Wastewater disposal for the proposed Project would be provided by the Amador Water Agency (AWA). The proposed Project does not involve the use of septic tanks or alternative wastewater disposal systems, therefore, there would be **no impact**.

Impact 4.7-6

WOULD THE PROJECT DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGICAL FEATURE?		
Significance Before Mitigation Measures Significance After Mitigation		Significance After Mitigation
Significant	MM GEO-1	Less than Significant with Mitigation

A combined desktop analysis of geologic maps, paleontological literature, and online paleontological database records has determined that the WWSP site is underlain by the Rabbit Flat Member (Jlr) and Goat Hill Member (Jlg) of the Logtown Ridge Formation, both of which are known to have produced fossils and contain sediments conducive to the preservation of significant paleontological resources (Bargas, 2024). Given this, both the Rabbit Flat Member and Goat Hill Member have been assigned a high potential under the SVP ranking system, especially where marine volcaniclastic sediments are present.

Given the high paleontological potential of the Rabbit Flat Member and Goat Hill Member of the Logtown Ridge Formation at all depths where they are encountered, even shallow excavations that would be undertaken into these units by future individual projects under the WWSP have the potential to result in the permanent loss of scientifically important and regionally significant paleontological resources, including identifiable vertebrate fossils, uncommon invertebrate fossils, plant fossils, and trace fossils. The risk of such loss is a significant impact. Implementation of **Mitigation Measure GEO-1** would reduce the impact to less than significant by requiring a qualified paleontologist to perform a comprehensive paleontological survey, produce a paleontological survey report to reassess the paleontological potential of geologic units, and, if appropriate, develop a Paleontological Resource Mitigation and Treatment Plan.

4.7.5 Cumulative Impacts

Impact 4.7-7

WOULD THE PROJECT RESULT IN IMPACTS TO GEOLOGY AND SOILS IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
No Impact	None Required	No Impact

The context for evaluation of potential cumulative impacts on geology, soils, and seismicity is based on the implementation of the reasonably foreseeable projects in the County. However, the geologic analysis of cumulative impacts is generally site-specific, rather than cumulative in nature because each development site has unique geologic considerations that would be subject to site development, grading and construction standards.

Accordingly, the proposed Project would not contribute to an existing cumulative impact and therefore, there would be **no cumulative impact** related to geology, soils, and seismicity.

Impact 4.7-8

WOULD THE PROJECT RESULT IN IMPACTS ON PALEONTOLOGICAL RESOURCES IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation Measures Significance After Mitigation		
Significant MM GEO-1 Less than Significant with Mitigation		

The cumulative setting for paleontological resources associated includes the Rabbit Flat Member and Goat Hill Member of the Logtown Ridge Formation, which are significant because of the information about the history of life, biochronology, paleoenvironment, and paleoclimate that they can provide. Due to this fact, these units are both assigned a high paleontological resources potential. Cumulative development within the local Rabbit Flat Member and Goat Hill Member of the Logtown Ridge Formation has the potential to destroy or impact significant, nonrenewable paleontological resources. Proposed excavations associated with the proposed Project, combined with other large-scale proposed, in-process, and future projects in the region, have the potential to contribute to the progressive loss of paleontological resources from these deposits. Cumulative impacts to paleontological resources could occur if the proposed Project and other cumulative projects would damage or destroy significant paleontological resources. However, with implementation of Mitigation Measure GEO-1, there would be a less than cumulatively considerable impact to paleontological resources. Furthermore, other projects within the cumulative setting would need to comply with existing regulations and undergo CEQA review to ensure potential impacts to paleontological resources are appropriately evaluated and mitigated on a project-to-project basis. As such, compliance with regulatory requirements would reduce cumulative impacts to paleontological resources during construction to a less than significant cumulatively considerable level.

4.7.6 Mitigation Measures

MM GEO-1 Paleontological Resources Survey, Monitor for Paleontological Resources, Cease Work and Consult with Qualified Paleontologist (Impact 4.9-3)

The services of a qualified paleontologist meeting the minimum standards for a Principal Investigator, as defined by the SVP (SVP, 2010) and described in **Appendix G**, shall be retained prior to the start of proposed earthmoving activities to perform a comprehensive paleontological survey of the site and produce a paleontological survey report. This report would describe the results of the survey, reassesses the site-specific paleontological potential with regard to proposed disturbances, describes steps to address any significant discovered fossils, and determine the need for development and implementation of a Paleontological Resource Mitigation and Treatment Plan (PRMTP). Per the SVP (2010), a qualified paleontologist shall have the equivalent of the following qualifications:

- 1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience.
- 2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts.
- 3. Proficiency in recognizing fossils in the field and determining their significance.
- 4. Expertise in local geology, stratigraphy, and biostratigraphy.
- 5. Experience collecting vertebrate fossils in the field.

Should volcaniclastic or marine deposits of the Rabbit Flat Member and/or Goat Hill Member of the Logtown Ridge Formation be encountered during the paleontological survey or if paleontological resources are encountered, then the paleontological potential should be considered high. In areas where geologic units with a high paleontological potential may be impacted, a qualified paleontologist should develop and carry out a site-specific PRMTP. This plan should specify the levels and types of actions to protect paleontological resources based on the types and depths of earthmoving activities and the geologic and paleontological sensitivity. The plan should also include a description of the professional qualifications required of key staff, communication protocols to be followed during construction, implementation of a Workers Environmental Awareness Program (WEAP) for paleontological resources, location and duration of paleontological monitoring, fossil recovery protocols, sampling protocols for microfossils (if required), laboratory procedures, reporting requirements, and curation provisions for any collected fossil specimens. This treatment plan would guide all paleontological resources mitigation efforts during construction.

If the entire area of proposed disturbance is found to be underlain by exposures of interbedded lavas, flows, and sills during the paleontological survey, then the area can be considered to have low paleontological potential and a qualified paleontologist shall only be retained in the case of unanticipated discoveries. Should construction or other personnel discover any unanticipated fossils or

potential fossils during construction, regardless of the depth of work or location, work at the discovery location shall cease within a 50-foot radius of the discovery until the qualified paleontologist has assessed the discovery and made recommendations as to the appropriate treatment. Construction activities may continue in other areas. If the discovery is identified as potentially significant, additional work, such as recovery, laboratory preparation, fossil identification, curation, and reporting, may be necessary. Recovered paleontological resources should be deposited in an appropriate fossil repository to be determined by the lead agency in consultation with the qualified paleontologist. Should a fossil be discovered in areas previously assigned a low paleontological potential, a site-specific PRMTP, as described above, should immediately be drafted, and implemented by the qualified paleontologist.

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4.8 Greenhouse Gas Emissions

4.8.1 Introduction

This section provides information about applicable regulations related to greenhouse gases (GHG), the local GHG and climate change setting, emissions sources, and evaluates GHG impacts from implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). "Emissions" refers to the actual quantity of pollutants and are typically measured in metric tonnes (MT) per year.

No specific comments were received in response to the Notice of Preparation (NOP) or at the Scoping Meeting related to GHG emissions. However, comments related to the offsite transport of dust during construction were raised. In addition, the California Department of Transportation (Caltrans) submitted comments noting that the vehicle miles travelled (VMT) per capita thresholds should be 15 percent below existing regional VMT per capita thresholds to assist with reducing GHG emissions. The NOP and written and verbal comments received are included in **Appendix A**.

4.8.2 Regulatory Setting

Federal

On-Road Vehicle Emission Regulations and Corporate Average Fuel Economy Standards

The United States Environmental Protection Agency (EPA) and National Highway Transportation Safety Administration (NHTSA) have issued rulemakings regarding the national program of fuel economy standards for passenger vehicles and light-duty trucks of model years 2017-2025, culminating in fuel economy of 54.5 miles per gallon (mpg) by model year 2025 (EPA, 2012). Similarly, fuel economy standards have been issued for medium- and heavy-duty vehicles of model years 2014-2018, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses (EPA and USDOT, 2011).

The NHTSA and the EPA updated the Corporate Average Fuel Economy (CAFE) and GHG emissions standards for passenger cars and light trucks and established new standards, covering model years 2021 through 2026, under the Safer Affordable Fuel Efficient (SAFE) vehicles final rule (SAFE Rule Part Two). This rule, which went into effect on June 29, 2020, rolled back some of the fuel efficiency mandates that had been in effect. In March 2022, CAFE standards were finalized for model years 2024-2026. The final rule establishes standards that require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks. In March 2024, the EPA finalized multi-pollutant emissions standards for passenger cars, light-duty vehicles, and medium-duty vehicles, starting in 2027 and phasing in through 2032. GHG emissions for light-duty fleets will go down to 85 grams of CO₂ per mile in 2032, and medium duty vehicles will have a fleet average of 274 grams of CO₂ per mile. For 2032, model year engines will have a fleet average of 15 milligrams per mile of non-methane organic gases plus NOx which represents a 50 percent reduction from the 2025 model year standards. For medium-duty vehicles, the nonmethane organic gases plus NO_x will have a fleet average of 75 milligrams per mile, representing a 58 to 70 percent reduction from current standards. For both light-duty vehicles and medium-duty vehicles the PM standard will be 0.5 milligrams per mile, which is projected to reduce tailpipe PM emissions from gasoline vehicles by over 95 percent as well as reducing mobile source air toxics. Current rulemaking is underway to establish standards for medium- and heavy-duty on-highway vehicles and work trucks.

In 2019, the NHTSA and the EPA also issued a regulation revoking California's Clean Air Act (CCAA) waiver, which had allowed the State to set its own emissions standards, asserting that the waiver was preempted by federal law. On December 21, 2021, the NHTSA published its CAFE Preemption Rule, which finalizes its repeal of SAFE Rule Part One. The EPA rescinded SAFE Rule Part One on March 9, 2022, and reinstated California's authority under the CCAA to implement its own GHG emission standards and zero-emission vehicle (ZEV) sales mandate. Notably, California harmonized its vehicle efficiency standards through 2025 with the federal standards through the Advanced Clean Cars Program.

Clean Air Act

Section 608 of the Clean Air Act (CAA) prohibits the knowing release of refrigerant during the maintenance, service, repair, or disposal of air conditioning and refrigeration equipment. The EPA requires proper refrigerant management practices by those who buy or sell refrigerant, technicians, owners and operators of air conditioning and refrigeration systems, and others. These requirements apply to all refrigerants that contain ozone-depleting substances and non-exempt substitute refrigerants.

GHG Emissions Reporting

The EPA has implemented a mandatory GHG emission reporting regulation (40 Code of Federal Regulations (CFR) Part 98), which requires certain industries to report their annual GHG emissions. Facilities with GHG emissions above 25,000 MT carbon dioxide equivalents (CO₂e) per year are required to report emissions associated with their operations.

State

California has been a leader among the states in outlining and aggressively implementing a comprehensive climate change strategy designed to result in a substantial reduction in total statewide GHG emissions. California's climate change strategy is multifaceted and involves several state agencies implementing a variety of state laws and policies. These laws and policies are provided below.

STATE OF CALIFORNIA EXECUTIVE ORDERS

<u>Executive Order S-3-05.</u> In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Schwarzenegger issued Executive Order (EO) S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order S-1-07. EO S-1-07, which was signed by then-Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020 and directs that a Low Carbon Fuel Standard (LCFS) be established for California. California Air Resources Board (CARB) approved the proposed regulation to implement the LCFS in 2009.

Executive Order S-13-08. Then-Governor Schwarzenegger signed EO S-13-08 on November 14, 2008. The order called on state agencies to develop California's first strategy to identify and prepare for expected climate impacts. As a result, the 2009 California Climate Adaptation Strategy (CAS) report was developed to summarize the best-known science on climate change impacts in the state, assess vulnerability, and outline possible solutions that can be implemented in and across state agencies to promote resiliency (CNRA, 2009), and updated in 2014 (CNRA, 2014). The state has also developed an Adaptation Planning Guide (California Emergency Management Agency [CEMA], 2012) to provide a decision-making framework intended for use by local and regional stakeholders to aid in the interpretation of climate science and develop a systematic rationale for reducing risks caused or exacerbated by climate change. The state's third major assessment (CNRA, 2018) on climate change explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to reduce climate-change impacts.

Executive Order B-30-15. Then-Governor Brown signed EO-B-30-15 on April 29, 2015, which directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030;
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 (80 percent below 1990 levels) reduction targets; and
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO₂e.

Executive Order B-55-18. On September 10, 2018, then-Governor Brown signed EO B-55-18, committing California to total, economy-wide carbon neutrality by 2045. EO B-55-18 directs CARB to work with relevant State agencies to develop a framework to implement these goals and an accounting that tracks progress toward this goal.

Executive Order N-79-20. In EO N-79-20, Governor Newsom states that "clean renewable fuels play a role as California transitions to a decarbonized transportation sector." EO N-79-20 directs as follows:

"[T]o support the transition away from fossil fuels consistent with the goals established in this Order and California's goal to achieve carbon neutrality by no later than 2045, the California Environmental Protection Agency (CalEPA) and the California Natural Resources Agency (CNRA), in consultation with other State, local and federal agencies, shall expedite regulatory processes to repurpose and transition upstream and downstream oil production facilities...."

The Governor's Order also directs CARB to "develop and propose strategies to continue the State's current efforts to reduce the carbon intensity of fuels beyond 2030 with consideration of the full life cycle of carbon."

State of California Policy and Legislation

Assembly Bill 32 and Senate Bill 32 – California Global Warming Solutions Act

In September 2006, then-Governor Schwarzenegger signed the California Global Warming Solutions Act (Assembly Bill [AB] 32). AB 32 (California Health and Safety Code, Division 25.5) establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was intended to be accomplished by enforcing a statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

In 2016, Senate Bill (SB) 32 and its companion bill, AB 197, amended California Health and Safety Code, Division 25.5 §38500 et seq., and established a new GHG reduction target of 40 percent below 1990 levels by 2030. The bills also include provisions to ensure the benefits of state climate policies reach disadvantaged communities. In 2022, Assembly Bill 1279 codified the 2045 carbon neutrality goal of EO B-55-18 by declaring that it is the policy of the state to achieve net zero GHG emissions no later than 2045, to achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced to at least 85 percent below 1990 levels.

Scoping Plan

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial Scoping Plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB, 2009).

Most recently, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) in December 2022. The 2022 Scoping Plan outlines the proposed framework of action for achieving the 2045 GHG target of an 85 percent reduction in GHG emissions relative to 1990 levels; the update also adds carbon neutrality as a science-based guide for California's climate work (CARB, 2022). The 2022 Scoping Plan outlines how carbon neutrality can be achieved to reduce GHGs to meet emission targets by reducing anthropogenic emissions and expanding actions to capture and store carbon. New to the 2022 Scoping Plan is a commitment to incorporate and quantify natural and working lands as a key component to GHG reductions and actions around capture and storage of carbon. The 2022 Scoping Plan strategy for meeting the state's 2030 GHG target incorporates the full range of legislative actions and state-developed plans that have relevance to the year 2030. The 2022 Scoping Plan is heading toward the 2045 target of 85 percent below 1990 levels and carbon neutrality, including the following reductions in key sectors:

The transportation sector targets reductions based on the technology of vehicles and associated refueling infrastructure for those vehicles; the fuel used as the energy source to power vehicles and the facilities that produce them; and VMT, which relates to development patterns and available transportation options. The plan has a goal to reduce VMT per capita by 30 percent below 2019 levels by 2045 under its Smart Growth measure.

- The electricity grid sector has a target of 38 MMTCO₂e in 2030 and 30 MMTCO₂e in 2035, which includes a goal of generating 20 gigawatts of offshore wind by 2045 and specifies that the increased demand for electrification occurs without new fossil gas-fired resources.
- The manufacturing and building sector, include increased electrification of energy demand for construction equipment, as well as across many manufacturing sectors and buildings.
- All electrical appliances, including space heating, beginning in new construction by 2026 for residential and 2029 for commercial will be used.
- For existing buildings, 80 percent of appliance sales will be electric by 2030 and 100 percent by 2035.
- CO₂ removal and capture include carbon capture and storage facilities and mechanical systems to remove CO₂ from the ambient air.
- Short-lived climate pollutants, including non-combustion methane emissions, are reduced with various strategies.
- Natural and working lands sectors include targets to conserve natural working lands and coastal waters and to implement actions to accelerate natural removal of carbon and improve resilience to climate change.

In the 2022 Scoping Plan, CARB recommends statewide targets of no more than 226 MMTCO $_2$ e from AB 32 GHG inventory sector emissions and 7 MMTCO $_2$ e from natural and working lands, a reduction from carbon capture and sequestration due to avoided GHG emissions from industry and electric sectors of 13 MMTCO $_2$ e, and a reduction of 7 MMTCO $_2$ e from CO $_2$ removal, including carbon sequestration on natural and working lands, as well as direct air capture and bio-energy with carbon capture and sequestration. The net 2030 GHG emissions, accounting for emissions and removal or sequestration, are 226 MMTCO $_2$ e. For the 2045 scenario in the 2022 Scoping Plan, maximum GHG emissions from AB 32 inventory sector emissions are 65 MMTCO $_2$ e, emissions from working lands are 7 MMTCO $_2$ e, and reductions from carbon capture and sequestration and CO $_2$ removal are 100 MMTCO $_2$ e. This is a net reduction of 3 MMTCO $_2$ e by 2045.

Tractor-Trailer Greenhouse Gas Regulation

CARB's Tractor-Trailer Greenhouse Gas regulation reduces the energy consumption of large trucks. CARB developed this regulation to make heavy-duty tractors more fuel efficient. Fuel efficiency is improved by requiring the use of aerodynamic tractors and trailers that are also equipped with tires that have low rolling resistance. The tractors and trailers subject to this regulation must either use EPA SmartWay (SmartWay)-certified tractors and trailers or retrofit their existing fleet with SmartWay-verified technologies. The SmartWay certification process is part of a broader voluntary program called the SmartWay Transport Partnership Program. The regulation applies primarily to owners of 53-foot or longer box-type trailers and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low-rolling-resistance tires. All owners, regardless of where their vehicle is registered, must comply with the regulation when they operate their affected vehicles on California highways. Besides the owners of these vehicles, drivers, motor carriers, California-based brokers, and California-based shippers that operate or use them also share in the responsibility for compliance with the regulation.

Low-Carbon Fuel Standard

The Low-Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products. It started with a 0.25 percent reduction in 2011 and culminated in a 10 percent total reduction in 2020. In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Zero-Emission Vehicles

In March 2012, then-Governor Brown issued Executive Order B-16-12, establishing a goal of 1.5 million ZEVs on California roads by 2025. In addition to the ZEV goal, Executive Order B-16-12 stipulated that by 2015, all major cities in California must have adequate infrastructure and be "zero-emission vehicle ready;" by 2020, the State must establish adequate infrastructure to support 1 million ZEVs; and by 2050, virtually all personal transportation in the state will be based on ZEVs; and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels in 2050.

On January 26, 2018, then-Governor Brown issued Executive Order B-48-18, establishing a goal of 5 million ZEVs on California roads by 2030 and spurring the installation and construction of 250,000 plugin electric vehicle chargers, including 10,000 direct-current fast chargers, and 200 hydrogen refueling stations by 2025.

In September 2020, Governor Newsom signed Executive Order N-79-20, which sets a new state goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035; that 100 percent of medium- and heavy-duty vehicles in the state will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks; and that 100 percent of off-road vehicles and equipment will be zero emission by 2035 where feasible. This order calls on state agencies, including CARB, the CEC, the CPUC, the Department of Finance, and others, to develop and propose regulations and strategies to achieve these goals.

Advanced Clean Cars Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the first set of regulations that addressed GHG emissions (CARB, 2017a). The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emission Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, as well as the Zero Emission Vehicle (ZEV) regulations requiring manufacturers to produce more ZEVs (i.e., battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. Due to federal adoption of the Final SAFE Rule, new cars of model years 2021 through 2026 are not currently required to achieve the fuel economy targets set by the Advanced Clean Cars program. The rule was judicially challenged, but the litigation has been placed in abeyance while undergoing review by the Biden administration.

Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Trucks Regulation, which requires that truck manufacturers in California sell a percentage of zero-emission trucks beginning in 2024, with an increased percentage over time. Under this rule, every new truck sold in California must be zero emissions by 2045.

Advanced Clean Fleets

The Advanced Clean Fleets (ACF) regulation is CARB's approach to accelerating a transition to zero-emission medium- and heavy-duty vehicles. The ACF regulation applies to fleets performing drayage operations, those owned by state, local, and federal government agencies, and high-priority fleets. High priority fleets are entities that own, operate, or direct at least one vehicle in California and that have either \$50 million or more in gross annual revenues or that own, operate, or have common ownership or control of 50 or more vehicles (excluding light-duty package delivery vehicles). The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. Manufacturers may sell only zero-emission medium- and heavy-duty vehicles starting in 2036. High priority and federal fleets must comply with the Model Year Schedule or the optional ZEV milestones to phase in ZEV. State and local government fleets are required to ensure that 50 percent of vehicle purchases are zero-emission beginning in 2024 and 100 percent of vehicle purchases are zero-emission by 2027. Small government fleets with 10 or fewer vehicles, or low-population counties such as Amador County, can delay the start of the ZEV purchases until 2027. At which point, 100 percent of vehicle purchases must be ZEVs, but must still meet other regulatory requirements, including reporting, starting in 2024.

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375)

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, Senate Bill (SB) 375, Chapter 728, Statutes of 2008) encourages housing and transportation planning on a regional scale, in a manner designed to reduce vehicle use and associated GHG emissions. As required under this law, CARB has assigned regional GHG reduction targets for the automobile and light-truck sectors for 2020 and 2035. The targets apply to regions in the State covered by the 18 Metropolitan Planning Organizations (MPOs). If MPOs do not meet GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012. CARB adopted regional reduction targets in 2010. Amador County is not part of an MPO; however, the County participates in regional planning efforts related to transportation, air and water quality, GHG, and other shared conditions.

SB 375 also requires each MPO to include a Sustainable Communities Strategy (SCS) in its Regional Transportation Plan (or an Alternative Planning Strategy if it is not feasible to adopt an SCS that meets regional GHG reduction targets). The SCS must set forth a vision for growth for the region while considering transportation, housing, environmental, and economic needs. The SCS will be the blueprint by which the region will meet its GHG emissions reduction target if there is a feasible way to do so. A discussion of the recently adopted SACOG SCS is provided below in the Local Regulations section.

Renewables Portfolio Standard

California adopted standards to increase the percentage of energy from renewable resources that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide in their portfolio. The Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill

(SB) 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2. Recently, SB 350, SB 100, and SB 1020 were added to the renewables requirements, as discussed below. The standards are referred to as the RPS. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 megawatts [MW] or less), wind, solar, and geothermal energy. The CPUC and the CEC jointly implement the RPS program.

In November 2008, then-Governor Schwarzenegger signed Executive Order S 14 08, which expanded the State's RPS to 33 percent renewable power by 2020. In September 2009, then Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S 21 09, which directed CARB to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

SB 350, also known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015, and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- 1. To increase from 33 to 50 percent by December 31, 2030, the procurement of California's electricity from renewable sources.
- 2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

On September 10, 2018, then-Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, SB 100 increases required energy from renewable sources for both Investor-Owned Utilities and Publicly Owned Utilities from 50 to 60 percent by 2030. Incrementally, these energy providers are also required to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

Senate Bill 1020 of 2022 (SB 1020) revises state policy requiring eligible renewable resources and zero-carbon resources to supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040; 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045; and 100 percent of electricity procured to serve all state agencies by December 31, 2035, as specified. It also contains provisions for cooperation between CPUC and Independent System Operators (ISOs) providing electricity for the purpose of transmission planning by allowing the exchange of confidential business information without risk of public disclosure requirements.

California Title 24 Part 6 Building Energy Efficiency Standards and Title 24 Part 11 Green Building Standards Code

The California Title 24 Building Energy Efficiency Standards are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is responsible for adopting, implementing, and updating building energy efficiency. The standards are updated every 3 years by the CEC. Title 24 Part 6 covers the

building envelope, space-conditioning systems, water-heating systems, pools and spas, solar-ready buildings, indoor, outdoor, and sign lighting, and electrical power distribution systems. The energy code provides either a prescriptive or performance approach for compliance. Some mandatory measures must be met regardless of which compliance approach is used.

California's Green Building Standards (CALGreen) Code, Title 24 Part 11, is focused on improving public health, reducing environmental impacts, and encouraging sustainable construction in residential and nonresidential buildings by enhancing the design and construction of buildings. Multiple agencies have authority to propose building standards for CALGreen. The CALGreen Code includes mandatory measures to support the goals of the State's GHG reduction program as well as promote healthy indoor and outdoor air quality. It is updated triennially. In addition to mandatory building standards, the CALGreen Code includes voluntary "reach" standards known as the Tiers, which offer model building code language for local governments that wish to go beyond the minimum statewide requirements. CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction.

Mandatory GHG Reporting Regulation and California Cap-and-Trade Program

The Mandatory Reporting Regulation requires reporting of GHG emissions by major sources, including electricity generators, industrial facilities, fuel suppliers, and electricity importers. Facilities are required to report if they are in a required industry or have more than 10,000 MT of CO_2e in a year. Reported GHG emissions must be verified by a third party if greater than 25,000 MT CO_2e per year. GHG emissions and other key product data required to be reported under this regulation are used to determine of emissions and allowances used in the Cap-and-Trade Program.

The Cap-and-Trade Program is implemented by CARB and is a key element of California's strategy to reduce GHG emissions. The Cap-and-Trade Program requires certain industries, including electrical utilities, to provide emission allowances for their annual GHG emissions (one allowance equals one metric ton of carbon dioxide equivalent [CO₂e] emissions) (CARB, 2020b). CARB gives a certain number of free allowances to industries based on their efficiency of operation, which decreases over time. Companies participate in allowance auctions to secure any additional GHG allowances that they require to cover their emissions. The price of GHG allowances is set at a minimum and increases over time.

Gas Insulated Switches Regulation

CARB implemented the gas-insulated switches (GIS) regulation to control emissions of sulfur hexafluoride (SF₆). This requires facilities to track the number and type of GIS as well as report any changes in SF₆ levels. There is a maximum allowed threshold for SF₆ emissions from GIS. Changes to the GIS regulation are being considered, including a future prohibition on SF₆ containing switches, but these have not been finalized at this time. This may be applicable if GIS is installed in any of the public/quasi-public land uses.

Refrigerant Management Program

As part of the California Global Warming Solutions Act of 2006 (AB 32), the CARB adopted a regulation in 2009 creating the Refrigerant Management Program (RMP) to reduce GHG emissions from stationary

sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal.

The RMP is designed to:

- Reduce emissions of high-global warming potential (high-GWP) refrigerants from leaky stationary, non-residential refrigeration equipment;
- Reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and
- Verify GHG emission reductions.
- The strategy of the regulation includes:
- Registration;
- Refrigerant leak detection and monitoring;
- Leak repair;
- Reporting and recordkeeping;
- System retrofit or retirement planning;
- Required service practices;
- Refrigerant distributor, wholesaler, and reclaimer prohibitions, recordkeeping, and reporting.

High-GWP refrigerants such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) are used in a large variety of refrigeration and air-conditioning systems.

In California, a more rapid reduction in HFC use is required than specified in the Kigali Amendment (International amendment to the Montréal Protocol for reducing Ozone Depleting Substances) to meet official state targets for GHG reduction, as determined by an analysis conducted by Research Division staff at CARB. SB 1383 specifies a target of 40 percent reduction in statewide HFC emissions below 2013 levels by 2030. The measures needed to meet this target were developed first in the Short-Lived Climate Pollutant Strategy (SLCP Strategy), adopted by CARB's Board in March 2017. CARB is working on additional rulemaking related to refrigerants and may be applicable in the future.

Local

Amador County General Plan

The County's General Plan contains goals and policies for greenhouse gas emissions. The following policies are directly applicable to the proposed Project (Amador County, 2016a).

<u>Greenhouse Gas Emissions – Goals and Policies</u>

Goal C-10: Reduce GHG emissions associated with automobile travel, electrical power generation and energy use.

Policy C-10.1: Evaluate potential effects of climate change on the County's human and natural ecosystems and prepare strategies that allow the County to appropriately respond and adapt.

- **Policy C-10.2**: Develop and adopt a comprehensive strategy to reduce GHGs by at least 15 percent from current levels by 2020.
- **Policy C-10.3**: Guide new development to areas where pedestrian and bicycle access to existing activity centers is possible, in order to reduce the need for automobile travel and VMT.
- **Policy C-10.4**: Work with service providers to ensure that transit offerings in the county are stable or expanding, and that transit is tailored to meet residents' needs.
- **Policy C-10.5**: Require new development projects to incorporate building placement and design features to increase energy efficiency in new structures.
- Policy C-10.6: Support green building through incentives for Leadership in Energy and Environmental Design (LEED) certification of new commercial, industrial, public, and multi-family residential buildings. Promote incentives for compliance with this standard as a way to increase the energy efficiency of new structures. Promote increased energy efficiency and green building practices through the County's use of these practices.
- **Policy C-10.7**: Support parcel-scale energy generation, including addition of solar panels for residential structures and cogeneration for larger commercial or industrial uses.
- **Policy C-10.8**: Expand recycling and waste minimization efforts, including recycling of construction and demolition materials.

Amador County Energy Action Plan

The County's Energy Action Plan contains goals and policies for energy reduction which will indirectly result in GHG emission reductions, including:

GOAL 1: INCREASE ENERGY EFFICIENCY IN EXISTING STRUCTURES

- Strategy 1.1: Expand outreach and education to increase participation in voluntary home energy efficiency programs.
- Strategy 1.2: Expand outreach and education to increase participation in voluntary nonresidential energy-efficiency programs.

Strategy 1.3: Identify and promote programs that help finance energy-efficiency and renewable energy projects.

GOAL 2: INCREASE THE ENERGY PERFORMANCE OF NEW CONSTRUCTION

- Strategy 2.1: Improve compliance with Title 24 Green Building and Energy Efficiency Standards.
- Strategy 2.2: Provide incentives for buildings to exceed the current Title-24 Energy Efficiency Standards.
- Strategy 2.3: Reduce the heat island effect and related summer heat gain in residential and nonresidential projects.

GOAL 3: INCREASE RENEWABLE ENERGY USE

• **Strategy 3.1:** Evaluate the County's residential, non-residential, and municipal solar potential and assess barriers to increased solar energy use.

- **Strategy 3.2:** Develop a comprehensive renewable energy program that provides outreach, financing, and technical assistance.
- Strategy 3.3: Encourage new development projects to meet 70 percent of their energy needs from renewable resources.

GOAL 4: INCREASE ENERGY EFFICIENCY IN MUNICIPAL STRUCTURES AND OPERATIONS

Strategy 4.1: Improve the energy efficiency of existing municipal structures.

GOAL 5: INCREASE COMMUNITY WATER CONSERVATION AND EFFICIENCY TO REDUCE ASSOCIATED ENERGY USE

- Strategy 5.1: Encourage residents and businesses to conserve water used indoors.
- Strategy 5.2: Encourage residents and businesses to conserve water used outdoors.

Wicklow Way Specific Plan

The proposed Project incorporates guidelines, strategies, and project design features that reduce the human environmental footprint with respect to transportation fuels consumption and electricity production. Implementation of these strategies and measures would help reduce potential GHG emissions resulting from the development of the WWSP as compared to what otherwise may occur. The transportation sector is the largest component of fossil energy consumption, and therefore the sector responsible for the largest share of GHG emissions statewide. To address transportation emissions, the proposed WWSP land use plan and Design Guidelines include policies and implementation measures with the following elements that would reduce project-related vehicles miles traveled, thereby reducing transportation GHG emissions:

- **Policy 4.1:** Create pedestrian-oriented neighborhoods using a grid system of streets, where feasible; sidewalks, bike paths, pedestrian pathways, and trails.
- **Policy 4.2:** Link residential neighborhoods, where appropriate, to encourage pedestrian and bicycle travel.
- **Policy 4.10:** Make commercial and office areas accessible via public transit routes, where feasible.
- **Policy 5.2:** The County shall endeavor to designate future sites for higher density housing near transit stops, commercial services, and schools where appropriate and feasible.
- **Policy 5.5:** Make density bonuses available to affordable and senior housing projects, consistent with State law.
- Policy 6.1: Create a safe and efficient circulation system for all modes of travel consistent with the California Completed Streets Act of 2008 and the Sustainable Communities and Climate Protection Act (SB 375).
- **Policy 6.2**: Encourage non-vehicular travel options by providing sidewalks, trails and bikeway connectivity between neighborhoods and destination points.
- Policy 6.3: Create a roadway network in the WWSP that is organized in a grid-like pattern of streets and blocks, except where topography and natural features make it infeasible, to create neighborhoods that encourage walking, biking, public transit, and other alternative modes of transportation.

- Policy 6.4: Require that circulation within the WWSP shall be ADA (Americans with Disabilities Act) accessible and minimize barriers to access by pedestrians, the disabled, seniors and bicyclists. Minimize physical barriers such as walls, berms, and landscaping that separate residential and nonresidential uses and impede bicycle or pedestrian access or circulation.
- Policy 6.5: Use traffic calming measures, where appropriate, to minimize neighborhood cut-through traffic and excessive speeds in residential neighborhoods. Roundabouts and traffic circles shall be considered on low volume neighborhood streets as an alternative to four-way stops or where traffic signals will be required at project build-out.
- **Policy 6.6:** Provide public accessibility to open space and scenic areas within the WWSP via roadway, sidewalks, trail, and bikeway connections, where appropriate.
- **Policy 6.7:** Use traffic calming measures and signage to enhance safety of sidewalk, trail and bikeway crossings of major roadways and streets.
- **Policy 7.5**: Promote walking and cycling so that community and neighborhood parks are connected to the pedestrian and bicycle network.
- **Policy 7.7:** Require that all park plans include a lighting plan and all park lighting fixtures that are shielded and energy efficient.
- **Policy 7.8**: Design parks and landscaping to provide shade, easy maintenance, water efficiency and to accommodate a variety of recreational uses.
- **Policy 9.5:** Locate Class I bicycle paths and paved and unpaved trails throughout the open space.
- Policy 9.19: Require water efficient irrigation systems, consistent with the latest edition of the California Model Water Efficient Landscape Ordinance (WELO), or similar ordinance, for all public and private development projects with a landscape area equal to or greater than 2,500-square feet requiring a building or landscape permit, plan check or design review.
- **Policy 9.20:** Incorporate alternative energy technologies into building design, whenever feasible, to include wind, solar, geothermal, or appropriate emerging technologies available at the time of construction.
- Policy 9.21: Install automatic lighting and thermostat features in Commercial, Civic and Office Park uses.
- **Policy 9.22:** Provide electrical outlets along the front and rear exterior walls of all single-family homes to allow for the use of electric landscape maintenance tools.

4.8.3 Environmental Setting

"Global warming" and "climate change" are common terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century. Natural processes and human actions have been identified as impacting climate. The Intergovernmental Panel on Climate Change (IPCC) has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. Since the 19th century however, increasing GHG concentrations resulting from human activity such as fossil fuel combustion, deforestation, and other activities are believed to be a major

factor in climate change. GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space—a phenomenon sometimes referred to as the "greenhouse effect." Some GHGs occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount reflected into space, intensifying the natural greenhouse effect, and resulting in an increase in the global average temperature.

Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6) are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect intensifies. CO_2 , CH_4 , and N_2O occur naturally and are also generated through human activity. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing, natural gas leaks from pipelines, industrial processes, and incomplete combustion associated with agricultural practices, landfills, energy providers, and other industrial facilities. Other human-generated GHGs include fluorinated gases such as HFCs, PFCs, and SF_6 , which have much higher heat-absorption potential than CO_2 and are byproducts of certain industrial processes.

 CO_2 is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs has on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2 . For example, CH_4 and N_2O are substantially more potent GHGs than CO_2 , with GWPs of approximately 25 and approximately 298 times, respectively, that of CO_2 , which has a GWP of 1.

In emissions inventories, GHG emissions are typically reported as metric tons of carbon dioxide equivalent (CO_2e). CO_2e is calculated as the product of the mass emitted by a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWPs than CO_2 , CO_2 is emitted in higher quantities and accounts for the majority of GHG emissions in CO_2e , both from commercial developments and human activity in general. Compounds regulated as GHGs are discussed in more detail below.

Carbon Dioxide. In the atmosphere, carbon generally exists in its oxidized form as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; decomposition of organic matter²; and evaporation from the oceans. Human-caused sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural CO₂ removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO₂; consequently, the gas is building up in the atmosphere. CO₂ accounted for approximately 80 percent of anthropogenic GHG emissions in California in 2019 (CARB, 2022).

Methane. CH_4 is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human generated CH_4 emissions in California and in the United States as a whole.

² Organic matter is composed of organic compounds that come from the remains of organisms such as plants and animals.

Agricultural processes such as intestinal fermentation in animals, manure management, and rice cultivation are also large sources of CH_4 in California. Methane is also released at points of natural gas extraction and in leakages throughout the gas pipeline system.

CARB considers the GWP of CH_4 to be approximately 25 times that of CO_2 as averaged over a 100-year timescale. On this timescale, CH_4 accounted for approximately 9 percent of anthropogenic GHG emissions in California in 2019 (CARB, 2022). However, because CH_4 breaks down rapidly into CO_2 and water once in the atmosphere, there is growing recognition among climate scientists that a 20-year time horizon is more relevant. The 20-year GWP of CH_4 is between 84 and 87 times greater than that of CO_2 . That means methane is a much larger contributor to California's anthropogenic GHG emissions over a shorter time frame of 20 years than originally calculated over 100 years.

Nitrous Oxide. N_2O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. N_2O is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O , and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human generated N_2O emissions in California. N_2O has a GWP of approximately 298 times that of CO_2 , and its emissions accounted for approximately 3 percent of anthropogenic GHG emissions in California in 2019 (CARB, 2022).

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. HFCs are primarily used as substitutes for ozone-depleting substances and have global warming potentials that range from hundreds to thousands of times that of CO₂. PFCs and SF₆ are emitted from various industrial processes, including semiconductor manufacturing and electric power transmission and distribution. These accounted for approximately 6 percent of anthropogenic GHG emissions in California in 2019 (CARB, 2022).

Nitrogen Trifluoride. NF_3 is primarily used in manufacturing semiconductor and liquid crystal display (LCD) panels, certain types of solar panels, and chemical lasers. The ability to measure NF_3 atmospheric concentrations has only recently become possible, and this has revealed much higher concentrations than originally assumed. This is a major cause of concern because NF_3 is an extremely potent GHG and has a GWP of 17,200 times that of CO_2 (WRI and WBCSD, 2013).

Effects of Climate Change

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change; occurrence, frequency, and magnitude of extreme weather events; effects of aerosols; changes in clouds; shifts in the intensity and distribution of precipitation; and changes in oceanic circulation.

For California, projected effects from climate change are described in California's Fourth Climate Change Assessment (California Climate Change Center [CCCC], 2019). Based on projections using climate modeling, temperatures in California are expected to rise between 5.6 F and 8.8°F above year 2000

averages by 2050 (CCCC 2019). The predicted changes in the future climate have been found to affect the natural environment in California in the following ways (CCCC, 2012; CCCC, 2019):

- Increased wildfire risk and wildfire severity;
- Adverse effects on native freshwater fish species;
- Increased ground-level ozone levels and particulate air pollution;
- Earlier snowmelt and runoff;
- Faster-than-historical sea level rise and increased coastal flooding; and
- Impacts on the agricultural industry from population decreases of pollinators and increases of pests and disease.

These changes in California's climate and ecosystems are projected to occur because California's population is expected to increase from 40 million in 2020 to 45 million by 2050 (CDF, 2023a). As the population increases, the demand for transportation, water, and electrical utilities, as well as other commodities, will increase correspondingly, resulting in an increase in the amount of anthropogenic GHG emissions anticipated under a "business as usual" scenario.

Although the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be substantial. These impacts would have either direct or indirect adverse effects for the residents and businesses in and near the proposed Project area.

Existing GHG Emissions

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks (things that absorb more carbon than they release, such as plants, oceans, and soil) of GHGs is a well-recognized and useful tool for addressing human society's contributions to climate change. This section summarizes the latest information on global, United States, California, and local GHG emission inventories.

Global Emissions

Global emissions estimates are based on country inventories developed as part of programs of the United Nations Framework Convention on Climate Change. Worldwide human-made emissions of GHGs in 2010 were approximately 49 billion metric tonnes CO_2e , including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation). Emissions of CO_2 in 2010 from fossil fuel use and industrial processes accounted for 65 percent of the total, while CO_2 emissions from all sources accounted for 76 percent of the total. Methane emissions accounted for 16 percent and N_2O emissions for 6.2 percent. For perspective, worldwide emissions of GHGs in 1970 were 27 billion metric tonnes CO_2e (IPCC, 2015).

U.S. Emissions

In 2021, the United States emitted about 5,586 million metric tonnes CO_2e (MMTCO₂e) after accounting for land sequestration. Of the major sectors nationwide, transportation accounted for the highest amount of GHG emissions (approximately 29 percent), followed by electricity (25 percent), industrial

(24 percent), agriculture (11 percent), commercial (7 percent), and residential (6 percent). Between 1990 and 2021, total net GHG emissions decreased by 2 percent. Since peaking in 2005, total net emissions have decreased by about 17 percent (EPA, 2023).

State of California Emissions

CARB compiles GHG inventories for the State of California. Based on CARB's 2020 GHG inventory data, California emitted 369.2 MMTCO₂e, including emissions resulting from imported electrical power (CARB, 2023). Between 1990 and 2022, the population of California grew by approximately 9.7 million (from 29.8 to 39.1 million) (California Department of Finance 2023a), representing an increase of approximately 31 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$3.60 trillion in 2022, representing an increase of approximately 365 percent (over four times the 1990 gross state product) (California Department of Finance 2023b). Despite this population and economic growth, CARB's 2020 statewide inventory indicates that California's net GHG emissions in 2020 were below 1990 levels of 431 MMTCO₂e, which was the 2020 GHG reduction target codified in California Health and Safety Code (HSC), Division 25.5, also known as the Global Warming Solutions Act of 2006 (AB 32). Although 2020 data may be slightly irregular due to the COVID 19 pandemic, previous years were already below the 1990 levels.

Existing Site Emissions

The WWSP site is currently used for cattle grazing. It contains grasslands and oak woodlands. GHG emissions at the WWSP site currently involve sequestration of carbon in the grassland and oak woodland. Cattle are known to emit enteric emissions of GHGs. The quantity of enteric GHG emissions is unknown since the number of cattle grazing on the site and duration of grazing is unknown. Development of the proposed Project would result in a one-time change in carbon sequestration. It is unknown if there will be any changes globally in cattle enteric emissions as the cattle may be relocated to other grazing sites.

4.8.4 Impacts

Method of Analysis

The discussion below presents the methodologies used to conduct the greenhouse gas analysis and assess the significance of the Project's impacts on the environment.

Construction

Short-term construction activities would result in the generation of GHGs from fossil fueled construction equipment and vehicles. The California Emissions Estimator Model, Version 2022.1.1.22 (CalEEMod) is an air quality model that estimates construction emissions of GHGs from land uses by utilizing the most relevant EPA, CARB, and/or district-specific emission factors. CalEEMod was used to estimate emissions from construction-related sources of the proposed Project. The model calculates construction emissions for land use development projects based on building size, land use and type, and disturbed acreage, and allows for input of project-specific information. Project-generated criteria pollutants were modeled based on information provided in Section 2.0 Project Description and default CalEEMod settings and parameters attributable to the construction period and project location. Since a detailed construction schedule and equipment list is not available at this time, the construction emissions are the current best estimate based on the land uses currently proposed. Details are not readily available regarding the size

and construction scope for the proposed WWSP WWTP, and these emissions are addressed qualitatively. A detailed list of the assumptions used to estimate construction emissions is included in **Appendix C**. Estimated construction emissions results from CalEEMod are presented below, and CalEEMod output files are included within **Appendix C**.

Operation

The proposed Project would generate operational emissions of GHGs. CalEEMod was used to estimate area, energy, and mobile emissions associated with operation of the proposed Project. Input values for the model included CalEEMod defaults and site-specific data if available. At this time, details are not available regarding the size and scope for the proposed WWSP WWTP and these emissions are addressed qualitatively. A detailed list of the assumptions used to estimate operational emissions is included in **Appendix C**. The operational effects to GHGs were analyzed for 2045 to be consistent with the traffic analysis even though the proposed Project would be built out in phases between the years 2025 and 2045. Area, energy, and mobile emissions were modeled based on proposed land use types and sizes as described in **Section 2.0**, Project Description, and the trip generation data described in **Section 4.14 Transportation**. Trip generation data includes internal trips and VMT. Operational emissions results from CalEEMod are presented below, and CalEEMod output files are included within **Appendix C**.

At this time, it is unknown if any SF_6 GIS will be installed as part of the proposed Project. Installation of GIS would be required to follow state guidelines which are aimed at reducing the impacts of SF_6 emissions. Thus, these emissions are not analyzed as it would be speculative to know at this time if any GIS will be installed.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on GHG is significant if implementation of the proposed Project would do any of the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG gases.

Amador Air District (AAD) does not have CEQA thresholds for GHGs. In the absence of AAD thresholds, it is recommended that construction and operation related GHG emissions are quantified, disclosed, and implement measures to minimize GHG emissions. Thus, the impact analysis evaluates whether implementation of the proposed Project would result in significant impacts related to GHG levels based on the anticipated construction, operation, and maintenance activities. For purposes of significance determination, the GHG emissions are tied back to the goals set forth in SB 32 and applicable strategies outlined in the latest Scoping Plan.

Impact Analysis

Impact 4.8-1

WOULD THE PROJECT GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant	MM GHG-1; MM GHG-2	Significant and Unavoidable	

The proposed Project's construction activities would generate GHG emissions. As described above, the GHG emissions from construction were estimated for off-road equipment and on-road vehicles. **Table 4.8-1, Proposed Project Construction GHG Emissions** shows the GHG emissions in terms of CO_2e for each construction year. The total GHG emission from the proposed Project is 14,680 metric tonnes CO_2e .

TABLE 4.8-1 PROPOSED PROJECT CONSTRUCTION GHG EMISSIONS

CONSTRUCTION YEAR	METRIC TONNES CO₂E
2025	475
2026	770
2027	1,024
2028	1,170
2029	1,150
2030	1,131
2031	1,112
2032	1,097
2033	1,075
2034	1,056
2035	1,039
2036	1,025
2037	1,006
2038	993
2039	436
2040	118
Total Construction GHG Emissions	14,680

Notes: Based on information provided in Appendix C; CO₂e = carbon dioxide equivalent

Operation of the proposed Project would result in emissions from vehicles, natural gas, and electricity used in buildings for space heating, cooling, water heating, and powering equipment and lights. The GHGs from natural gas and other fossil fuel combustion are classified as direct emissions and occurs at the location of use. Indirect GHG emissions are a consequence of the use or activities of a source that result in GHG emissions but may be at another location removed from the place of consumption.

Electricity, water, wastewater, and solid waste all have indirect GHG emissions. As described above, both direct and indirect GHG emissions from vehicles, natural gas consumption, area sources including fireplaces, electricity use, water use, wastewater generation, solid waste, and refrigeration were quantified. **Table 4.8-2** shows the GHG emissions from operational activities of the proposed Project by source category. The total GHG emissions from operation are anticipated to be 19,251 metric tonnes CO_2e per year. This is an underestimate since details of the WWSP WWTP and other public and quasipublic land uses is not known in sufficient detail to estimate the emissions. When amortizing construction emissions over the 30-year project life, the amortized construction emissions are 489 MT CO_2e per year. The total operational emissions combined with the amortized construction GHG emissions is 19,740 MT CO_2e per year. The GHG emissions per capita is 12.06 MT CO_2e per year per person. If the population is combined with employees to develop a service population, the GHG emissions per service populations is 10.54 MT CO_2e per year per service population. For context the 2050 goal for land use sectors is 0.8 MT CO_2e per year per service population.

TABLE 4.8-2 PROPOSED PROJECT OPERATIONAL GHG EMISSIONS

OPERATIONAL SOURCE CATEGORY	METRIC TONNES CO₂E
Mobile	16,291
Area	1,068
Energy	1,421
Water	89
Wastewater	381
Refrigeration	1
Total Operational GHG Emissions	19,251
Construction Amortized Over 30 years	489
Total Operational with Amortized Construction GHG Emissions	19,740

Notes: Based on information provided in Appendix C; CO₂e = carbon dioxide equivalent

To determine the significance of the GHG emissions for the proposed Project, consideration of consistency with the goals of SB 32 and the 2022 Scoping Plan is required. SB 32 and the Scoping Plan require that GHG emissions be reduced by 85 percent below 1990 levels in 2045 and to achieve net neutrality from anthropogenic sources in 2045. A large amount of this reduction in GHG emissions will be from reduction in the use of fossil fuels in mobile sources, space heating, water heating, and electricity generation. CARB has established aggressive schedules for implementation of electrification of off-road and on road vehicle fleets, and by 2045, the replacement amount of electric equipment and vehicles will be substantial. California also has aggressive plans to decarbonize the electricity supply, which will result in reductions in GHG emissions associated with electricity use. The Scoping Plan smart growth/VMT action requires VMT per capita to be reduced by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. As described in Section 4.14 Transportation, this transition associated with implementation of the WWSP will decrease VMT for residents and employees from current VMT levels by 24 and 36 percent, respectively. This is close to reaching the 2030 goal of 25 percent below 2019 levels; however, it does not achieve the 2045 goal of 30 percent reduction in VMT. The WWSP site is located adjacent to existing suburban residential and commercial uses and

additional development outside of this area may occur during the 20-year build out of this proposed Project that may further reduce VMT as a result of increased diversity of land uses and development density. The 2022 Scoping Plan also has actions to require electric appliances beginning in 2026 for new residential and 2029 for new commercial development. The WWSP does not currently require that buildings have all electric appliances in buildings. The GHG emissions estimated for the proposed Project are above the goals of SB 32 and the 2022 Scoping Plan and inconsistent with the Scoping Plan. As a result, the proposed Project would emit GHG emissions that would have a **significant** impact on the environment.

Mitigation Measures GHG-1 and GHG-2 provide a list of construction and operation mitigation measures for the proposed Project. These include using more efficient equipment and vehicles and, to the extent available and feasible, electric or alternative-fueled equipment. The mitigation measures require that all single-family homes, multi-family dwelling units, and parking lots have electrical vehicle charging infrastructure available. Buildings are required to reduce GHG emissions by 15 percent which can be achieved through a variety of measures. Even with implementation of Mitigation Measures GHG-1 and GHG-2 the proposed Project would still not reduce GHG emissions to meet SB 32 goals and would be inconsistent with the Scoping Plan. Therefore, the GHG emission impacts are significant and unavoidable.

Impact 4.8-2

WOULD THE PROJECT CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES?			
Significance Before Mitigation Measures Significance After Mitigation			
Significant	MM GHG-1; MM GHG-2	Significant and Unavoidable	

The WWSP has several policies that aim to reduce GHG emissions including encouraging walking and bicycling, locating transit stops in the community using efficient landscaping, and water use conservation. The proposed Project is located at the edge of a suburban growth area in an otherwise rural county. It is projected that with the proposed Project, average VMT per person and per employee will decrease below County averages. The proposed Project has a variety of housing densities proposed and encourages affordable housing development. The WWSP is consistent with Amador County General Plan policies and goals with respect to GHG emissions.

SB 32 and the Scoping Plan require that GHG emissions, be reduced by 85 percent below 1990 levels in 2045 and to achieve net neutrality from anthropogenic sources in 2045. A large amount of this reduction in GHG emissions will be due to a reduction in the use of fossil fuels in mobile sources, space heating, water heating, and electricity generation. CARB has established aggressive schedules for implementation of electrification of off-road and on-road vehicle fleets, and by 2045, the amount of electric equipment and vehicles will be substantial. California also has aggressive plans to decarbonize the electricity supply, which will result in reductions in GHG emissions associated with electricity use. The Scoping Plan smart growth/VMT action requires VMT per capita to be reduced by 25 percent below 2019 levels by 2030 and by 30 percent below 2019 levels by 2045. As described in Section 4.14 Transportation, the proposed Project will decrease VMT for residents and employees from current VMT levels by 24 and 36 percent respectively. This is close to reaching the 2030 goal of 25 percent below

2019 levels, it does not achieve the 2045 goal of 30 percent reduction in VMT. It should be noted that the proposed Project is located adjacent to existing suburban and commercial uses and additional development outside of the WWSP may occur in the 20-year build out of the proposed Project that may further reduce VMT due to increased diversity of land uses and density. The 2022 Scoping Plan also has actions to install all-electric appliances beginning in 2026 for residential and 2029 for commercial development. The WWSP does not currently require that buildings have all electric appliances. The GHG emissions estimated for the proposed Project are above the goals of SB 32 and the 2022 Scoping Plan and inconsistent with the measures outlined in the Scoping Plan. The proposed Project is consistent with all other applicable state regulations, plans and policies outside of SB 32 and the 2022 Scoping Plan. Thus, the proposed Project would emit GHG emissions that would have a **significant** impact on the environment.

Mitigation Measures GHG-1 and GHG-2 involve a list of construction and operation mitigation measures to minimize potential impacts. This includes using more efficient equipment and vehicles, and to the extent available and feasible, electric, or alternative-fueled equipment. The mitigation measures require all single-family homes, multi-family dwelling units and parking lots to have electrical vehicle charging infrastructure available. Buildings are required to reduce energy use and therefore GHG emissions by 15 percent which can be achieved through a variety of measures. Even with implementation of Mitigation Measures GHG-1 and GHG-2, the proposed Project would still not reduce GHG emissions to meet SB 32 goals and would remain inconsistent with the Scoping Plan. Therefore, the impact of GHG emissions is **significant and unavoidable**.

4.8.5 Cumulative Impacts

Impact 4.8-3

WOULD THE PROJECT RESULT IN IMPACTS TO GREENHOUSE GASES IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM GHG-1; MM GHG-2	Significant and Unavoidable

GHG emissions are, by their nature, cumulative impacts. Consequently, the cumulative analysis is the same as the discussion concerning project-level impacts. The proposed Project's GHG emissions would be significant, but construction emissions would be reduced with implementation of Mitigation Measure GHG 1. Operation emissions would be reduced with implementation of Mitigation Measure GHG-2. Even with implementation of mitigation measures, the amount of GHG emissions is not consistent with the goals and policies of SB 32 and the 2022 Scoping Plan. Therefore, the Project would result in a cumulatively considerable contribution to an existing significant impact. Therefore, the proposed Project's contribution to GHG cumulative emissions impacts would be **significant and unavoidable**.

4.8.6 Mitigation Measures

MM GHG-1 Construction GHG Mitigation

The County and/or the project develop/contractor will ensure the following construction mitigation measures are implemented, or prepare documentation of infeasibility, of any of the measures outlined below. All requirements will be included in applicable bid documents, purchase orders, and constructs,

with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

- 1. Require all diesel-fueled off-road construction equipment used on land to be equipped with EPA Tier 4 final compliant engines or better as a condition of contract unless a unique piece of equipment is not available as a Tier 4 engine.
- Use zero-emission and hybrid-powered equipment, to the greatest extent possible. The
 performance criterion for meeting this standard assumes availability by at least two commercial
 rental facilities in the Mountain County Air Basin, to the greatest extent possible.
- 3. Provide certificates of compliance with applicable CARB equipment and vehicle fleet regulations to the County prior to bringing any equipment onsite.
- 4. Require all on-road heavy-duty trucks to conform to the most stringent emissions standard as a condition of contract. This currently means 2015.
- 5. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes. Provide clear signage that posts this requirement for workers at site entrances. The County will conduct random monthly inspections to confirm compliance.
- 6. Require that all construction equipment is maintained and properly tuned in accordance with manufacturer's specifications. Equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 7. Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- 8. Develop a plan to efficiently use water for adequate dust control.
- 9. Encourage use of local construction contractors.

MM GHG-2 Operation GHG Mitigation

The County and/or the project develop/contractor will ensure the following land use and building operation mitigation measures are implemented to the maximum extent feasible.

- 1. Ensure that all wood burning devices are EPA Phase II certified.
- 2. Ban wood burning fireplaces in new residential units.
- 3. Provide electrical outlets around the exterior of the dwelling units to encourage use of electric landscape maintenance equipment.
- 4. To reduce emissions from traffic, the following measures shall be implemented to the extent feasible:
 - a. Coordinate with local transit operators to extend or expand service to the WWSP area.

- b. Provide transit stops within the WWSP site.
- c. Sidewalks and bikeways should be installed throughout as much of the project as possible and should be connected to any nearby existing and planned open space areas, parks, schools, residential areas, and commercial areas to encourage walking and bicycling.
- d. Ensure that all residential units including multi-family units are wired for installation of electric vehicle charging outlets.
- e. Require that all commercial and government building parking areas contain electrical vehicle charging stations.
- 5. To reduce the GHG emissions associated with buildings, consider a mix of the following options with a goal of reducing estimated GHG emissions from direct and indirect sources by 15 percent:
 - a. Exceed Title 24 Building Envelope Energy Efficiency Standards;
 - b. Establish onsite renewable energy systems such as solar power;
 - c. Install geothermal heat pumps or air heat pumps for space heating and cooling;
 - d. Implement CalGreen Tier 1 or Tier 2 measures from the code in place at the time of actual building construction;
 - e. Install tankless water heaters;
 - f. Install Energy Star-rated appliances;
 - g. Expand urban tree planting;
 - h. Use recycled water for landscaping and require installation of smart water meters;
 - i. Require installation of electric vehicle charging stations in all parking lots; and
 - Require installation of cool roofs and cool wall paints on the exterior of buildings.
- 6. Require installation of electric vehicle charging for all multi-family dwelling units.
 - a. Require installation of electric vehicle charging for all single-family residential units.
 - b. Use LED traffic lights and street lighting.

4.8.7 References

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4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Introduction

This section presents the environmental setting and potential impacts related to hazards and hazardous materials that may occur from the development of the Wicklow Way Specific Plan (WWSP or proposed Project), and reasonably foreseeable projects. Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released.

Materials and waste are generally considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode, or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in the State Health and Safety Code (Chapter 6.95, Section 25501[o]) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous waste is defined as any hazardous material that is abandoned, discarded, or recycled, as defined in the State Health and Safety Code (Chapter 6.95, Section 25125). The transportation, use, and disposal of hazardous materials, as well as the potential releases of hazardous materials to the environment, are closely regulated through many state and federal laws.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to hazards and hazardous materials include concerns regarding historical mines which contain heavy metal such as arsenic, mercury and lead in addition to concerns about dust, contaminated water, and soil leaching. The NOP and written and verbal comments received are included in **Appendix A**.

4.9.2 Regulatory Setting

Hazardous materials are regulated by numerous agencies whose jurisdictions and responsibilities sometimes overlap. Below is a discussion of the regulations most significant or pertinent to the proposed Project.

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980, and provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to CERCLA are limited to sites on the National Priorities List (NPL) for cleanup activities, with NPL listings based on the USEPA Hazard Ranking System (HRS). The HRS is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of the hazardous material release, and the potential to affect people or environmental resources. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase

of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned.

Resources Conservation and Recovery Act

The federal Resources Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, provides for the management of hazardous wastes from generation to disposal to ensure that it is handled in a manner that protects human health and the environment. Under RCRA, the USEPA has established regulations and procedures for the generation, transportation, storage, and disposal activities of hazardous waste handlers, as well as technical standards for the design and safe operation of treatment, storage, and disposal facilities to minimize the release of hazardous waste into the environment. RCRA's corrective action program is designed to investigate and guide the cleanup of any contaminated air, groundwater, surface water, or soil from hazardous waste management of spills or releases into the environment as a result of the past and present activities at RCRA-regulated facilities.

Hazardous Materials Transportation Act

The U.S. Department of Transportation (DOT), the Federal Highway Administration (FHWA), and the Federal Railroad Administration are the three entities that regulate the transport of hazardous materials at the federal level. The Hazardous Materials Transportation Act (49 CFR 171, Subchapter C) governs the transportation of hazardous materials. These regulations are promulgated by DOT and enforced by USEPA.

Federal Aviation Regulations Part 77

The Federal Aviation Administration (FAA) has primary responsibility for the safety of civil aviation. The FAA's major functions regarding hazards include the following: (1) developing and operating a common system of air traffic control and navigation for both civil and military aircraft; (2) developing and implementing programs to control aircraft noise and other environmental effects of civil aviation; (3) regulating U.S. commercial space transportation; and (4) conducting reviews to determine that the safety of persons and property on the ground are protected. Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions in navigable airspace; sets forth the requirements for notice to the FAA of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace; provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and provides for establishing antenna farm areas. FAA Form 7460-1, Notice of Proposed Construction or Alteration, must be filed with the FAA regional office prior to construction of buildings that are 200 feet or higher above the graded terrain. Minimum FAA safety standards include the marking or lighting of any structures 200 feet in height or greater from the graded terrain.

State

California Code of Regulations

Most state and federal regulations and requirements that apply to generators of hazardous waste are codified in CCR Title 22, Division 4.5. Title 22 contains detailed compliance requirements for hazardous waste generation, transportation, treatment, storage, and disposal facilities. Because California is a fully

authorized state under RCRA, most RCRA regulations are integrated into Title 22. The California EPA/California Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the USEPA through Title 22, which does not include as many exemptions or exclusions as the equivalent federal regulations. Title 22 also regulates a wider range of waste types and waste management activities than RCRA.

The State has compiled a number of additional regulations from various CCR titles related to hazardous materials, wastes, and toxics into CCR Title 26 (Toxics), and provides additional related guidance in Titles 23 (Waters) and 27 (Environmental Protection), although California hazardous waste regulations are still commonly referred to as Title 22. CCR Title 24, Part 9, the California Fire Code (CFC) is based on the International Fire Code, with necessary California amendments. Additionally, CCR Title 8, Division 1, Chapter 4, Subchapter 4 regulates exposure to asbestos (Section 1529) and lead-based paint (Section 1532.1) during construction work. Pertinent sections of the Government Code and Education Code, both part of the CCR is discussed separately below.

California Government Code Section 65962.5

The provisions of California Government Code Section 65962.5 are commonly referred to as the Cortese List, which refers to several government databases, compiled and updated by state regulatory agencies that identify potential hazardous materials sites, including sites that may have been subject to a release of hazardous substances and hazardous waste facilities. A site's presence on this list can affect the local permitting process and compliance with the CEQA. Data resources that provide information regarding the sites and facilities identified as meeting the Government Code Section 65962.5 list requirements include the following (CalEPA, 2024):

- List of Hazardous Waste and Substances Sites from the DTSC EnviroStor database;
- List of Leaking Underground Storage Tank (LUST) Sites from the Water Resources Control Board (SWRCB) GeoTracker database;
- List of Solid Waste Disposal Sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit;
- List of active Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB; and
- List of Hazardous Waste Facilities subject to corrective action pursuant to California Health and Safety Code Section 25187.5, identified by DTSC.

The California Education Code Section 17210

The California Education Code contains the requirements related to siting school facilities near or on suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The Education Code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation must be completed to determine the health and safety risks (if any) associated with a site. The Education Code identifies DTSC's role in assessment, investigation, and cleanup of proposed school sites. All proposed school sites that will receive state funding for acquisition and/or construction must go through a comprehensive investigation and cleanup process under DTSC oversight. DTSC is required to be involved in the environmental review process to ensure that selected properties are free of contamination.

Hazardous Materials Release Response Plans and Inventory Act

The Hazardous Materials Release Response Plans and Inventory Act requires facilities that handle hazardous materials in amounts above threshold quantities to establish and implement hazardous materials business plans. Pursuant to California Health and Safety Code Section 25504, hazardous materials business plans must contain a hazardous materials inventory disclosing the type, quantity, use, location, and health risks of every hazardous substance, chemical product, and waste handled by the facility; emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and provisions for employee training in safety procedures.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including CalEPA, the California Highway Patrol, CDFW, and RWQCB.

Local

Amador County Local Hazard Mitigation Plan

Long-term prevention, mitigation efforts, and risk-based preparedness for specific hazards within Amador County are addressed as a part of the 2020 Amador County Local Hazard Mitigation Plan (LHMP). It is a programmatic document intended to educate the public, help serve as a decision-making tool, supplement local policies regarding disaster planning, and improve coordination. The LHMP documents the hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the County will use to decrease vulnerability and increase resiliency and sustainability in the community. The LHMP was incorporated by reference into the Amador County General Plan with the adoption of the General Plan Update in 2016.

Amador County Hazardous Materials Area Plan

The Amador County Hazardous Materials Area Plan is designed to be used as a resource document in conjunction with the Amador County Emergency Operations Plan (EOP) (see below), and other local and state plans. This plan provides Amador County's pre-incident planning and preparedness for hazardous materials releases; describes roles and responsibilities of federal, state, and local agencies during a hazardous materials incident; and details the County's hazardous materials incident response program, training, communications, and post-incident recovery procedures.

Amador County Emergency Operations Plan

The Amador County EOP is the primary document that discusses how disasters are managed by the County. The EOP is currently under revision. The Amador County Sheriff's Office of Emergency Services (OES) is responsible for preparation of the EOP and is tasked with the administration of the County emergency management program on a day-to-day basis and during disasters. This includes necessary planning, coordination, response support, and communications with all agencies affected by large scale emergencies or disasters. OES works cooperatively with other agencies and districts (e.g., law

enforcement, fire, emergency medical services, state and federal agencies, utilities, private industry, volunteer groups) to provide a coordinated response to disasters.

Airport Land Use Plan for Westover Field, Amador County

The State of California requires the preparation of an Airport Land Use Compatibility Plan (ALUCP) for public-use airports. The ALUCP provides the basis for compatible planning within the vicinity of a public airport. These plans may include land use measures specifying land use, height restrictions, and building standards, which could include but are not limited to soundproofing. The planning boundary of the airport land use compatibility plan is the "airport influence area" or AIA and is established by the Airport Land Use Commission (ALUC). An ALUCP contains policies and criteria that address compatibility between airports and future land uses that surround them by addressing noise, overflight, safety, and airspace protection concerns to minimize the public's exposure to excessive noise and safety hazards within the airport influence area (AIA) for each airport over a 20-year horizon. The Westover Field Airport Land Use Plan (ALUP) provides findings, policies, and implementation mechanisms of policies for the Westover Field Airport.

Amador County Municipal Code, Title 15, Building and Construction

Amador County Municipal Code (ACMC) Chapter 15.30, Fire and Life Safety, adopts the 2022 CFC as the fire code of the County for regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices; and from conditions hazardous to life or property in the occupancy of buildings and premises, erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, equipment use, and maintenance of buildings and structures. Similarly, Chapter 15.04 of the ACMC adopts the California Building Code (CBC), which contains provisions in relation to standards of construction for fire safety ranging from materials and access, water availability and pressure, roadway design (width, turning radii, marking), etc.

Amador County General Plan

The Amador County General Plan contains goals and policies that are related to hazards and hazardous materials. Most of these goals and policies are to be implemented at a programmatic level by the County, such as coordinating with State and federal agencies or encouraging programs to reduce waste. Other goals and policies are industry specific and are not pertinent to the types of land uses proposed in the WWSP. The following Amador County General Plan Land Use Element goal and policy apply to the WWSP:

Goal LU-13: Maintain compatible uses in the vicinity of Westover Field

Policy LU-13-1: Ensure that future development proposals within the Airport Land Use Plan area are consistent with the requirements of the ALUP.

4.9.3 Environmental Setting

Existing Uses

Physically, the proposed Project site contains grassland, oak woodland, and drainage areas. The site is relatively flat with gently rolling hills, gradually sloping downward from east to west and ranging in

elevation from approximately 1,400 to 1,500 feet above mean sea level. With the exception of unimproved roadways and fencing used in support of livestock and property management there is no other development on site, including any underground utility extensions.

The Project site is outside of any mapped groundwater basins, with the nearest such basin being the San Joaquin Valley – Cosumnes (5-022.16) groundwater basin (DWR, 2024), beginning approximately 5.7 miles west of the site. Thus, the underlying soils/geology of the WWSP site would not be expected to support substantial groundwater storage.

Past Uses

The proposed Project site has been used for cattle grazing since 1929 and has historically been associated with ranching and a variety of agricultural pursuits. While mining was prevalent in areas surrounding the proposed Project site, no mining occurred onsite.

Hazardous Materials Sites

Government Code 65962.5 requires that the DTSC, the Department of Health Services (DHS), the SWRCB, and any local enforcement agency, as designated by Section 18051, Title 14 of the CCR, identify and update annually a list of sites that have been reported to have certain types of contamination. The DTSC EnviroStor database and the SWRCB GeoTracker databases were consulted to identify if the Project site or surrounding nearby properties are on a list compiled pursuant to Government Code 65962.5 (DTSC 2024; SWRCB 2024). The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and there are no sites within 1,000 feet of the proposed Project site boundaries.

Aircraft Hazards

The closest airport is Westover Field, approximately one mile northeast of the proposed Project site. The northeastern portion of the proposed Project site is located in Safety Zone 6 (Amador County 2016). Safety Zone 6 comprises the traffic pattern zone and covers regular traffic patterns and pattern entry routes both into and out of the airport. This zone also contains the 55 dB CNEL contour. While residential uses in this zone are restricted in relation to noise and overflight impacts, no other prohibitions exist within this zone. However, outdoor stadiums and similar uses that would result in very high intensities are advised to be avoided.

Wildfire Hazards

PRC 4201-4204 directs the California Department of Forestry and Fire Protection (CALFIRE) to map fire hazard within SRAs based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the CAL FIRE as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones (FHSZ), classify a wildland zone as moderate, high, or very high fire hazard based on the average hazard across the area included in the zone. CAL FIRE last updated the maps for Amador County in November 2022. A review of the CAL FIRE maps indicates the Project site lies within a State Responsibility Area (SRA) in the high fire hazard severity zone (HFHSZ) (CAL FIRE, 2022).

Surrounding lands are either in the Local Responsibility Area (within the City of Jackson jurisdiction) or within the SRA. The lands within the SRA are primarily within the high FHSZ, although some of the property to the south of the Project site is within the very high FHSZ (VHFHSZ).

4.9.4 Impacts

Method of Analysis

Potential impacts related to hazards and hazardous materials from the proposed Project, reasonably foreseeable projects were evaluated with respect to the applicable CEQA Guidelines Appendix G significance criteria, described below. Potential impacts also were considered in light of existing federal, state, and local laws and regulations related to hazards and hazardous materials, as well as the existing physical environment in the area of the proposed Project, reasonably foreseeable projects, including proximity to sensitive receptors.

Thresholds of Significance

The following thresholds of significance have been used to determine whether implementing the proposed Project would result in a significant impact. These are based on Appendix G of the State CEQA Guidelines. A significant impact would occur if implementation of the proposed Project would.

- 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 or 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 compile 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 or excessive noise 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 significant risk of loss, injury, or death involving wildfires.

Impacts Analysis

Impact 4.9-1

WOULD THE PROJECT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE OR DISPOSAL OF HAZARDOUS MATERIALS?					
Significance Before Mitigation	Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant			

Construction

Project construction would involve the on-site use and/or storage of hazardous materials/wastes such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. The location of material storage and construction staging areas would be dictated by a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which includes such measures as regular maintenance of construction equipment and storage criteria for oil, gasoline, and other potential contaminants that commonly occur during construction activities (see Section 4.13, Hydrology and Water Quality).

Further, the improper handling or use of hazardous materials or hazardous wastes during construction or operation of the proposed Project, particularly by untrained personnel; transportation accidents; improper disposal methods; or fire, explosion, or other emergencies could occur. However, construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws. Additionally, as individual developments within the WWSP are proposed, they would be required as part of the conditions of approval to prepare a construction management plan. These plans provide the mechanisms of how construction would comply with the various regulations and any special procedures that may be required. The plans also provide the method of verification and responsible agency for monitoring compliance and are reviewed and approved by the responsible oversight agencies prior to the issuance of permits (i.e., grading, building, operating, etc.).

The transport, use, and disposal of hazardous materials are regulated by federal, state, and local agencies and regulations, such as RCRA, DOT's hazardous materials regulations, the Amador County Hazardous Materials Area Plan and LHMP regulations. Adherence to such regulations would result in less than significant construction impacts.

Operation

The proposed Project involves a mixture of land uses, including residential, commercial, business professional, open space, and public/quasi-public land uses. The types of hazardous materials associated with these land uses include cleaning products, paints, solvents, adhesives, other chemical materials used in building maintenance and interior improvements, pesticides and herbicides, automotive lubricants, small combustion engine fuels and lubricants, expired pharmaceuticals, mercury thermometers, sharp or used needles, and electronic wastes. No special permits would be required for limited use or disposal of common agents and products. There would be an increase in hazardous materials disposal. The County and nearby jurisdictions have regular events for the disposal of household hazardous wastes that cannot be discarded in the regular waste pick up. Overall, the minor

level of hazardous materials usage commonly associated with the proposed mix of land uses is considered acceptable and has not been identified as a threat to the environment.

The Project would also include a wastewater treatment plant (WWTP). The WWTP specifications are unknown; however, untreated wastewater is conveyed to the plant and treated with a series of processes and chemicals. CFC Article 80 includes specific requirements for the safe storage and handling of flammable and combustible liquids or hazardous materials, which would be adhered to during operation and maintenance activities. Operation of a WWTP would also require the preparation of a hazardous materials business plan (HMBP), which include a hazardous materials inventory that lists chemicals stored and used as well as detailed plans for their disposal. Operation and maintenance activities associated with the Project would adhere to the required HMBP and comply with applicable state and federal requirements regulating the storage, routine handling, and transport of hazardous materials. Adherence to such regulations would result in less than significant operations impacts.

The impact on hazard to the public or environment is less than significant. No mitigation is required.

Impact 4.9-2

WOULD THE PROJECT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET OR ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS				
MATERIALS INTO THE ENVIRONMENT?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant		

As discussed above in response to item 4.9-1, limited quantities of hazardous materials such as gasoline, diesel, oils, and lubricants may be required to operate the construction equipment. Construction activities would be short-term, and the use of these materials would cease once construction is complete. The hazardous substances used during construction would be required to comply with existing federal, state, and local regulations regarding the use and disposal of these materials. In the event of an accidental release during construction, containment and clean up would be conducted in accordance with existing applicable regulatory requirements. Further, as discussed above under Hazardous Materials Sites, no known hazardous materials sites exist on the Project site, so there is low risk of construction encountering contaminated soil or groundwater and releasing contaminants to the environment.

There is the potential that as the proposed Project is developed that more sensitive land uses such as residential could interface with construction; however, construction management plans would be required as conditions of approval for specific development within the Project area. As discussed above, these plans outline how construction would comply with the required regulations and any special procedures that may be required. The plans also provide the method of verification and responsible agency for monitoring compliance and are reviewed and approved prior to the issuance of permits (i.e., grading, building, operating, etc.).

Once operational, implementation of the proposed Project would not create a land use associated with hazardous material storage or transport that would contribute to the release of hazardous materials. Activities at the Project site would involve the limited use of common, commercially available hazardous

materials for routine maintenance during operation, which would not require special permits for use and disposal as they would not create a significant hazard to the public or the environment. The operation of the WWTP would involve the use of chemicals to treat waste. The operator of the WWTP would be required to comply with all regulations and prepare a HBMP that would outline the practices for adherence to applicable regulations. Further, an HMBP is required to include emergency response plans and procedures to be followed in the event of a reportable release or threatened release of a hazardous material.

Impacts would be less than significant. No mitigation is required.

Impact 4.9-3

WOULD THE PROJECT EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL?				
Significance Before Mitigation	Mitigation Measures Significance After Mitigation			
Less than Significant	None Required Less than Significant			

Argonaut High School and Jackson Junior High School are within one quarter mile of the proposed Project. The Project's use of hazardous materials during construction would be handled in accordance with NPDES SWPPP requirements, as well as compliance with applicable federal, state, and local regulations associated with hazardous materials. Adherence to these applicable regulations would avoid exposure to construction-related and common residential hazardous materials from occurring to nearby schools. Further, as discussed above under Impact 4.9-2, no known hazardous materials sites exist on the Project site, so there is low risk of construction encountering contaminated soil or groundwater and releasing contaminants to the environment.

Once operational, the project would introduce residential, commercial, and business professional uses; parks and open space; and supporting public/quasi-public uses to the Project site. As noted above, the future residential land uses would involve the regular handling of minor quantities of common household chemical agents and related wastes; however, these types of wastes would not represent a hazardous materials or waste impact. Similarly, none of the other proposed land uses would use hazardous materials or dispose of hazardous wastes that require special licenses or permitting.

The proposed Project includes land dedicated to the use as a future elementary school site. As shown in **Figure 2-7**, Proposed Land Use Plan, the school site would be situated in an area surrounded by proposed residential and open space uses and existing school uses (Argonaut High School). A review of government databases maintained pursuant to Government Code 65962.5 did not identify any recognized environmental concerns present at the site (see discussion below). Further, school siting is subject to the provisions of the Education Code, that outline the standards for school site development. A future school would be required to be sited at adequate distance from known hazardous materials sites.

While no specific tenants are known for the future commercial or business professional land uses, these types of land uses do not generate hazardous emissions or involve the handling of acutely hazardous materials, substances, or wastes. Commercial or business professional land uses may involve limited

transport, storage, use, and disposal of small quantities of hazardous materials such as chemical cleaning agents, but not to the extent that would require special permits.

Therefore, development within the project site would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Impacts would be less than significant. No mitigation is required.

Impact 4.9-4

BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILE PURSUANT					
TO GOVERNMENT CODE SECTION 65962.5 AND, AS A RESULT WOULD IT CREATE A SIGNIFICANT HAZARD TO					
THE PUBLIC OR THE ENVIRONMENT					
	ce Before Mitigation Mitigation Measures Significance After Mitigation				
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation			

A search of federal, state, and local environmental regulatory agency databases was conducted to identify listed hazardous materials sites (Envirostor and Geo Tracker). The Project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and there are no known hazardous materials sites within 1,000 feet of the Project site boundaries. For purposes of disclosure, the search radius was extended beyond 1,000 feet to a one-mile radius. There are five listed sites within the one-mile search radius as discussed below.

- Argonaut Mine. Argonaut Lane. Sutter Street, Jackson, CA. The Argonaut Mine was a below ground mine and mill operation, where ore was processed onsite. Mining operations ceased in 1942, although tailings and unprocessed ore have been removed from the mine through the 1990s. In 1990, the RWQCB issued a Cleanup and Abatement Order to clean up impoundments and unprocessed ore which was followed by a series of orders through the early to 2000s and as recently as 2015. Potential contaminants of concern included arsenic, lead, cyanide, and mercury that have potentially affected sediments, soil, and surface water. The site was listed on the NPL due to the instability of an onsite dam; a Remedial Action Plan that included a retrofit was approved and work completed in 2018. Most recently, the USEPA has issued a Non-Time Critical Removal Action for stormwater management and the design of a stormwater drainage system that is slated for installation in early 2024.
- American Forest Products. Junction of Highway 49 and Highway 88. The American Forest Products site has been in operation since the 1940s. The mill was operated as the Ampine manufacturing division of Timber Products Company of Oregon from 2015-2022. The mill was destroyed by fire in July 2022. The property has been cited for PCP and PCB contaminated soil, which has since been removed. A Preliminary Endangerment Assessment (PEA) was conducted on a 70-acre portion of the site in 2000, and DTSC granted No Further Action Status that same year. The 70 acres have since been redeveloped.
- Most recently, the Central RWQCB was overseeing cleanup of groundwater and soil fungicide contamination on the remainder of the property, and the case closed in May 2023. An additional case that was opened 2008 does not specify any contaminants of concern or potentially affected media. The case is in relation to a land disposal site, which includes sites

with solid and/or liquid wastes discharged to land such as landfills, mines, surface impoundments, waste piles, and land treatment facilities. These sites are State regulated, with no violations. This case relates to operational permits and reporting requirements rather than violations.

- Home Depot. 917 North Main Street. This listing is in relation to a voluntary cleanup program. This is a 60-acre site comprised of four contiguous parcels. Currently the site is largely undeveloped with the exception of a residence that is used as a day care facility. The citation relates to a development application that has since been terminated by Home Depot.
- Specifically, tailings and waste from nearby former mining operations were located onsite, and site soils contain arsenic. A PEA was approved by DTSC in 2006 and a Remedial Action Workplan (RAW) was requested to address the contamination. Home Depot withdrew its development application prior to the RAW being approved.
- Pioneer Property. Pioneer Street and Argonaut Lane. As of 2015, the USEPA began remediation activities at this site as part of the Argonaut mine tailings. This included a series of assessments and removal activities. While there is no closure report on the online database, the cleanup status is listed as inactive.
- Sutter Street Extension. Intersection of Sutter Street and Argonaut Drive. This is an active cleanup site. The site is within the voluntary cleanup program in an effort to complete the proposed extension of Sutter Street. A draft RAW has been prepared which includes road construction with site soils including mine waste and tailings. The final RAW is pending funding and environmental review.

The project site is not listed on any databases maintained pursuant to Government Code § 65962.5. A review of sites within one mile identified five sites; these are in various stages of remediation from closed cases to actively implementing cleanup. Further, these known hazardous materials sites are not anticipated to present a threat to the Project site. Contamination was reported to be limited to the sites listed, and there was no indication of groundwater contamination which could have migrated onsite. Since the Project site is not listed on a site that is on a database maintained pursuant to Government Code § 65962.5, there is no impact.

Impact 4.9-5

FOR A PROJECT LOCATED WITHIN AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN				
ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT RESULT				
IN A SAFETY HAZARD OR EXCESSIVE NOISE FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA				
Significance Before Mitigation Measures Significance After Mitigation				

The Westover Field Airport is located approximately one mile from the eastern boarder of the Project Site. The northeast portion of the Project site is located in Safety Zone 6. Zone 6 is on the outer perimeter of the AIA and while there are recommended restrictions, the proposed Project land uses are consistent with the allowable uses in Zone 6. However, land uses may be restricted if aircraft noise would exceed the allowable noise criteria set forth in the ALUCP.

The proposed Project would comply with the Amador County General Plan Land Use Element Policy LU-13-1 that requires that future development proposals within the ALUP area are consistent with the requirements of the ALUP³. Table 3-1, Noise Compatibility Criteria, of the ALUCP establishes the noise compatibility standards for land uses within Zone 6 of the ALUCP. Prior to the approval of any specific development proposal within the Project area, future projects would be required to demonstrate that they are compatible with Table 3-1 of the ALUCP. The impact is less than significant. No mitigation is required.

Impact 4.9-6

IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN				
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation		
Less than Significant	None Required	Less than Significant		

In relation to an adopted emergency response plan, the County's EOP is currently under revision. The EOP provides the framework for coordination for agencies during a disaster. The EOP also works in concert with other County plans, such as the LHMP. These plans are programmatic and administered at a regional level; there are no components of the proposed Project that would disrupt the effective implementation of these plans. Any future projects approved under the proposed Project would adhere to the required municipal codes, including those that have been adopted to enact the CBC and the CFC to maintain adequate emergency access and response.

There are no specific emergency evacuation routes identified in the Amador County General Plan; according to the LHMP, the County, in conjunction with OES, is in the process of mapping and plotting evacuation routes (Amador County, 2017). ACMC Chapter 15.30, Fire and Life Safety Chapter indicates future subdivisions in SRAs (see response to item 4.9-7 below) shall provide for basic emergency access, the standards of which are outlined in the ACMC.

The proposed Project is near the intersection of two major roadways, State Route 88 and State Route 49. During construction of the project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). Additionally, construction of the Project could require temporary detours and/or lane closures that could temporarily disrupt travel along construction routes for a period of time within the construction zone. As conditions of approval for development applications for specific projects within the Project area, construction management plans would be

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³ The Amador County General Plan references the ALUP; the current document guiding development for the Westover Airfield is the ALUCP.

prepared and required to demonstrate that emergency access to all surrounding properties would be maintained throughout the construction period.

Once operational, the Project would introduce a variety of new land uses and an increased population that would intensify the evacuation process in the event of an emergency. Further, the proposed Project would include a new circulation network within the Project site that would also provide connections to existing roadways. As stated in the ACMC, road and street networks, whether public or private, unless exempted, shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency. Any such roads would also serve to provide emergency evacuation routes during a non-wildfire emergency. All future development within the Project area would be required to adhere to the ACMC. In addition, all future development would be subject to the review and approval of the agencies or their representatives that coordinate emergency services, such as the Amador County Fire Protection District. Impacts to emergency response plans or emergency evacuation plans are less than significant. No mitigation is required.

Impact 4.9-7

EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDFIRES				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant		

As discussed above in Section 4.9.3 under Wildfire Hazards, the project site is in the SRA in a HFHSZ. The development of structures within the HFHSVZ is a direct impact. Moreover, the proposed Project would potentially indirectly expose people to wildfire hazards as people come to work or recreate within the Project area.

Further, as discussed above, the project site is adjacent to lands in the SRA that are in a HFHSZ or a VHFHSZ. The proposed Project would interface with these areas, and as such there is the possibility for future land uses in the Project area to be located near areas with high to very high wildfire potential. Accordingly, there is potential for the project site to be exposed to wildfire.

However, the proposed Project would be required to adhere to the ACMC. As individual developments are proposed within the Project area, they would be subject to the provisions in the ACMC, including those that adopt the CBC and CFC. Future projects would be required to demonstrate compliance prior to the issuance of building permits. Through this routine process, the Amador County Fire Protection District confirms that development proposals meet the applicable fire codes set forth by the State Fire Marshal and the County's building code, including sufficient fire flow and emergency access for fire engines and crews.

Further, the Project contains Policy 9.8, which is directed toward the adjacency of the Project site to SRA lands that are within the HFHSZ and VHFHSZ.

Policy 9.8:

Open space areas adjacent to buildings and development parcels shall maintain a fuel modification and vegetation management area in order to provide the minimum fuel modification fire break as required by State and local laws and ordinances. Additionally, development parcels adjacent to open space areas may be required to provide emergency access through the property to the open space by means of gates, access roads or other means approved by the Amador Fire Protection District. Ownership and maintenance of open space areas, including fuel modification requirements and fire hazard reduction measures shall be outlined in the Project's Open Space Operations & Management Plan to be prepared at the time specific development is proposed.

Lastly, the proposed Project includes land dedicated for the development of a future fire station (discussed in Section 4.13, Public Services). As such, at time of Project buildout there would be additional fire service resources and personnel to provide protection against any potential wildfire threats.

The proposed Project has the potential to directly and indirectly expose people, structures, or infrastructure to wildfire risks. However, through adherence to the required plans and codes, impacts are reduced. Impacts are less than significant. No mitigation measures are required.

4.9.5 Cumulative Impacts

Impact 4.9-8

RESULT IN IMPACTS REGARDING HAZARDS AND HAZARDOUS MATERIALS IN THE CUMULATIVE CONDITION?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant		

For the most part, hazardous materials impacts are site-specific and would not combine with impacts from other projects to result in cumulative impacts. The project when considered with other projects that would occur under the build out of the General Plan would result in an increase in the use, storage, and transport of hazardous materials and wastes. Like the proposed Project, projects associated with General Plan build out would be required to adhere to federal, state, and local regulations. The Amador County General Plan EIR concluded that build-out of the General Plan would result in less-than-significant impacts related to hazards and hazardous materials and did not identify an existing cumulative impact because of the localized nature of hazards and hazardous materials impacts. Thus, there is no existing cumulatively significant impact in this regard.

The geographic context for the analysis of cumulative impacts related to airport safety hazards is the AIA of Westover Field Airport. All cumulative projects would be subject to the ALUCP, which would require compliance with development limitations in relation to noise, safety, airspace protection, and overflight notification zones of Westover Field's Airport's AIA. Therefore, a significant cumulative impact related to airport safety hazards would not occur.

The geographic context for the analysis of cumulative impacts related to emergency response and

evacuations plans and wildland fires is the immediately surrounding areas. The cumulative projects associated with General Plan buildout may require temporary roadway closures during construction that

could cumulatively impede emergency access and/or evacuation routes throughout the area. As discussed, the proposed project may require that segments of surrounding roadways be temporarily impacts during construction, but this would not impede emergency access or evacuation routes, as construction management plans would be required to identify alternative routes or maintain access. Thus, implementation the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to emergency response and evacuation plans. In addition, some cumulative projects would be developed in the SRA mapped fire hazards areas that could cumulatively increase risks associated with wildland fires. The proposed Project, like other cumulative projects in the SRA (and thus the County) would be subject to the provisions of the ACMC, which require emergency access and evacuation routes be constructed and maintained to the ACMC standards. Therefore, implementation the proposed project would not contribute to a significant cumulative impact related to wildland fires.

4.9.6 Mitigation Measures

No mitigation measures are required.

4.9.7 References

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4.9. HAZARDS AND HAZARDOUS MATERIALS

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4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Introduction

This section describes the existing hydrology and water quality conditions and the potential adverse physical impacts from implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). Potential impacts are evaluated relative to the baseline existing conditions considering the existing regulatory setting. See also **Section 4.4**, **Biological Resources** for a detailed discussion of wetlands and riparian habitat. Impacts on water and wastewater services, including effects on existing capacity of these facilities, are analyzed in **Section 4.16**, **Public Utilities**.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to hydrology and water quality include concerns regarding effects on the hydrology and water quality in upper headwater streams of Jackson Creek; impacts on water quality and downstream erosion from proposed wastewater treatment plant (WWTP) discharge points; hydromodification impacts to Rock Creek and South Rock Creek due to proposed impervious surfaces and increased surface runoff; recommendations for inclusion of stream protection buffers and "Green" stormwater infrastructure; erosion and sedimentation due to construction-related grading activities; potential impacts to state drainage facilities adjacent to the proposed Project site; potential need for various types of permits from the Central Valley Regional Water Quality Control Board (RWQCB) and other regulatory entities; and impacts on the several creeks that flow through the site. The NOP and written and verbal comments received are included in **Appendix A**.

4.10.2 Regulatory Setting

Federal

Clean Water Act and Associated Programs

The Federal Water Pollution Control Act of 1972, also known as the Clean Water Act (CWA), is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." States, territories, and authorized Tribes establish water quality standards that describe the desired condition of a waterbody or the level of protection, which are then approved by the United States Environmental Protection Agency (EPA). These standards form a legal basis for controlling pollution that enters waters of the U.S. Water quality standards consist of the designated beneficial uses of the waterbody, criteria to protect those designated uses, antidegradation requirements to protect existing uses and high-quality waters, and general policies regarding implementation.

The EPA is responsible for implementing the CWA, although some sections are implemented by other federal agencies under the EPA's oversight, such as Section 404 dealing with discharge of dredged and fill material into waters of the U.S. (implemented by the U.S. Army Corps of Engineers [USACE]). The EPA also has the option to delegate implementation of certain programs to a state agency. In California, the State Water Resources Control Board (SWRCB) and its nine RWQCBs administer various sections of the CWA.

The discussion below specifies provisions of the CWA, including Sections 401, 402, 404, and 303, which may relate to activities associated with the proposed Project.

Section 401

CWA §401 requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the EPA has delegated authority to issue water quality certifications to SWRCBs and RWQCBs. Each RWQCB is responsible for implementing §401 in compliance with the CWA and that region's water quality control plan (also known as a Basin Plan). Applicants seeking a federal license or permit to conduct activities that might result in a discharge to waters of the U.S. must also obtain a §401 water quality certification to ensure that any such discharge would comply with the applicable provisions of the CWA.

Section 404

CWA §404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of USACE under the provisions of CWA §404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to CWA §401.

Section 402

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES). Under §402, a permit is required for point-source discharges of pollutants into navigable waters of the U.S. (other than dredge or fill material, which is addressed under Section 404). In California, the NPDES permit program is administered by the SWRCB and the RWQCBs. Permits contain specific water-quality-based limits and establish pollutant monitoring and reporting requirements. Discharge limits in NPDES permits may be based on water quality objectives designed to protect designated beneficial uses of surface waters, such as recreation or supporting aquatic life.

General Permit for Construction Activities

Most construction projects that disturb one acre or more of land are required to obtain coverage under the SWRCB's NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ – "Construction General Permit"). The Construction General Permit (CGP) requires the applicant to file a notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances and regulations; and present a list of best management practices (BMPs) that will be implemented to prevent soil erosion and protect against the discharge of sediment and other construction-related pollutants into surface waters.

The SWPPP may include BMPs to control erosion at the source, such as through minimizing soil disturbance, preserving existing vegetation where feasible, and stabilizing and revegetating disturbed areas as soon as possible after grading or construction activities. Temporary soil stabilization measures/practices that could be utilized include covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding (SWRCB 2009). Additionally, the SWPPP would include sediment control measures, which would be used to capture any soil that becomes eroded. This may include perimeter control measures, such as installing silt fences or placing straw waddles below slopes (SWRCB 2009).

Enrollees in the CGP are further required to conduct monitoring and reporting to ensure that BMPs are implemented correctly and are effective in controlling the discharge of construction-related pollutants. Additionally, if a project that receives coverage under the CGP is in an area that is not subject to a municipal stormwater permit, the project must implement post-construction stormwater controls in accordance with permit Section XIII, Post-Construction Standards.

Municipal Stormwater Permitting Program

The SWRCB and RWQCBs regulate stormwater discharges from municipal separate storm sewer systems (MS4s), in accordance with CWA §402 and federal MS4 permitting regulations. The MS4 permitting requirements were developed in two phases: Phase I and II. MS4 permits continue to be issued under Phase I or Phase II, depending on the size of the MS4 seeking authorization. Phase I permits for medium and large MS4s (i.e., serving 100,000 people or more) are issued by the RWQCBs and require the discharger to develop and implement a storm water management plan/program with the goal of reducing the discharge of pollutants to the maximum extent practicable, including identifying what BMPs will be used to address specific program areas. The SWRCB has adopted a general permit for Phase II MS4s that applies to smaller municipalities and other facilities (e.g., non-traditional MS4s, such as community service districts, military bases, state parks, water agencies, etc.). Amador County falls within the Phase II MS4 requirements. Among other requirements, the Phase II general permit requires implementation of construction site stormwater runoff control measures.

The Central Valley RWQCB which has jurisdiction the WWSP site, has adopted a region-wide MS4 permit (Order R5-2016-0040), which governs discharges from MS4 systems in the Project area. The region wide MS4 permit specifies discharge prohibitions, effluent limitations, and receiving water limitations, such that discharges from MS4s within the region generally must not result in pollution or nuisance or otherwise result in exceedances of water quality standards in any receiving waters.

Section 303

CWA §303 requires states to adopt water quality standards. In addition, under §303(d), states are required to identify a list of "impaired waterbodies" (i.e., those not meeting established water quality standards), identify pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for preparation of control plans to improve water quality. The EPA then approves or modifies the state's recommended list of impaired waterbodies. States must update their §303(d) list every two years. Waterbodies on the list are defined to have no further assimilative capacity for the identified pollutant, and the §303(d) list identifies priorities for development of pollution control plans for each listed waterbody and pollutant.

The pollution control plans mandated by the CWA §303(d) list are called Total Maximum Daily Loads (TMDLs). The TMDL is a "pollution budget," designed to restore the health of a polluted waterbody and provides protection for designated beneficial uses. The TMDL also contains the target reductions needed to meet water quality standards and allocates those reductions among the pollutant sources in the watershed (i.e., point sources, nonpoint sources, and natural sources) (40 CFR 130.2). A TMDL is unique to a specific waterbody and its surrounding pollutant sources and is not applicable to other waterbodies.

The current effective EPA-approved §303(d) list for waterbodies in California is the 2020-2022 list, which received EPA final approval on May 11, 2022 (SWRCB 2024).

Federal Antidegradation Policy

The federal antidegradation policy includes minimum criteria to protect existing beneficial uses, ensures that the level of water quality is offset to maintain existing uses, and prevents degradation of water quality. This policy stipulates that states must adopt the following minimum provisions and allows states to adopt even more stringent rules (40 CFR Part 131):

Existing instream water uses and the level of water quality necessary to protect existing uses shall be maintained and protected.

- Where the quality of waters exceeds levels necessary to support propagation of fish, shellfish, wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the state finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.
- 2. Where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

Permits issued by the SWRCB and RWQCBs for waste discharges into navigable waters must incorporate provisions to ensure this policy is met. The state antidegradation policy described below complies with this requirement and incorporates the federal policy by reference.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is intended to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells that serve more than 25 individuals. The goal of the SDWA is to ensure that drinking water is safe for human consumption and will not have adverse health effects on the typical person who drinks water. Under the SDWA, EPA has set drinking water standards for chemical, microbiological, radiological, and physical contaminants in its National Primary Drinking Water Regulations (40 CFR Part 141).

State

Porter-Cologne Water Quality Control Act

Effective in January 1970, the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; California Water Code Division 7) created water quality regulation at the state level, establishing the SWRCB, and divided California into nine regions, each overseen by an RWQCB. The act established regulatory authority over waters of the state, defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." More specifically, the SWRCB and RWQCBs have jurisdiction over any surface water or groundwater to which a beneficial use may be assigned. Following enactment of the federal CWA in 1972, the Porter-Cologne Act assigned responsibility for implementing CWA Sections 303, 401, and 402 to the SWRCB and RWQCBs.

The Porter-Cologne Act requires the RWQCBs to adopt Basin Plans for the protection of surface water and groundwater quality. The act also authorizes the RWQCBs to issue WDRs for discharges of waste to waters of the state, including NPDES permits. Any activity, discharge, or proposed activity or discharge from a property or business that could affect California's surface water, coastal waters, or groundwater will (in most cases) be subject to a WDR. The California Water Code authorizes the SWRCB and RWQCBs to conditionally waive WDRs if it is in the public interest.

Water Quality Control Plan for the Sacramento and San Joaquin River Basins

The Central Valley RWQCB oversees the Central Valley Region, which includes the San Joaquin River Basin, within which the proposed Project site is located. The Central Valley RWQCB has prepared a basin plan covering the Sacramento and San Joaquin River Basins (Basin Plan; Central Valley RWQCB 2019), which governs water quality in the Project area. The Basin Plan identifies beneficial uses for surface waters and groundwater and establishes qualitative and quantitative water quality objectives (WQOs) to achieve beneficial uses for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons the waterbody is considered valuable). WQOs reflect the standards necessary to protect and support those beneficial uses.

The Basin Plan does not identify beneficial uses specifically for any of the waterbodies in immediate proximity to the proposed Project site. The waterbodies may be included within the "Source to Delta" category (Hydro Unit Number 531/532), in which case the Basin Plan identifies the following existing beneficial uses: municipal and domestic supply, irrigation, stock watering, contact recreation, canoeing and rafting, other noncontact recreation, warm freshwater habitat, cold freshwater habitat, warm water migration, cold water migration, warm water spawning, cold water spawning, and wildlife habitat (Central Valley RWQCB 2019).

State Drinking Water Standards

The California Code of Regulations, 22 CCR Division 4, Chapter 15, establishes parameters for safe drinking water throughout the state. These drinking water standards are similar to, but in many cases more stringent than, federal standards. Title 22 contains both primary standards and secondary standards related to aesthetics (taste and odor).

California Antidegradation Policy

SWRCB enacted the Statement of Policy with Respect to Maintaining High Quality of Waters in California, which is also referred to as the California Antidegradation Policy. This policy is used to ensure that high-quality water is maintained, and it limits the discharge of pollutants into high-quality water in the state (Resolution Number 68-16), as follows:

- 1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
- 2. Any activity which produces or may produce waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) became law in 2015 and created a legal and policy framework to manage groundwater sustainability at a local level. SGMA allows local agencies to customize groundwater sustainability plans (GSPs) to their regional economic and environmental conditions and needs and establish new governance structures, known as groundwater sustainability agencies (GSAs). SGMA requires that GSAs develop GSPs for groundwater basins designated as high and medium priority by the California Department of Water Resources (DWR). GSPs are intended to facilitate the management of groundwater supply and use in a manner that avoids specific undesirable results. Undesirable results are defined as the following:

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed);
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies;
- Significant and unreasonable land subsidence that substantially interferes with surface land uses; and
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

GSPs are required to include measurable objectives and minimum thresholds, as well as interim milestones in 5-year increments, to achieve the sustainability goal for the basin for the long-term beneficial uses of groundwater. Additionally, GSPs are required to include components related to groundwater quality monitoring, the monitoring and management of groundwater levels within the

basin, mitigation of overdraft, and a description of surface water supply used or available for use for groundwater recharge or in-lieu use.

California Statewide Groundwater Elevation Monitoring Basin Prioritization

In 2009, the California State Legislature amended the California Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California. Under this amendment, DWR established the California Statewide Groundwater Elevation Monitoring (CASGEM) program, which establishes the framework for regular, systematic, and locally managed monitoring in all of California's groundwater basins. The CASGEM program is essential to DWR's ranking all of California's basins by priority: High, Medium, Low, and Very Low. DWR's basin prioritization is based on the following factors:

Population overlying the basin;

- 1. Rate of current and projected growth of the population overlying the basin;
- 2. Number of public supply wells that draw from the basin;
- 3. Total number of wells that draw from the basin;
- 4. Irrigated acreage overlying the basin;
- 5. Degree to which persons overlying the basin rely on groundwater as their primary source of water;
- 6. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and
- 7. Any other information determined to be relevant by DWR.

Local

Amador County General Plan

The Amador County General Plan (2016) guides land use and development within unincorporated areas of Amador County. Goals and policies from the County's General Plan that are related to hydrology and water quality and are applicable to the proposed Project include the following:

Conservation Element

Water Supply and Water Quality

- **Goal C-1** Ensure that all future development permitted in the county can be provided adequate amounts of water.
- **Policy C-1.1:** Coordinate with the County's water suppliers to ensure that water is available to serve both current and planned future residential, commercial, industrial, and agricultural needs. Include upland areas in future water management plans.

- **Policy C-1.2:** Guide future development to areas of the county where adequate water supplies can be ensured.
- **Policy C-1.3**: Limit reliance on groundwater wells as sources for community water systems. Where possible, encourage connection of developments to existing water supply systems.
- **Policy C-1.4**: Encourage new development, renovation, landscape, and agricultural projects to include water conservation measures, including use of graywater, reclaimed, or recycled water for irrigation, water-conserving plumbing fixtures, and low-water landscapes.
- **Goal C-2:** Maintain and improve water supply planning and infrastructure.
- **Policy C-2.1:** Encourage integrated management of surface water and groundwater resources, wastewater, stormwater treatment and use, and the development of reclaimed water.
- **Policy C-2.6:** Reduce erosion and sediment loads which might limit the lifespan of existing water storage facilities.
- **Goal C-3:** Minimize negative effects of sewage treatment on water quality.
- **Policy C-3.1:** Guide future development to areas of the county with the ability to obtain adequate wastewater service and treatment capacity.
- **Policy C-3.2:** Encourage recycling and water-saving features in new development, including use of graywater, recycled, or reclaimed water for irrigation, to limit the water flows to septic systems and leach fields.
- **Goal C-4:** Minimize negative effects of point and non-point sources on water quality.
- **Policy C-4.1:** Encourage site plan elements in proposed development such as reduced pavement/cover and permeable pavement, as well as drainage features which limit runoff and increase infiltration and groundwater recharge.
- **Policy C-4.3:** Promote agricultural and development practices which limit soil erosion and runoff.
- **Goal C-5:** Reduce the negative effects of new development on stormwater runoff and non-point source water pollution.
- **Policy C-5.1:** Develop Low Impact Development (LID) standards for new construction, including residential developments of 5 or more units, and commercial or industrial projects. These standards should be incorporated into the County's development ordinances.
- **Policy C-5.2**: Encourage the use of LID strategies to help Amador County sustain and improve both surfaceand groundwater quality.

Safety Element

Flood Hazards

Goal S-1: Prevent loss of life or property from flooding.

- **Policy S-1.1:** Direct future development (as defined in "Floodplain Management Regulations" set forth in the Amador County Code) to areas outside the floodway portion of the 100-year floodplain.
- **Policy S-1.2:** Limit development in other areas prone to flooding, including the floodway fringe, other portions of floodplains and inundation areas. Require structures in these areas to incorporate floodproofing measures, including elevation above the 100-year floodplain profile.
- **Policy S-1.3**: Reduce urban runoff and maintain the carrying capacity of floodplains or flood channels. Require provision of onsite retention and detention basins in new development applications as needed to reduce downstream flooding hazards.

Amador County Transportation and Public Works Standard Plans

The Amador County Public Works Agency has a set of Standard Plans (Amador County 2021) that govern transportation and public works projects within the unincorporated county. This includes design standards for roads, driveways, utilities, etc. The Standard Plans specify standard depths and placement of sanitary sewer and water lines beneath roadways.

4.10.3 Environmental Setting

Regional Watershed Setting

The Project site is in the San Joaquin Hydrologic Basin, Middle Sierra Hydrologic Unit (532.00), and Sutter Creek Hydrologic Area (532.40) (Central Valley RWQCB 2019). The San Joaquin River/Hydrologic Basin covers 15,880 square miles and includes the entire area drained by the San Joaquin River. Together with the Sacramento River Basin, the San Joaquin River Basin covers about one fourth of the total area of the state and furnishes roughly 51 percent of the state's water supply (Central Valley RWQCB 2019). The principal streams in the basin are the San Joaquin River and its larger tributaries: the Consumnes, Mokelumne, Calaveras, Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno Rivers. Major reservoirs and lakes include Pardee, New Hogan, Millerton, McClure, Don Pedro, and New Melones (Central Valley RWQCB 2019).

Topography and Climate

Elevations at the WWSP site ranges from approximately 1,400 to 1,500 feet above mean sea level, with gently rolling hills within the site gradually sloping from east to west. The WWSP site is currently undeveloped, and most of its perimeter is fenced since it is used as leased cattle pasture. The site contains grassland, oak woodland, and drainage areas, including tributaries to Rock Creek.

The Project site experiences a moderate, Mediterranean climate. Average temperature and precipitation data is provided in **Table 4.10-1**, **Monthly Climate Summary**.

Table 4.10-1 Monthly Climate Summary – Sutter Hill CDF (October 1943 to June 2016)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	ANNUAL
Average Maximum Temperature (F)	53.8	56.8	61.9	65.7	76.5	86.2	92.9	91.6	86.5	74.7	62.0	54.2	71.9
Average Minimum Temperature (F)	38.0	40.0	41.7	43.7	50.8	57.0	62.8	61.6	58.8	51.3	44.4	38.8	49.1
Average Total Precipitation (in.)	5.19	4.41	3.84	2.76	1.07	0.32	0.01	0.12	0.29	1.72	3.62	5.22	28.55
Average Total Snowfall (in.)	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9

Source: Western Regional Climate Center 2024

Surface Water Hydrology and Quality

The 201-acre Project site is in unincorporated Amador County, immediately west of the City of Jackson and one mile south of the City of Sutter Creek. As noted above, the site is currently undeveloped and includes some drainage areas, including a segment of Rock Creek and its tributaries. As shown on **Figure 4.10-1**, Existing Drainage Watersheds, several stream segments have been identified within the WWSP site, including two perennial streams, an intermittent stream, and an ephemeral drainage (**Appendix D**). The northern perennial stream segment is Rock Creek, which runs along the northwestern boundary of the Project site. The southern perennial stream segment runs east-to-west across the site, conveying water offsite and linking with several tributaries before contributing to Rock Creek approximately 2.5 miles west of the Project site. Rock Creek eventually flows into Lake Amador/Jackson Creek, then into Dry Creek, and eventually into the Mokelumne River within the San Joaquin River Delta (**Appendix D**).

Other surface waterbodies in the Project site vicinity include Sutter Creek, located approximately 2.5 miles north of the site. Additionally, Lake Amador is a reservoir formed by Jackson Creek and is located approximately 4.5 miles southwest of the site. Further, there are large reservoirs, Pardee Reservoir and Camanche Reservoir, located approximately 5 miles and 10.5 miles from the site, respectively and are formed by dams along the Mokelumne River.

Limited information is available regarding water quality within Rock Creek. It is not listed on the CWA §303(d) list as an impaired waterbody (SWRCB, 2022). Given that it is in a lightly developed area and relatively high in the watershed, one would expect water quality to be good, although there may be some potential for legacy mercury pollution associated with gold mining in the Sierra Nevada foothills. The use of the WWSP site for cattle grazing also suggests potential for coliform (pathogens) contamination. Sutter Creek and Jackson Creek are not on the 303(d) list. However, Lake Amador is

listed as impaired for mercury and pH (high) (SWRCB, 2022). Pardee and Camanche Reservoirs are listed for several impairments/pollutants, but these waterbodies would not be affected by the Project.

Stormwater

As noted above, the Project site is currently undeveloped with natural groundcover consisting of grasses and trees. Onsite precipitation generally sheet flows across the landscape to drainages within and near the site. Stormwater analysis conducted for the proposed Project (**Appendix D**) identified three distinct watersheds within the site and are shown on **Figure 4.10-1** and identified as the Northerly, Southerly, and Easterly Drainages. The Northerly Drainage can be further divided into two subareas. Using the Rational Method⁴, the peak runoff from the site under pre-project conditions was estimated at 147.52 cubic feet per second (cfs) (**Appendix D**). No conventional stormwater systems (e.g., storm drains, piped conveyance systems) are present on the existing site.

Flooding, Tsunamis, and Seiche

As shown on **Figure 4.10-2, FEMA Flood Types**, the proposed Project site is not within or near any mapped flood hazard zones, as identified by the Federal Emergency Management Agency (FEMA) (FEMA, 2024). As described in the Amador County General Plan (2016), flood risk is greatest in the floodplain adjacent to a stream channel. Amador County is situated in a region that dramatically drops in elevation from the Sierra Nevada Mountains in the easternmost portion of the County to the central and western portions, where excess rain or snow can contribute to downstream flooding (Amador County, 2016). Flooding events have caused significant damage in the western portion of the County near population centers, such as Jackson, Ione, and Sutter Creek (Amador County, 2016). Figure S-1 in the Amador County General Plan identifies a flooding event as having occurred at roughly the junction of SR-49 and SR-88, which is approximately 0.4 mile east-northeast of the WWSP site.

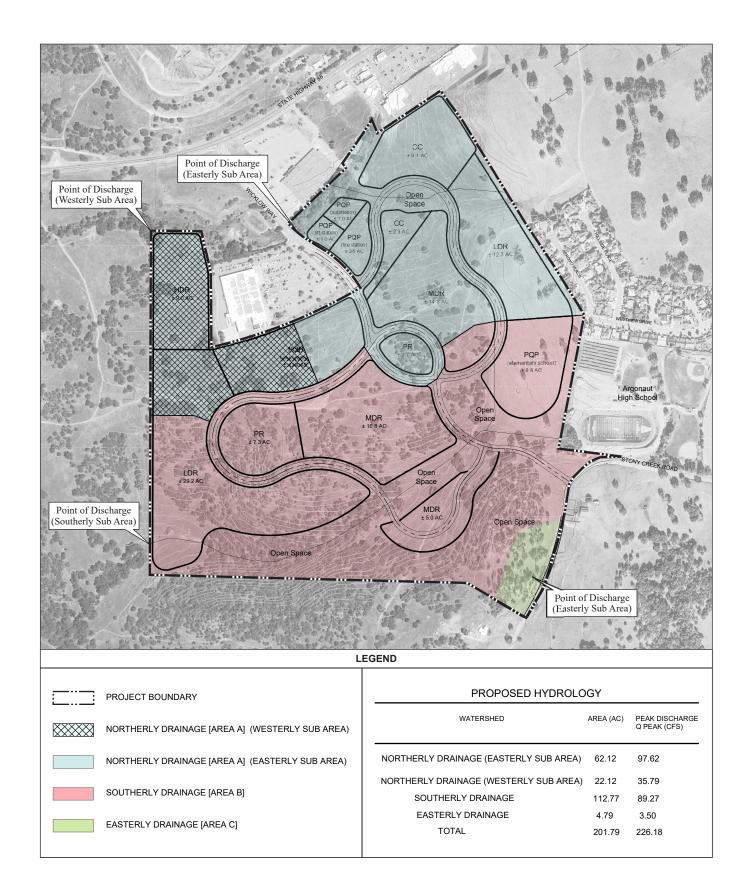
At over 100 miles inland from the coast, the site is outside of any tsunami hazard zones. Additionally, with no large, enclosed bodies of water near the Project site, there is no potential for seiche waves to affect the site.

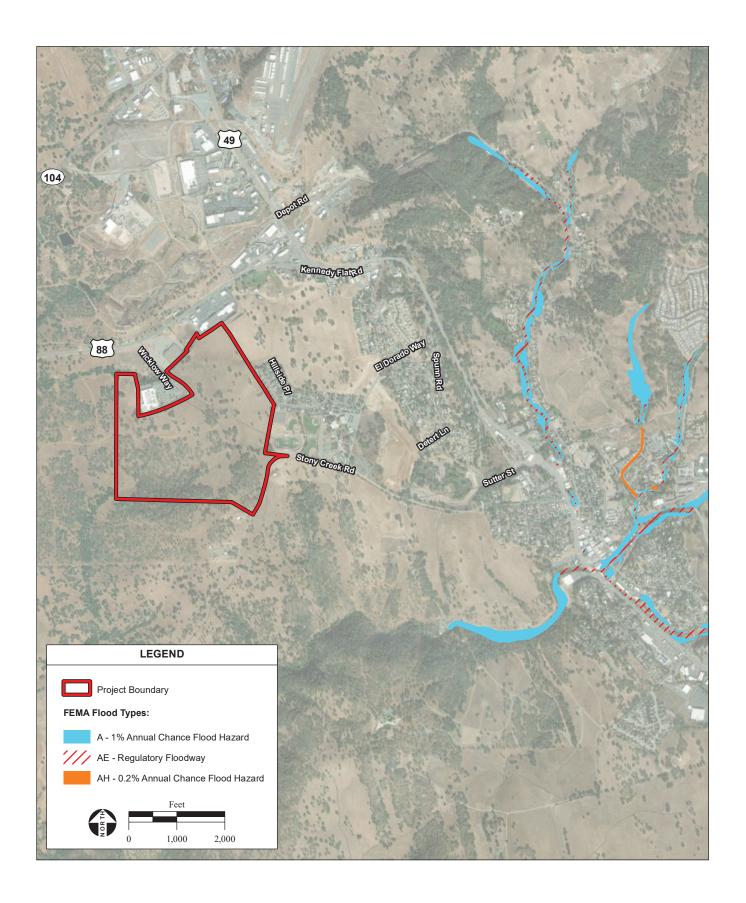
Groundwater

The Project site is outside of any mapped groundwater basins, with the nearest such basin being the San Joaquin Valley – Cosumnes (5-022.16) groundwater basin (DWR, 2024), beginning approximately 5.7 miles west of the site. Thus, the underlying soils/geology of the WWSP site would not be expected to support substantial groundwater storage.

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⁴ The Rational Method formula estimates the peak runoff rate at any location in the watershed basin as a function of drainage area (A), runoff coefficient (C), and rainfall intensity, (I) for the duration equal to the time of concentration (Tc), which is the time required for water to flow from the most remote point of the basin area to the location being analyzed.





4.10.4 Impacts

Method of Analysis

The analysis of impacts to hydrology and water quality as a result of the proposed Project was primarily qualitative in nature and involved considering the aspects of the Project in relation to the applicable significance criteria, the existing physical environmental setting, and existing applicable laws, regulations, and policies. However, the analysis of potential stormwater impacts was based on a quantitative technical study (Appendix D)

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on hydrology and water quality is significant if implementation of the proposed Project would do any of the following:

- 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: i) result in substantial erosion or siltation on- or off site; ii) substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact Analysis

Impact 4.10-1

WOULD THE PROJECT VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUNDWATER QUALITY?					
Significance Before Mitigation	Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant			

Development of the proposed Project would involve site preparation and grading, as well as various other activities involving ground disturbance, which would loosen soils and potentially allow for increased erosion and discharge of sediments offsite and to nearby waterbodies (e.g., during a subsequent rainstorm). Additionally, construction activities for the Project would involve use of hazardous materials (e.g., fuel, oil, and grease contained within construction equipment). If such hazardous materials were not managed properly or if equipment was not properly maintained, it could allow for the materials to leak or otherwise be released to the environment, where they could then be washed offsite to surface waterbodies or leach into the soil and groundwater below. Erosion and associated discharge of sediments and release of leaked hazardous materials could result in degradation of surface and groundwater quality, including violations of water quality standards such as beneficial uses and WQOs.

As discussed in Section 4.10.2, "Regulatory Setting," development of the WWSP site would require coverage under the Construction General Permit, which would include preparation and implementation of a SWPPP. The SWPPP would include BMPs to control erosion at the source, such as minimizing soil disturbance, preserving existing vegetation where feasible, and stabilizing and revegetating disturbed areas as soon as possible after grading or construction activities. Additionally, temporary soil stabilization measures/practices (e.g., mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding) could be prescribed (SWRCB 2009). The SWPPP may also include sediment control measures (e.g., installing silt fences or placing straw waddles below slopes), which would be used to capture any soil that becomes eroded. The SWPPP would also include good housekeeping BMPs (e.g., secondary containment for hazardous materials, proper equipment and vehicle fueling and maintenance practices, employee training on hazardous waste handling, etc.), which would help to reduce potential for inadvertent or accidental releases of hazardous materials during construction (EPA, 2007).

Implementation of the SWPPP during construction would substantially reduce the potential for adverse water quality impacts to occur. The Project design/layout would also help to reduce impacts to some degree; as shown on **Figure 2-7**, the proposed development areas on the northern portion of the Project site are set back from Rock Creek, while Open Space is proposed for the area within and immediately surrounding the perennial stream feature in the southern portion of the site. In addition to conserving and protecting these streams over the long-term, these setbacks will help reduce potential for pollutant discharges to the waterbodies during Project construction activities. The easterly drainage watershed would be unchanged as it is fully within the proposed Open Space area near Stony Creek Road.

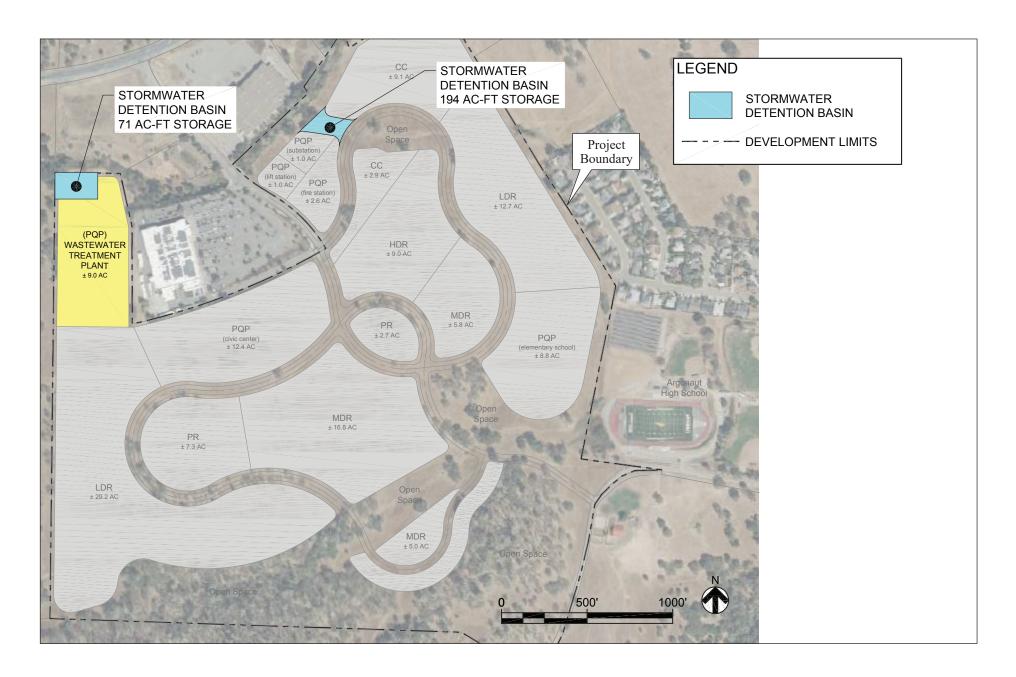
With respect to water quality impacts during the operation phase of the Project, the development of the site would add impervious surface to the area, thus generating additional surface runoff relative to existing conditions. Additionally, with the new uses of the site (e.g., roadways, parking lots, etc.), there would be additional sources of pollutants that could be washed offsite in stormwater and discharged to surface waterbodies and/or infiltrate into the soil and groundwater. The detailed analysis conducted by HydroScience (Appendix G) found that development of the proposed Project would increase the total peak flow rate from the site (all watersheds combined) from 147.52 cfs under pre-Project conditions (as described in Section 4.10.3) to 226.18 cfs with the Project. Therefore, the Project would potentially result in roughly a 53 percent increase in peak runoff (HydroSciences, 2024 [Appendix D]).

However, as described in Chapter 2.0, *Project Description*, onsite drainage improvements included in the Project would consist of a combination of conventional subsurface and surface drainage systems, including pipe conveyance systems and culverts and bridges at roadway and trail crossings of creeks and tributaries. Vegetated swales, soft armoring, mechanical storm filters, structural interceptors, and other BMPs would be utilized at pipe outfalls or other appropriate locations for water quality management, and to convey stormwater runoff to receiving waters while minimizing effects on open space resources. Since the Project does not include downstream improvements, one or more detention basins would need to be constructed as shown on **Figure 4.10-3**, **Proposed Detention Basins**. Based on the analysis, HydroScience determined that two detention basins (with capacities of 194-acre feet (AF) and 71 AF, respectively; both within the Northerly Drainage) should be installed to accommodate the 100-year, 24-hour storm event. With inclusion of the detention basins, along with flow routing through the proposed storm drain system, the total peak runoff flow rate would be reduced by approximately 78.55 cfs, resulting in a total mitigated peak runoff flow rate of 147.63 cfs. Thus, the total mitigated peak runoff flow rate would be similar to pre-Project conditions.

In addition to addressing potential flow/flooding impacts, inclusion of detention basins would help minimize water quality impacts. Detention of runoff water from the impervious areas of the site could allow for entrained sediments and/or other pollutants to settle out prior to discharge to surface waterbodies. Additionally, reducing the velocity of water running off the site may reduce erosion and sedimentation in receiving waters. Note that the detention basins are not considered "mitigation" from a CEQA perspective and rather are incorporated as part of the Project. If future projects result in an increase in impervious surfaces beyond what is projected as part of the current Project, subsequent environmental analysis would be conducted.

With respect to the WWSP WWTP, included as part of the proposed Project, this facility has not yet been fully designed. As it would be situated adjacent to Rock Creek on the northwestern portion of the site, it would likely discharge to this waterbody. As a point source of pollution, it would be subject to NPDES permitting requirements and would need to meet effluent and receiving water limitations with applicable monitoring and reporting. It is also reasonable to assume that any WWSP WWTP effluent discharge point would include rock armoring or other erosion protection. Additionally, the Project would produce recycled water for use on the site; thus, not all of the wastewater effluent would be discharged directly to a surface waterbody but would rather be beneficially reused onsite. It is expected that further environmental review will be conducted for the WWSP WWTP when the facility is designed and more detailed and requires discretionary permits from the County for development.

In conclusion, construction and operation of the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the impact would be **less than significant**.



Impact 4.10-2

WOULD THE PROJECT SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN?				
Significance Before Mitigation	Mitigation Measures Significance After Mitigation			
Less than Significant	None Required	Less than Significant		

As discussed in Section 4.10.3, "Environmental Setting," the Project site is not within any mapped groundwater basin, and thus the subsurface conditions at the site would likely not be especially conducive to groundwater storage and extraction. Groundwater recharge that does occur at or in proximity to the site would be expected to occur via infiltration of precipitation, particularly along stream beds. During construction, the proposed Project would use water for dust control and for other uses (e.g., cement mixing, equipment/vehicle cleaning, etc.). Water for use during construction activities would likely be obtained from Amador Water Agency (AWA), which supplies the Project area. As described in Section 4.16, "Public Utilities," the majority of AWA's water supplies come from surface sources (86 percent in 2020), and only a small proportion comes from groundwater. Thus, while it is not possible at this program level of analysis to determine the exact quantity of water that would be used during construction, it is unlikely to be of a magnitude to substantially affect existing groundwater supplies.

As discussed above under Impact 4.10-1, development of the WWSP site would add land uses that include impervious surfaces, whereas the existing site is entirely pervious. In addition to accelerating surface runoff rates, this would preclude groundwater recharge from occurring on areas of the site that are converted to impervious surfaces (i.e., water falling onto the site as precipitation or running onto the site from adjacent areas could not infiltrate into the soil and groundwater). However, the proposed Project would include various stormwater management features, which would both manage flows onsite and serve to encourage groundwater infiltration and recharge. Refer to the discussion in Impact 4.10-1. Given the re-direction of stormwater runoff on the site to adjacent pervious features/areas or to creek systems, the runoff generated at the site would still have an opportunity to infiltrate to soil and groundwater. Thus, development of the WWSP site, including substantial areas of open space, would not substantially reduce groundwater recharge or adversely affect groundwater supplies.

With respect to long-term water demand, the proposed Project would be supplied by AWA and would utilize recycled water from a new onsite WWTP for non-potable uses. As described in Chapter 2, *Project Description*, the Project would connect to AWA existing potable water lines adjacent to the site and water would be distributed within the Project area via looping systems which parallel roadways on a transmission main grid. Water demand and available water supply to meet the projected demand would be determined through a Water Supply Assessment and consistency with the AWA's Urban Water Management Plan (UWMP) projections. Upon completion of the proposed WWTP, recycled water would be used within the Plan area to irrigate landscaping at parks, schools, business professional, and multifamily projects, as well as publicly landscaped areas (including roadway landscape corridors and medians), thus offsetting potable water demands.

Preliminary analysis by HydroSciences (**Appendix D**) has shown that daily water demand for the proposed Project would average 294,000 gallons per day (gpd), as shown in **Table 4.10-2**, Projected Water Demands.

TABLE 4.10-2 PROJECTED¹ WATER DEMANDS

FLOW CONDITION	DEMAND (GPD)	DEMAND (GPM)
Average Day Demand	294,000	204
Maximum Day Demand ²	434,000	301
Peak Hour Demand ³	-	592

Notes:

gpd = gallons per day; gpm = gallons per minute

- 1. The projections are based on AWA unit demands and those for other local agencies. The projections include a 15 percent allowance for system losses as well as a safety factor to ensure adequate supply. The projections are preliminary and for planning purposes only.
- 2. Peaking factor for Maximum Day Demand is 1.5, which is typical for similar facilities. The peaking factor was only applied to non-irrigation demands.
- 3. Peaking factor for Peak Hour Demands is 3.0, which is conservative for similar facilities. The peaking factor was only applied to non-irrigation demands.

Source: HydroScience 2024

Based on the average day demand shown in Table 4.10--2, this would equate to roughly 330 AFY.

As noted above in Environmental Setting and described in detail in Section 4.16, "Public Utilities," AWA obtains most of its supplies from surface sources, with only a small percentage of supplies coming from groundwater. The AWA provides water service to the entire County with a population of approximately 15,161 residents, comprising 7,118 retail residential water service connections (AWA, 2021). Surface water accounts for approximately 91 percent of AWA's total water supply and is obtained from the Mokelumne River watershed. In 2020, AWA supplied a total of 18,710 AF to customers, with only 1,620 AF coming from groundwater sources (AWA, 2021). Therefore, utilization of the AWA system for the proposed Project's potable demands, assuming AWA's existing supplies would be sufficient to supply the Project, would not substantially affect groundwater storage/supplies in the region. Use of recycled water, similarly, would not affect groundwater, as it would be produced via wastewater treatment at the new WWTP and would neither increase groundwater recharge nor would it draw on groundwater supplies.

As indicated in Section 4.10.3, "Environmental Setting," the Project site is outside of any mapped groundwater basins. Therefore, there is no basin underlying the site subject to SGMA for which a GSP would potentially need to be developed. In other words, no sustainable groundwater management plan applies to the Project site. Regardless, for the foregoing reasons, implementation of the proposed Project would not hinder the sustainable management of groundwater supplies. As such, this impact would be **less than significant**.

Impact 4.10-3

WOULD THE PROJECT SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER OR THROUGH THE ADDITION OF IMPERVIOUS SURFACES, IN A MANNER WHICH WOULD:

- i) Result In Substantial Erosion or Siltation On- Or Off Site.
- ii) Substantially Increase the Rate or Amount of Surface Runoff in A Manner That Would Result in Flooding On-Or Off-Site;
- iii) Create Or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff; or
- iv) Impede Or Redirect Flood Flows?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

As described in the preceding impact discussions, the proposed Project would alter the existing drainage pattern of the site in several ways, most notably by adding impervious surface area to the site with full buildout. Each aspect of this significance criterion, with respect to both construction and operation, is discussed below:

Result in substantial erosion or siltation on- or off-site. During construction, the drainage pattern would be altered by site preparation and grading, along with other earthmoving activities, which would both alter the way water flows over the site and expose soils to erosion. Certain areas of the construction site, such as staging areas and access roads, could also become compacted (e.g., due to heavy construction equipment repeatedly traversing the area), which could increase surface runoff rates from these areas relative to baseline. As discussed in Impact 4.10-1, development of the proposed Project would require coverage under the Construction General Permit, including preparation and implementation of a SWPPP. This would include BMPs to control erosion at the source, as well as sediment control measures to prevent eroded soils from being washed off-site. Implementation of the SWPPP, combined with design elements (e.g., setbacks from streams/drainages) that would be protective of surface waters, would prevent substantial erosion and/or siltation from occurring during construction.

Over the long-term, during Project operation, the addition of impervious surface to the site would increase the volume and velocity of surface runoff, relative to baseline conditions, which would increase potential for erosion and siltation. For example, areas adjacent to the new impervious surfaces could receive increased volumes of runoff, thus subjecting these areas to elevated erosive forces and potentially allowing for soils to be eroded and washed off-site. However, as discussed in Impact 4.10-1 and Chapter 2.0, *Project Description*, the proposed Project would include various stormwater management features that would route flows to nearby creeks/conveyance systems, protect against erosion and/or slow stormwater flows, and allow for infiltration to the soil and groundwater. This may include vegetated swales, soft armoring, mechanical storm filters, structural interceptors, and other BMPs. Additionally, the proposed Project would retain open space around the existing creeks onsite, which would allow for these features to continue to receive overland flow from adjacent areas and convey water off-site. Given the stormwater management features that would be included in the Project design and layout, the proposed Project would not result in substantial erosion or siltation on- or offsite over the long term. If future projects result in an increase in impervious surfaces beyond what is

projected as part of the proposed Project, subsequent environmental analysis would be conducted. As a result, impacts would be **less than significant**.

Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. As discussed above, construction activities could potentially increase surface runoff rates relative to baseline, in particular at areas within the site that may become compacted (e.g., staging areas, access roads) due to equipment and truck traffic. During site preparation, vegetation onsite would likely be removed, which also may act to increase surface runoff since vegetation acts to slow or detain runoff. Nevertheless, while construction activities could increase surface runoff rates to some degree, it would not be sufficient to result in substantial flooding on or offsite, particularly with implementation of the SWPPP. As noted above, the SWPPP would include various BMPs that would serve not only to reduce erosion and offsite movement of sediments but would also help to slow and minimize surface runoff. Thus, with implementation BMPs, significant effects would not occur during construction.

During Project operation, surface runoff rates at the Project site would be elevated compared to baseline conditions due to the addition of new impervious surface area. As discussed under Impact 4.10-1 above, the detailed analysis by HydroScience (2024) found that development of the site as proposed would potentially increase total peak runoff by roughly 53 percent (from 147.52 cfs to 226.18 cfs). However, inclusion of two detention basins in the Project, as proposed by HydroScience, would reduce the peak runoff flow rate substantially, such that the 100-year, 24-hour storm event would be accommodated (HydroSciences, 2024 [Appendix D]). Moreover, the proposed Project would include various other stormwater management features and would maintain natural open space around existing streams, which would serve to slow runoff and minimize potential flooding. Given this, the Project site would not generate substantial additional surface runoff so as to result in substantial flooding. The Project site is not in an area especially prone to flooding or within a mapped floodplain. Thus, this impact would be **less than significant**.

Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As discussed above, during Project construction, there would be potential for increased surface runoff due to denuding of vegetation and compaction of soils. This would be substantially minimized through implementation of the SWPPP; nevertheless, surface runoff may still be elevated during the construction period. Generally, this would not be expected to be of a magnitude to exceed the capacity of any existing natural stormwater drainage systems that are currently provided by the onsite creek systems. As described in Chapter 2.0, *Project Description*, existing onsite drainage is limited to the small streams that traverse the site (one of which is Rock Creek, which runs along the northern boundary of the site); no existing conventional/centralized stormwater drainage system serves the currently undeveloped site. To the extent the existing drainages (e.g., Rock Creek and tributaries) on the site convey stormwater runoff, these drainages may receive additional flow during construction due to the factors discussed above in Impact 4.10-1; however, this would not, on its own, result in the facilities' capacities being exceeded.

Project construction activities would also have the potential to generate additional sources of polluted runoff. As described in Impact 4.10-1, Project construction would involve use of hazardous materials (e.g., fuel, oil, grease, etc.), such as those that may be contained within heavy equipment. If such materials were to spill or leak, this could result in the materials being washed offsite in stormwater

runoff and discharged to surface waters. However, in addition to erosion/sediment control measures, the SWPPP would include good housekeeping BMPs, which would serve to minimize potential for any releases of hazardous materials during construction.

Over the long term, development of the proposed Project would increase the volume of runoff generated from the site due to the addition of new impervious surface. As discussed under Impact 4.10-1, development of the Project is projected to potentially increase total peak runoff from the site by approximately 53 percent. However, this additional runoff would be reduced through inclusion of two detention basins (with capacities of 194 AF and 71 AF) into Project design, which would minimize adverse effects with respect to stormwater conveyance capacity. The proposed Project also includes various stormwater management features, including what would be considered green infrastructure or LID (e.g., vegetated swales), which would serve to reduce the amount of stormwater generation (e.g., by encouraging soil infiltration) as well as route the stormwater appropriately to nearby creeks/conveyance systems. Moreover, the WWSP would retain substantial open space around the existing creeks on-site, which would help to minimize the flow velocities from surrounding impervious areas, allow for natural attenuation/capture of pollutants, and otherwise minimize the impacts of the hardscape development. As a result, this impact would be **less than significant**.

Impede or redirect flood flows. The proposed Project site is not within a flood hazard area, as mapped by FEMA; as such, it is not considered likely to experience flooding. While damaging floods have occurred in the Jackson area (Amador County, 2016), this flooding has occurred to the east-northeast of the site. Rock Creek does traverse the northern boundary of the site, so its floodplain may extend further into the site. However, due to Rock Creek's relatively small size at this point in the watershed, it would not be expected to result in substantial flooding at the Project site. If flooding were to occur at the site during construction, certain elements of the construction equipment / process could potentially impede or redirect flood flows. For example, depending on the state of the construction process, excavations or mounding onsite and/or heavy construction equipment and staged materials could affect flood flows; however, these effects would not be significant as they would be temporary in nature and would be subject to the requirements of a SWPPP.

Once constructed, the proposed Project would include various above-ground buildings and facilities that would have potential to redirect or impede flood flows. However, since no portion of the site is within a flood hazard zone, as mapped by FEMA, the potential for flood flows to occur onsite is considered unlikely. Therefore, the impact would be **less than significant**.

Therefore, the proposed Project would not result in substantial adverse effects related to the alteration of 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. As such, the impact would be **less than significant.**

Impact 4.10-4

WOULD THE PROJECT, IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES, RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant None Required Less than Significant				

As described in Section 4.10.3, "Environmental Setting," the site is not within or near any mapped flood hazard zones (FEMA, 2024). Likewise, the site is over 100 miles inland and well outside of any tsunami hazard zones. Finally, there are no large, enclosed bodies of water on or near the proposed Project site that could potentially generate a seiche wave. Accordingly, the Project would not increase risk of pollutant release to the environment due to tsunami or seiche.

As discussed above in Impact 4.10-3, although the site is not within a mapped flood hazard zone, floods have occurred in the Jackson area of Amador County. However, these events occurred offsite to the east-northeast of the site. Although flooding is considered unlikely, if flood flows were to affect the Project site during construction, the floodwaters could lead to the release of pollutants (e.g., hazardous materials stored at the site and used in construction equipment). Limited quantities of hazardous materials such as gasoline, diesel, oils, and lubricants may be required to operate the construction equipment. Construction activities would be short-term, and the use of these materials would cease once construction is complete. The hazardous substances used during construction would be required to comply with existing federal, state, and local regulations regarding the use and disposal of these materials. Due to the low probability of flooding occurring during construction, the impact is considered less than significant. During operation, the risk of pollutants released due to onsite flooding would be similar to other similar residential, commercial, and office land uses as these land uses would carry similar types and strengths of hazardous materials. As the site is not in a mapped flood hazard and includes Project features that would ensure that the runoff rates would remain similar to pre-project conditions, the likelihood of inundation is low. Overall, the impact would be less than significant.

Impact 4.10-5

WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN?				
Significance Before Mitigation Mitigation Measures Significance After Mitigation				
Less than Significant None Required Less than Significant				

As discussed under Impact 4.10-1, development of the proposed Project would involve construction activities, such as site preparation and grading, which would have potential to result in erosion and discharge of sediments to nearby waterbodies. Additionally, construction would use hazardous materials (e.g., fuel, oil, and grease contained within construction equipment), which could potentially spill or leak or otherwise be released if proper precautions are not taken. This could result in adverse impacts to both surface and groundwater quality, which would generally conflict with the Basin Plan (Central Valley RWQCB, 2019). As described in Impact 4.10-1, however, the proposed Project would require coverage under the Construction General Permit, including preparation and implementation of a

SWPPP. This would include BMPs to control both erosion and potential offsite movement of sediments, which would minimize potential for Project construction to result in discharges of sediment-laden runoff. The SWPPP would also include good housekeeping BMPs, which would reduce potential for accidental releases of hazardous materials. With implementation of the SWPPP, proposed Project construction would not substantially conflict with or obstruct implementation of the applicable Basin Plan.

As noted above, the Project site does not lie within a mapped groundwater basin, and there is no GSP or sustainable groundwater management plan applicable to the proposed Project. Regardless, construction would not use excessive volumes of groundwater that would potentially impact groundwater sustainability.

During operation, the proposed Project would not generate substantial polluted runoff or result in other forms of pollution that would potentially conflict with or obstruct implementation of the Basin Plan. As discussed in Impact 4.10-1, the fully developed site would generate additional stormwater runoff relative to existing conditions due to the proposed land uses that include impervious surface. In total, the proposed development would potentially increase peak runoff rates by approximately 53 percent over baseline; however, based on the HydroScience (2024) analysis, the Project would include two detention basins to reduce the increased runoff. With incorporation of the detention basins and other stormwater management features, including LID/green infrastructure features, the additional runoff from the Project site would not result in substantial non-point source pollution so as to adversely affect beneficial uses or otherwise conflict with the Basin Plan.

Although the Project site is not subject to a sustainable groundwater management plan, the inclusion of stormwater management features (e.g., vegetated swales) would help minimize the adverse effects of the proposed Project on groundwater recharge. As discussed above, water demand would be met by AWA and supplied predominantly through surface sources; thus, the long-term water demand would not have a substantial adverse effect on groundwater supplies. As such, this impact would be **less than significant**.

4.10.5 Cumulative Impact

Impact 4.13-6

WOULD THE PROJECT RESULT IN IMPACTS TO HYDROLOGY OR WATER QUALITY IN THE CUMULATIVE CONDITION?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant	None Required	Less than Significant		

Other past, present, and reasonably foreseeable projects affecting hydrology and water quality would include other development projects in the Jackson area and in neighboring portions of Amador County. While Jackson/Martell are relatively lightly developed areas within the largely rural Amador County, past development projects (e.g., housing, commercial, etc.) and associated infrastructure have resulted in hydromodification and construction-related hydrology and water quality impacts. By adding impervious surfaces to the landscape and sources of pollutants (e.g., vehicles, gasoline/diesel storage tanks, etc.),

these projects have increased potential non-point source pollution from urbanized areas, although these effects have been ameliorated to some degree through implementation of the MS4 permitting program.

Present and reasonably foreseeable future projects would have similar effects in terms of potential construction-related impacts (e.g., erosion/sedimentation, hazardous material releases, etc.) and long-term effects due to increased runoff volume and velocity from impervious surfaces. Buildout of the Amador County General Plan, including the Martell Regional Service Center, would have similar effects; however, like the proposed Project, the effects would be minimized through compliance with the Construction General Permit (for projects disturbing greater than 1 acre of land), including the permit's post-construction standards and the applicable MS4 requirements. The other cumulative projects could affect Rock Creek and downstream waterbodies, as well as other surface waters in the region. Due to Jackson/Martell's relatively high position in the watershed (e.g., in the Sierra Nevada foothills, above mapped groundwater basins), there is generally higher water quality in this area than in the valley. As noted in Section 4.10.3 above, there are relatively few impairments listed in CWA Section 303(d) for surface waterbodies in the Project vicinity (SWRCB, 2022).

As discussed in Section 4.10.4, the proposed Project would obtain coverage under the Construction General Permit, including preparation and implementation of a SWPPP. The SWPPP would include BMPs for erosion- and sediment-control as well as good housekeeping measures and would substantially reduce the Project's construction-related effects on hydrology and water quality. Additionally, although the Project would incrementally contribute to ongoing urbanization/hydromodification effects associated with impervious surfaces and non-point source pollution, the inclusion of appropriately sized detention basins and green stormwater infrastructure (e.g., vegetated swales) would minimize the adverse effects, both at the Project site level as well as cumulatively. Therefore, the Project's contribution to the cumulative impact would be **less than significant**.

4.10.6 Mitigation Measures

No mitigation measures are required.

4.10.7 References

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4.11 Noise

4.11.1 Introduction

This section describes the existing noise setting associated with implementation of the Wicklow Way Specific Plan (WWSP or proposed Project), identifies associated regulatory requirements, evaluates potential impacts from construction and operation, and identifies mitigation measures as they relate to noise. Evaluation of potential impacts is based in part on information contained in the Environmental Noise Assessment prepared by Saxelby Acoustics LLC (Saxelby) in Appendix E of this DEIR.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to noise include concerns regarding increased noise from new high-density residential uses; construction-related noise disturbing schools, communities, and wildlife; and airport noise. The NOP and written and verbal comments received are included in **Appendix A**.

4.11.2 Regulatory Setting

4.11.2.1 Federal

Federal Aviation Administration Standards

Code of Federal Regulations Title 14, Part 150, which is enforced by the Federal Aviation Administration (FAA), regulates airport noise compatibility planning. This regulation prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. This regulation also identifies those land uses that are normally compatible with various levels of exposure to noise by individuals. The FAA considers all land uses to be compatible with exterior noise levels less than 65 dBA LDN (or CNEL).

4.11.2.2 State

California Government Code

Government Code §65302.3 requires that general plans and any applicable specific plan be consistent with Airport Land Use Compatibility Plans (ALUCP) prepared in accordance with Public Utilities Code §21675. Any Project changes that result in compatibility issues, including potential noise impacts, with the ALUCP, requires that general plans and applicable specific plans be amended accordingly.

California Airport Land Use Planning Handbook

The 2011 California Airport Land Use Planning Handbook provides guidance for determining consistency between local planning documents and an Airport Land Use Commission's (ALUC's) ALUCP. When an ALUC chooses to establish development standards in an ALUCP to prevent airport noise and safety hazards, they are indirectly setting development standards for local government because local government general and specific plans (and therefore their implementing standards) must be consistent with the ALUCP [§21670.1(c)(2)(D) and Government Code §65302.3(a)], unless the conclusion of the overrule process allows otherwise.

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations

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 that house people, including hotels, motels, apartments, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB Ldn or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses be located where the Ldn or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to allowable interior levels. If 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.

4.11.2.3 Local

Draft Airport Land Use Compatibility Plan for Westover Field, Amador County

An Airport Land Use Compatibility Plan (ALUCP) provides the basis for planning within the vicinity of a public airport and addresses the compatibility between airport uses and future land uses within the airport's influent area. The ALUCP noise policies are designed to minimize the public's exposure to excessive noise (Amador County, 2017). Further, the ALUCP's maps the airport's noise contours, ranging from 55 to 70 dB CNEL (Draft ALUCP, **Figure 3-2**).

Amador County General Plan

The Amador County General Plan Land Use Element and Noise Element contain goals and policies that provide guidance on land use compatibility that focus on reducing conflicts between land uses and sources of noise generation. Specific to the WWSP, the General Plan contains goals and policies that seek to minimize noise impacts to sensitive land uses (NSLUs) such as residences, school, and open space (Amador County, 2016).

The following goals and policies regarding noise apply to the Project:

- **Goal LU-13:** Maintain compatible land uses in the vicinity of Westover Field.
- **Policy LU-13.1:** Ensure that future development proposals within the Airport Land Use Plan area are consistent with the requirements of the ALUCP.
- **Goal N-2:** Minimize noise conflicts from transportation sources.
- **Policy N-2.1:** Minimize noise conflicts between current and proposed land uses and the circulation network by encouraging compatible land uses around critical roadway segments with higher noise potential.
- **Goal N-3:** Minimize noise conflicts between airports and surrounding land uses.
- **Policy N-3.2:** Ensure future development in the vicinity of airports, including Westover Field and Eagle's Nest Airport, is compatible with current and projected airport noise levels for each facility in accordance with noise standards presented in Table N-3 of the General Plan.

Wicklow Way Specific Plan

There are no policies in the Wicklow Way Specific Plan that pertain to noise attenuation; however, the WWSP Design Guidelines (Appendix B of the WWSP) contain guidance for attenuating noise through design features. These guidelines indicate that, as appropriate, masonry walls should be included in the design of individual developments to provide sound attenuation along roadways or between differing land uses. The typical application of masonry walls is on collector roadways and along the back edge of the landscape corridor where needed for sound attenuation.

4.11.3 Fundamentals of Noise

Noise is evaluated by various descriptors that are applicable standards and guidelines described in this section. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise are defined below.

- dBA: A-weighted decibel, is an expression of the relative loudness of sounds as perceived by the human ear. A-weighting gives more value to frequencies in the middle of human hearing and less value to frequencies at the edges as compared to a flat audio decibel measurement.
- Lmax (Maximum Noise Level): The maximum instantaneous noise level during a specific period.
 The Lmax may also be referred to as the peak (noise) level.
- Lmin (Minimum Noise Level): The minimum instantaneous noise level during a specific period.
- Leq (Equivalent Noise Level): The energy mean (average) noise level. The instantaneous noise levels during a specific period in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the Leq. In noise environments determined by major noise events, such as aircraft overflights, the Leq value is heavily influenced by the magnitude and number of single events that produce the high noise levels.

Ldn (Day-Night Level): The energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.

CNEL (Community Noise Equivalent Level): The CNEL is like the Ldn described above, but with an additional 5 dBA 'penalty' added to noise events that occur during the noise-sensitive hours between 7:00 p.m. to 10:00 p.m., which are typically reserved for relaxation, conversation, reading, and television. If using the same 24-hour noise data, the reported CNEL is typically approximately 0.5 dBA higher than the Ldn.

Community noise is commonly described in terms of the ambient noise level, defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level Leq, 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 Leq is the foundation of the composite noise descriptors such as Ldn and CNEL, as defined above, and shows a very good correlation with community response to noise.

Table 4.11-1, Land Use Compatibility Guidelines, summarizes the County's land use compatibility guidelines as presented in the General Plan (Table N-3). These guidelines are intended to guide the design and location of future development and serve as a target for reduction of noise in existing development.

TABLE 4.11-1 LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

USES		CNEL (DBA)	
	INTERIOR ^{1,2}	EXTERIOR ³	
Active and passive agricultural operations	N/A	75	
Single-family and duplex	45	60	
Mobile home park	N/A	60	
Multiple family	45	65	
Mixed-Use	45	70	
Transient lodging—motels, hotels	45	65	
Sports arenas, outdoor spectator sports	N/A	N/A5	
Auditoriums, concert halls, amphitheaters	45	N/A5	
Office buildings, business, commercial and professional	N/A	70	
Manufacturing, utilities, processing, distribution, storage	N/A	75	
Schools, nursing homes, day care facilities, hospitals, convalescent facilities, dormitories	45	65	
Government Facilities—offices, fire stations, community buildings	45	N/A	
Places of Worship, Churches	45	N/A	
Libraries	45	N/A	
Playgrounds, neighborhood parks	N/A	70	
Utilities	N/A	75	
Cemeteries	N/A	75	
Mining, managed forestry	N/A	75	
Passive Recreation	N/A	75	
Golf courses, riding stables, water recreation, cemeteries	N/A	N/A	

Source: Amador County General Plan Table N-3

Notes: N/A = Not Applicable to specified land use category

 $^{^{1}\,}$ Interior habitable environment excludes bathrooms, closets, and corridors.

² Interior noise standards shall be satisfied with windows in the closed position. Mechanical ventilation shall be provided per Uniform Building Code (UBC) requirements.

³ Exterior noise level standard to be applied at outdoor activity areas. Where the location of an outdoor activity area is unknown or not applicable, the noise standard shall be applied inside the property plane of the receiving land use.

⁴ Within the Town Center and Regional Service Center land use designations, exterior space standards apply only to common outdoor recreational areas.

⁵ Mitigation will be determined on an as-needed basis and to achieve interior noise standards and noise standards of adjacent uses.

In addition, the County has established hourly and maximum performance standards designed to protect NSLUs adjacent to stationary sources from excessive and continuous noise. For stationary sources, the County has established L_{eq} for daytime (7 a.m. to 10 p.m.) of 60 dBA and nighttime (10 p.m. to 7 a.m.) of 45 dBA, with L_{max} of 75 dBA for daytime and 65 dBA nighttime.

4.11.3.1 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 a hearing organ, such as human ears.

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.

Sound levels are described in dB. The human ear is not equally sensitive to all frequencies within the sound spectrum. To account for this phenomenon, the A-scale is used, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, as discussed above, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dBA. The A-weighted sound level has become the standard tool of environmental noise assessment.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of ten. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, for most receivers, a three-dBA change in noise levels is clearly noticeable; a three-dBA change is typically the smallest increment that is perceivable; and one to two dBA changes are generally not detectable.

It is also recognized that the impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, there are a variety of noise descriptors for time-averaged noise levels, as discussed in Section 4.11.2.

4.11.3.2 Fundamentals of Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system that is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural responses to different vibration levels are influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Table 4.11-2 Effects of Vibration on People and Buildings indicates that the threshold for architectural damage to structures is 0.20 in/sec peak particle velocity, which is the level at which humans generally experience annoyance. A threshold of 0.20 in/sec peak particle velocity is a reasonable threshold for short-term construction projects.

TABLE 4.11-2 EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		HUMAN REACTION	EFFECT ON BUILDINGS
MILLIMETER / SECOND	INCH / SECOND		
0.15-0.30	0.006- 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings	Risk of "architectural" damage to normal dwellings with plastered walls and ceilings. Special finishes, such as lining of walls, flexible ceiling treatment, etc., would minimize damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans, 2002. TAV-02-01-R9601. February 20, 2002.

4.11.4 Existing Noise Baseline Setting

Noise Sources

The existing noise environment in the Project vicinity is primarily defined by auto traffic on SR-88. Secondary noise sources include nearby commercial uses and aircraft overflights. Argonaut High School is also a secondary noise source, primarily attributed to event noise, which is infrequent, especially in comparison to the consistent transportation noise sources.

Noise Sensitive and Vibration Land Uses (NSLUs)

NSLUs are land uses that may be subject to stress and/or interference from excessive noise, such as residential dwellings, schools, transient lodging (hotels), hospitals, educational facilities, and libraries. Industrial and commercial land uses are generally not considered sensitive to noise. NSLUs in the project area include existing residential land uses to the south/southeast and Argonaut High School.

Land uses in which ground-borne vibration could potentially interfere with operations or equipment are considered vibration-sensitive (Federal Transit Administration [FTA] 2018). The degree of sensitivity depends on the specific equipment that would be affected by the ground-borne vibration. In addition, excessive levels of ground-borne vibration of either a regular or intermittent nature can result in annoyance to residential uses or schools. Vibration-sensitive land uses in the Project area include the nearby residences and the high school.

Ambient Noise Levels

To quantify the existing ambient noise environment in the Project vicinity, Saxelby Acoustics conducted continuous (24-hour) noise level measurements at three locations (LT-1, LT-2, and LT-3) and one short-term measurement (ST-1). These locations were chosen to capture the ambient noise at nearby sensitive receptors as well as major sources of commercial, transportation, and industrial noise in the vicinity. Noise measurement locations are shown on **Figure 4.11-1**, **Noise Measurements**. A summary of the noise level measurement survey results is provided in **Table 4.11-3**, **Noise Measurements**.

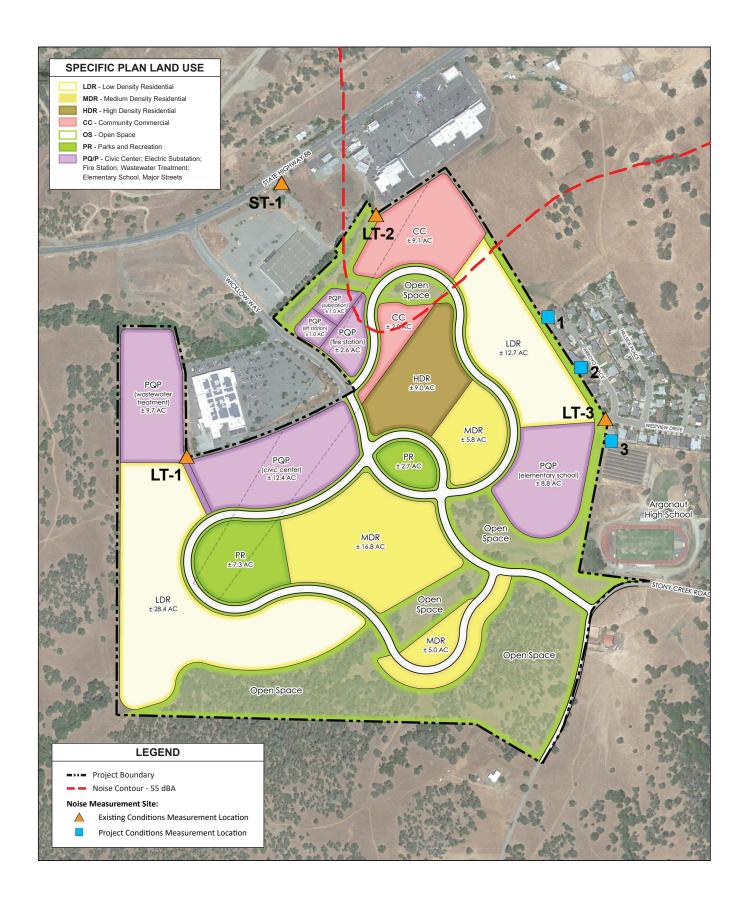
TABLE 4.11-3 NOISE MEASUREMENTS

LOCATION #	LOCATION	DAYTIME (DBA) LEQ ¹	NIGHTTIME (DBA) LEQ ¹
LT-1	Southwest of Walmart parking lot	47	41
LT-2	Southwest of Big 5 Sporting Goods	50	44
LT-3	West of terminus of Westview Drive	45	40
ST-1 ²	SR-88 near entrance to Former Kmart Building	67	N/A

Source: Saxelby Acoustics, LLC, 2024

Unless otherwise noted, measurements were taken on Friday, February 2, 2024; daytime hours: 7:00 a.m. to 10:00 p.m.; nighttime hours: 10:00 p.m. to 7:00 a.m.

² 65 feet from the centerline of SR-88; taken at 10:20 a.m., Thursday, February 1, 2024



4.11.5 Impacts

4.11.5.1 Method of Analysis

Generally, a project may have a significant effect on the environment if it will substantially increase ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local criteria or ordinances or substantially increase noise levels at noise-sensitive land uses. The potential increase in traffic noise from a project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

Additionally, **Table 4.11-4, Significance of Changes in Noise Exposure** shows that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

TABLE 4.11-4 SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

AMBIENT NOISE LEVEL WITHOUT PROJECT, LDN	INCREASE REQUIRED FOR SIGNIFICANT IMPACT
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: FICON 1992.

To assess noise impacts due to proposed Project-related traffic increases on the local roadway network, traffic noise levels were measured and predicted for existing and future, proposed Project, and no-Project conditions. Noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model inputs various vehicle fleet attributes with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

Proposed Project auto and truck trip generation volumes were provided by the Project Transportation Analysis (TA) prepared by Abrams Associates (**Appendix F**), as well as field observations of truck usage and vehicle speeds on the local area roadways. Subsequently, the predicted increases in traffic noise levels on the local roadway network for the various no Project and proposed Project conditions were calculated. Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each proposed Project-area roadway segment evaluated in the TA. In some locations, sensitive receptors may not receive full shielding from noise barriers or may be located at distances that vary from the assumed calculation distance.

4.11.5.2 Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on noise and vibration is significant if implementation of the proposed Project would:

- 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.
- Generate excessive groundborne vibration or groundborne noise levels.
- 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.

Impact Analysis

Impact 4.11-1

WOULD THE PROJECT RESULT IN THE GENERATION OF A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?

Significance Refere Mitigation

Mitigation Measures

Significance After Mitigation

Significance Before Mitigation Mitigation Measures		Significance After Mitigation
Significant	MM NOI-1 Construction Noise Control	Less than Significant

Construction Noise

Noise from construction could affect nearby NSLUs that include residential land uses and Argonaut High School located adjacent to the east side of WWSP boundary. Construction activities would employ a variety of noise-generating equipment such as excavators, backhoes, front-end loaders, and concrete saws. As shown in **Table 4.11-5, Construction Equipment Noise**, at a distance of 50 feet, activities associated with construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max}.

TABLE 4.11-5 CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	MAXIMUM LEVEL, DBA AT 50 FEET
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels greater than 60 dBA when onsite construction-related noise levels exceed approximately 90 dBA at the site boundary. Noise would also be generated during the construction phase by increased truck traffic on area roadways.

Although NSLUs would be exposed to elevated construction noise levels, the exposure would be temporary. However, construction noise levels may be disruptive to nearby residences and students. The County's noise standards discussed in Section 4.11.2 do not apply to construction. Thus, considering the nearby NSLUs, noise-generating construction activities would have a significant short-term impact. Implementation of **MM NOI-1**, as identified in Section 4.11,6, below, would reduce construction generated noise levels to **less-than-significant**.

Operational Noise

Once operational, the proposed Project would generate traffic, which would result in increased noise levels on roadways as well as stationary sources of noise such as HVAC units, commercial deliveries, alarms and security systems, outdoor activities and recreation, and domestic animals.

Transportation Noise

Using the traffic data as presented in the TA (**Section 4.14, Transportation and Appendix F**), Saxelby determined the existing and Project-related noise attributed to traffic at key offsite locations.

Table 4.11-6, Existing Plus Project-Related Traffic Noise Level Increases identifies the change in existing conditions with the addition of proposed Project-related traffic.

TABLE 4.11-6 EXISTING PLUS PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

ROADWAY	SEGMENT	EXISTING NO PROJECT (DBA L _{DN})	EXISTING + PROJECT (DBA L _{DN})	CHANGE
SR-88	West of Wicklow Way	54.8	56.5	1.7
SR-88	East of Wicklow Way	62.4	64.0	1.6
Stony Creek Road	West of Project	50.2	51.0	0.8
Hoffman Street	East of Project	48.7	53.1	4.4

Likewise, using data from the TA, a baseline condition was generated. The baseline condition is based upon the existing traffic volumes plus growth in the background traffic (two years) in addition to traffic from all reasonably foreseeable developments that could substantially affect the traffic volumes at the Project study intersections (**Appendix F**).

Table 4.11-7, Baseline Traffic Noise Levels and Project-Related Traffic Noise Level Increases, shows the change in the baseline conditions with the addition of Project-related traffic.

TABLE 4.11-7 BASELINE TRAFFIC NOISE LEVELS AND PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

ROADWAY	SEGMENT	BASELINE NO PROJECT (DBA L _{DN})	BASELINE + PROJECT (DBA L _{DN})	CHANGE
	West of Wicklow Way	55.5	57.1	1.6
	East of Wicklow Way	63.1	64.5	1.4
Stony Creek Road	West of Project	53.6	54.0	0.4
Hoffman Street	East of Project	52.2	54.9	2.7

Based upon the information presented in **Tables 4.11-6 and 4.11-7**, the proposed Project is predicted to result in an increase in the maximum traffic noise level increase of 4.4 dBA along Hoffman Street east of the proposed Project site. The addition of proposed Project generated traffic does not result in noise levels that exceed the FICON criteria at the analyzed roadway segments (see **Table 4.11-4**). Therefore, impacts resulting from increased traffic noise would be considered **less than significant**. No mitigation is required.

Stationary Noise

The proposed Project land uses would also generate a variety of stationary sources of noise. Typical of this type of development noise sources would include landscape maintenance, children playing, HVAC units, alarms/horns, domesticated animals, delivery vehicles, etc. **Figure 4.11-1** identifies the locations of offsite NSLUs that would be most likely to experience Project related stationary noise impacts.

To predict stationary noise from the proposed Project, Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed uses, existing and proposed buildings, terrain type, and locations of sensitive receptors. More detail on model inputs and noise contour figures may be referenced in **Appendix E**.

The proposed Project's commercial uses, wastewater treatment plant (WWTP), civic center, elementary school, parks, and fire station components would be the primary stationary noise generating sources. The following is a list of assumptions used for the noise modeling.

Commercial Area

Saxelby Acoustics assumed that a variety of commercial uses would be located on the commercial parcels. These uses could include general retail, grocery stores, gas stations, restaurants, medical office buildings, etc. Primary noise sources associated with these uses include rooftop mechanical equipment, vehicle circulation, loading dock activity, truck deliveries, and drive-thru speaker boxes. Noise levels on the proposed Project site were approximated based on similar commercial development areas.

Wastewater Treatment Plant

At the time of this study, the type and method of wastewater treatment were unknown. Saxelby Acoustics used previously collected sound level data for a typical municipal system. Based upon field measurements taken from various types of WWTPs, the worst-case scenario was modeled.

Civic Center

Saxelby Acoustics assumed that the civic center would consist of a collection of government office buildings. The primary noise sources associated with office buildings are mechanical equipment noise and vehicle circulation.

Elementary School

The primary noise sources associated with the proposed elementary school would be vehicle circulation and children using athletic fields/playgrounds. It was assumed that these primary sources would not be in operation concurrently. While the exact size of the school was unknown at the time of the study, it was assumed that a maximum of 300 cars would drop off on site in a peak hour.

Neighborhood Park

The proposed Project includes two neighborhood parks. The primary noise sources for parks typically include recreation activity from users of public sports courts or play structures. No amplified sound would be considered part of normal operation. This analysis assumes daytime use only.

Fire Station

To assess noise generated by the fire station, Saxelby Acoustics assumed an average of four events on the fire station site during a peak hour. It was assumed that the four trips per hour could occur during either daytime or nighttime hours. Based on field observations, siren noise often occurs off-site. Emergency siren noise is typically exempt from the noise regulation.

Noise model results for the Project average and maximum daytime and nighttime hours of operation are shown in **Table 4.11-8**, Project Stationary Noise at Sensitive Receptors.

TABLE 4.11-8 PROJECT STATIONARY NOISE AT SENSITIVE RECEPTORS

LOCATION	OPERATING SCENARIO	NOISE STANDARD ¹	PREDICTED NOISE LEVELS	COMPLIES WITH STANDARD?
1	Daytime Average (L _{eq})	60.0 dBA	38.0 dBA	Yes
	Daytime Maximum (L _{max})	75.0 dBA	40.1 dBA	Yes
	Nighttime Average (L _{eq})	45.0 dBA	35.0 dBA	Yes
	Nighttime Maximum (L _{max})	65.0 dBA	37.3 dBA	Yes
2	Daytime Average (L _{eq})	60.0 dBA	42.4 dBA	Yes
	Daytime Maximum (L _{max})	75.0 dBA	50.8 dBA	Yes
	Nighttime Average (L _{eq})	45.0 dBA	33.9 dBA	Yes
	Nighttime Maximum (L _{max})	65.0 dBA	37.8 dBA	Yes
3	Daytime Average (L _{eq})	60.0 dBA	46.3 dBA	Yes
	Daytime Maximum (L _{max})	75.0 dBA	56.1 dBA	Yes
	Nighttime Average (L _{eq})	45.0 dBA	28.7 dBA	Yes
	Nighttime Maximum (L _{max})	65.0 dBA	35.7 dBA	Yes

¹General Plan noise level standards for stationary noise sources

As shown in **Table 4.11-8**, Project related noise levels at offsite NSLUs would not exceed the Amador County stationary noise level standards.

Based on the assumptions outlined within this impact analysis, operational traffic and stationary noise levels do not exceed noise level standards. However, implementation of the Project has the potential to generate short-term construction noise resulting in a potentially significant impact. **Mitigation Measure MM NOI-1**, described in Section 4.11.6 below, would reduce construction-related noise impacts to **less than significant**.

In addition, where the intended use of CEQA is to examine the impact of the proposed Project on the environment, as a Specific Plan, it is recognized at a programmatic level that future land uses may also generate impacts internally within the Plan area. For purposes of disclosure, as conditions of approval for future development applications, individual developments would be required to demonstrate compliance with County standards. Moreover, as noted above in Section 4.11.2, the WWSP Design Guidelines (Appendix B) contain strategies for noise attenuation.

Impact 4.11-2

WOULD THE PROJECT RESULT I GROUNDBORNE NOISE LEVELS?	N THE GENERATION OF EXCESSIVE	GROUNDBORNE VIBRATION OR
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None required	Less than Significant

As discussed above, vibration is the movement of particles that may create noise; groundborne noise is the noise that is transmitted because of vibration. The primary vibration-generating activities associated with the proposed Project would occur during construction when activities such as grading, utility placement, and parking lot construction occur. **Table 4.11-9**, **Vibration Levels for Various Construction Equipment** shows the typical vibration levels produced by construction equipment.

TABLE 4.11-9 VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	PEAK PARTICLE VELOCITY AT 25 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY AT 50 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY AT 100 FEET (INCHES/SECOND)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

Construction vibration impacts could include human annoyance and building structural damage. Human annoyance occurs when construction vibrations rise significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The data above in **Table 4.11-9** indicates that construction vibration levels anticipated for the proposed Project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors, which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located further than 26 feet, from typical construction activities. At distances greater than 26 feet construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Impacts are **less than significant**; therefore, no mitigation is required.

Impact 4.11-3

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?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	NOI-2 Interior Noise Control	Less than Significant

There are two public-use airports in Amador County: Eagle's Nest and Westover Field. Eagle's Nest is greater than 12 miles from the WWSP site, and Westover Field is approximately 1-mile northeast of the site. As shown on **Figure 4.11-1**, a portion of the WWSP is within the Westover Field 55 dBA CNEL noise contour. Low-density residential is proposed in the 55-dBA contour. The Westover Field ALUCP indicates that residential development within the 55-65 dBA CNEL contour is considered "Normally Unacceptable". Therefore, noise from aircraft on the Project site would be considered to have a potentially significant impact.

The Westover ALUCP indicates that noise intrusion during indoor activities can be mitigated by requiring special noise insulation construction methods. With the implementation of **MM NOI-2 Interior Noise Control**, impacts from aircraft noise would be reduced to **less than significant**.

4.11.6 Cumulative Impacts

Impact 4.11-4

WOULD THE PROJECT RESULT IN IMPACTS TO NOISE IN THE CUMULATIVE CONDITION?						
Significance Before Mitigation Measures Significance After Mitigation						
Less than Significant None Required Less than Significant						

Construction

Construction noise impacts are typically project-specific and highly localized. Construction activities associated with anticipated development within the WWSP area would contribute temporarily to the noise levels in the cumulative (2040) ambient noise environment, but in a highly localized and transient manner.

Impact 4.11-1 found short-term, temporary construction noise impacts to be potentially significant; however, these impacts would be less than significant with the implementation of **Mitigation Measure NOI-1**. Based on current information, there are no known other reasonably foreseeable projects in the immediate area that would be under construction concurrently with the proposed Project (**Table 4.0-1**). Therefore, there would be no construction related cumulative impacts, and therefore, no additional mitigation is required.

Operation

Transportation

Consistent with industry standards, Saxelby examined a cumulative scenario as outlined in the TA prepared by Abrams Associates that includes year 2045 cumulative traffic volumes based on planned and approved projects and the Amador County Travel Demand Model. This approach is inclusive of the projects listed in **Table 4.0-1**, Past Present and Foreseeable Projects, and is conservative since it not only considers the projects in **Table 4.0-1**, but also additional traffic as captured in the Amador County Transportation Demand Model. **Table 4.11-10**, **Cumulative Traffic Noise Levels with and without the Project** identifies forecasted cumulative noise levels. As shown in **Table 4.11-10**, cumulative noise does not exceed standards, and transportation-related noise impacts are **less than significant** in the cumulative scenario; therefore, no mitigation is required.

TABLE 4.11-10 CUMULATIVE TRAFFIC NOISE LEVELS WITH AND WITHOUT THE PROJECT

ROADWAY	SEGMENT	CUMULATIVE NO PROJECT (DBA L _{DN})	CUMULATIVE + PROJECT (DBA L _{DN})	CHANGE
SR-88	West of Wicklow Way	55.9	57.4	1.5
SR-88	East of Wicklow Way	63.5	64.8	1.3
Stony Creek Road	West of Project	54.1	54.4	0.3
Hoffman Street	East of Project	52.6	55.1	2.5

Stationary Sources

In terms of Impact 4.11-1, Project-related stationary noise impacts are **less than significant**. As other development occurs in the area, noise from different types of uses would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations. Locally, as conditions of approval for future development applications within the Project area, individual developments would be required to demonstrate compliance with the County standards. The WWSP Design Guidelines (WWSP, **Appendix B**) contain strategies for noise attenuation. As identified in the Design Guidelines and as determined by site-specific noise analyses, this may include masonry walls that would attenuate noise at offsite locations. Therefore, stationary noise impacts are **not cumulatively significant**, and no mitigation is required.

Vibration

Impacts 4.11-1 and 4.11-2 are associated with the temporary construction phase of the proposed Project. Modeling performed predicts construction generated vibrations would not exceed acceptable levels and are below established thresholds. Based on current information, there are no known other reasonably foreseeable projects in the immediate area that would be under construction concurrent with the proposed Project (**Table 4.0-1**). Therefore, there would be no vibration-related cumulative impacts and no mitigation is required.

Aircraft Noise

Regarding Impact 4.11-3 pertaining to exposure of proposed Project residents and visitors to aircraft noise, a potentially significant impact would be reduced to less than significant with implementation of **MM NOI-2**. Cumulatively, none of the Projects listed in **Table 4.0-1**. are within the mapped noise contours for the Westover Field, thus there would be no cumulative impact. No mitigation is required.

4.11.7 Mitigation Measures

MM NOI-1 Construction Noise Control

Prior to the approval of grading permits, the County shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

A Construction Management Plan shall be prepared that demonstrates compliance with the noise standards. The plan shall be prepared by project applicants and submitted to the County for approval prior to issuance of the grading permit. The following measures may be included to reduce construction noise:

- Construction shall be limited to 7:00 a.m. to 10:00 p.m.
- Construction equipment shall be properly outfitted and maintained with manufacturerrecommended noise-reduction devices.
- Diesel equipment shall be operated with closed engine doors and equipped with factoryrecommended mufflers.
- Mobile or fixed "package" equipment (e.g., arc-welders and air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion powered equipment, where feasible.
- Unnecessary idling of internal combustion engines (e.g., more than 5 minutes) shall be prohibited.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- No project-related public address or music system shall be audible at any adjacent sensitive receptor.
- Temporary sound barriers or sound blankets may be installed between construction operations and adjacent noise-sensitive receptors.

MM NOI-2 Airport Land Use Compatibility Noise Control

Residential uses that are located within the Westover Field 55-65 dBA CNEL noise contour shall incorporate interior noise control measures to reduce interior noise levels to 45 dBA CNEL or less. These interior noise control measures may require the use of glazing and exterior doors with an improved sound transmission class (STC) rating or the use of resilient channels on exterior walls and ceilings. A

site-specific noise analysis shall be conducted to determine the final noise control measures required to achieve compliance with County interior noise level standards.

4.11.8 References

- Amador County. 2016. *Amador County General Plan*. Prepared by Amador County. Adopted on October 4, 2016. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan. Accessed: February 20, 2024.
- Amador County. 2017. *Draft Westover Field Airport Land Use Compatibility Plan*. Prepared by ESA. Available at: https://www.amadorgov.org/home/showdocument?id=27862. Accessed: February 29, 2024.
- California Department of Transportation (Caltrans). 2002. *Transportation Related Earthborne Vibrations*. Adopted on February 20, 2002. Available at: https://planning.lacity.gov/eir/8150Sunset/References/4.G.%20Noise/N.03_Transportation%20 Earthborne%20Vibrations_2002.pdf. Accessed: February 28, 2024.

4.12 POPULATION AND HOUSING

4.12.1 Introduction

This section presents the environmental setting and potential impacts related to population and housing that may occur from development of the Wicklow Way Specific Plan (WWSP or proposed Project). Changes in population and housing, in and of themselves, are generally characterized as social and economic effects, not physical effects on the environment. CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic effects are connected to physical environmental effects. Thus, impacts on population and housing are discussed in relation to a direct or indirect physical change to the environment.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to population and housing include concerns regarding the provision of affordable housing and the proposed density. The NOP and written and verbal comments received are included in **Appendix A**.

4.12.2 Regulatory Setting

Federal Regulations

No federal plan, policies, regulations, or laws related to population or housing are applicable to the Project.

State

California Housing Element Law

The State Housing Element Law (Government Code Chapter 1143, Article 10.6, §§ 65580 and 65589) requires each city and county to adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet those needs. The amount of housing that must be accounted for in a local housing element is determined through the Regional Housing Need Assessment (RHNA). In the RHNA process, the State gives each region a number representing the amount of housing needed based on existing needs and expected population growth.

The need is determined by the HCD, which estimates the relative share of the State's anticipated population growth that would occur in each county, based on California Department of Finance (DOF) population projections and historic growth trends.

Each city and county must update its general plan housing element on a regular basis pursuant to the requirements of Government Code Section 65580, et seq. Among other things, the housing element must incorporate policies and identify potential sites that would accommodate that jurisdiction's share of the regional housing need. Before adopting an update to its housing element, a city or county must submit the draft to the HCD for review and approval.

Local

Amador County Housing Element

The County adopted the 6th Cycle Countywide 2021-2029 Housing Element (Housing Element) in October 2023. The Housing Element, is the comprehensive planning document to guide the provision and allocation of housing throughout the County. The Housing Element addresses the housing needs of all jurisdictions in the County, and includes strategies and programs that:

- Ensure adequate sites and remove constraints to housing production
- Support affordable and special-needs housing
- Pursue cooperative planning and outreach
- Promote conservation and energy efficiency, and
- Support equal-opportunity housing.

In addition, the Housing Element contains the following components:

- The County's housing plan to address identified housing needs through housing goals, policies, and programs
- A community profile containing data and analysis of the County's demographics, housing characteristics, and existing housing needs
- An analysis of future housing needs
- An analysis of constraints to housing production and maintenance
- Identification of resources to meet housing needs, including vacant land for new construction, as well as financial and administrative resources
- An assessment of past accomplishments.

The goals and policies of the Housing Element that are applicable to the proposed Project are outlined below:

Housing Diversity - Goals and Policies

Housing Diversity

- Goal H-1: HOUSING DIVERSITY Ensure adequate sites are available throughout the County and throughout each jurisdiction to accommodate identified housing needs and to encourage a diversity of housing types affordable to a range of income levels, including extremely low, very low, low, and moderate.
- **Policy H-1.1:** Encourage diversity in the type, density, size, affordability, and tenure of residential development available throughout the County and throughout each city.
- **Policy H-1.2:** Ensure adequate sites are identified and zoned to accommodate each jurisdiction's share of regional housing needs throughout the planning period.
- **Policy H-1.3:** Encourage and support the development of housing for those with special housing needs, including seniors, persons with disabilities, including developmental, single heads of household with children, large families, the workforce, and the unhoused.

- Policy H-1.4: Encourage a geographic dispersal of units affordable to all income levels throughout Amador County, with an emphasis on promoting housing that is proximate to jobs and services and that provides a variety of housing types, including housing affordable to lower-income and special-needs households, in areas with higher levels of economic, employment, environmental, and transportation opportunities in each jurisdiction.
- **Policy H-1.5**: Support the concept of "aging in place" by maintaining a range of housing that allows people to remain in their community as their housing needs change.
- **Policy H-1.6:** Support opportunities for the integration of housing in commercial districts and the adaptive reuse of non-residential structures.
- **Policy H-1.7:** Facilitate the development of affordable housing through regulatory incentives and concessions and available financial assistance. Proactively seek out new models and approaches in the provision of affordable housing, including accessory dwelling units (ADUs), inclusion of duplexes and multiple units in areas zoned for single family uses, and cottage housing.

Housing and Neighborhood Preservation and Improvement

- **Goal H-2:** HOUSING AND NEIGHBORHOOD PRESERVATION AND IMPROVEMENT Conserve, rehabilitate, and enhance existing neighborhoods and housing stock.
- **Policy H-2.1:** Maintain suitable neighborhoods with quality housing, infrastructure, and open space that foster neighborhood character and the health of residents.
- **Policy H-2.5:** Encourage the conversion of existing apartment complexes to condominium ownership and only permit it when the citywide vacancy rate for rental units warrants.
- **Policy H-2.6:** Support the preservation of mobile home parks as an important source of affordable housing.
- **Policy H-2.7:** Ensure the continued availability and affordability of income-restricted housing for low- and moderate-income households.

Wicklow Way Specific Plan

The policies listed below would guide development of the plan area and provide specific policy-level direction. These policies provide context for which the County shall review individual projects proposed within the WWSP area. Project policies related to population and housing include the following:

Chapter 5.0 Affordable Housing Plan

- **Policy 5.1:** The County shall ensure that sufficient land is designated and zoned in a range of residential densities to accommodate the County's regional share of housing.
- **Policy 5.2:** The County shall endeavor to designate future sites for higher density housing near transit stops, commercial services, and schools where appropriate and feasible.
- **Policy 5.3:** The County shall support the development of second units on single-family parcels.
- **Policy 5.4:** The County shall ensure that new development pays its fair share in financing public facilities and services and pursues financial assistance techniques to reduce the cost impact on the production of affordable housing.

Policy 5.5: The County shall make density bonuses available to affordable and senior housing projects, consistent with State law.

Policy 5.6: The County shall encourage housing for seniors and persons with disabilities to be located near public transportation, shopping, medical, and essential services and facilities.

4.12.3 Environmental Setting

The proposed Project site is located in unincorporated Amador County and consists of undeveloped land that is primarily used for cattle grazing. Currently, there is no housing, and thus, no population on the WWSP site. The site is designated as Regional Service Center (RSC) in the County General Plan, which allows for a variety of residential densities.

Below is a discussion of the existing population and housing conditions in unincorporated Amador County and Amador County as a whole.

Population

Table 4.12-1, Amador County Historic Population, shows the growth in the unincorporated area of Amador County in relation to the County as a whole and the State. As the table indicates, growth in the County closely mimics that of the State while the unincorporated parts of the County are growing at a slower rate. However, it is noted that the unincorporated part of the County makes up approximately 56 percent of the population of the entire County.

TABLE 4.12-1 AMADOR COUNTY HISTORIC POPULATION

JURISDICTION	2010	2020	2023	GROWTH RATE (%)
Unincorporated Amador County	21,831	22,641	22,282	2.1%
Amador County Total	38,091	40,474	39,837	4.5%
California	37,253,956	39,538,223	38,940,231	4.4%
Source: DOF, 2023.				

Table 4.12-2, Amador County and California Population Estimates below shows population estimates and projections from the DOF for all of Amador County and California from 2025 to 2050. The County's 2030 population is projected to be about 41,584 persons, which represents a nearly 4.4 percent increase from the 2023 total population of 39,837; however, the County's 2050 population is projected to be about 38,929, which is approximately a 0.2 percent increase from the 2023 total population. Thus, after a period of slight growth from present to 2030, it is projected that growth in the County will decline.

TABLE 4.12-2 AMADOR COUNTY AND CALIFORNIA POPULATION ESTIMATES

JURISDICTION	2025	2030	2040	2050	GROWTH RATE (%)
Amador County	40,334	41,584	40,621	38,929	-3.5%
California	39,024,054	39,430,871	40,106,449	40,049,519	2.6%
Source: DOF, 2020.					

Based on the information displayed in **Table 4.12-2**, the population of Amador County is projected to decrease between years 2025 and 2050⁵.

Housing

Population projections are converted to numbers of households by using an average household size for each year. Unincorporated Amador County, as reflected by the U.S. Census, is a community with a high vacancy rate and relatively average sized households (2.6 people per household in 2020). **Table 4.12-3**, **Amador County and California Household Characteristics** below displays Amador County's and California's total households, population in households, and average household size for 2010 and 2020. The U.S. Census reports that the number of housing units in the County increased from 18,032 in 2010 to 18,805 in 2020. Additionally, the number of occupied homes increased from 14,569 in 2010 to 15,678 in 2020. As of 2020, approximately 3,127 of the homes in Amador County were unoccupied, possibly due seasonally occupied homes along SR-88 in the 'upcountry' areas.

TABLE 4.12-3 AMADOR COUNTY AND CALIFORNIA HOUSEHOLD CHARACTERISTICS

JURISDICTION	YEAR	NUMBER OF TOTAL HOUSEHOLDS	NUMBER OF OCCUPIED HOUSEHOLDS	AVERAGE PERSONS PER HOUSEHOLD		
Amador County	2010	18,032	14,569	2.3		
Amador County	2020	18,805	15,678	2.6		
California	2010	13,670,304	12,568,167	2.9		
California	2020	14,392,140	13,475,623	2.9		
Source: DOF 2020.						

Regional Housing Needs Assessment

As discussed in Section 4.12.2, the RHNA is mandated by State housing law as part of the systematic process of updating housing elements of local general plans. State law requires that housing elements identify RHNA targets set by the Department of Housing and Community Development to encourage each jurisdiction in the state to provide its fair share of very-low, low-, moderate-, and above-moderate-income housing. The RHNA does not promote growth but provides a long-term outline of housing needs in a community.

The Amador Countywide 2021-2029 Housing Element identifies that for the County to meet its RHNA allocation, an additional 377 housing units are needed in the unincorporated area of the County (see **Table 4.12-4, Unincorporated Amador County RHNA Allocation**). To do so, the County must implement

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⁵ The County population estimates reported by the DOF are calculated using the following demographic balancing equation: Current Population = Previous Population = (Births – Deaths) + Net Migration This method calculates the population in the target year by starting with the population from the previous year, adding natural increase (births minus deaths) and net migration that occurred during the period between two years. These are 2019 baseline projects that incorporate the latest historical population, births, deaths, and migrations available as of July 1, 2022, and are informed by available data for the 2020 Census.

proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

TABLE 4.12-4 UNICORPORATED AMADOR COUNTY RHNA ALLOCATION

INCOME CATEGORY	HOUSING UNITS NEED
Very Low ⁶	109
Low	62
Moderate	72
Above Moderate	134
Total	377
Source: Denovo Planning Group, 2023	

Housing Forecast

The DOF released a Projection Report on June 12, 2020, based on 2019 baseline data detailing population and housing trends. **Table 4.12-5, Amador County Housing Forecast**, highlights that the total population, household population, number of households, and persons per household will increase, but group quarters are projected to decrease. The DOF reports that an average of 2.31 persons occupied available households in the County and by year 2030, an average of 2.33 persons will occupy available households, resulting in a 1 percent change from 2020 to 2030.

TABLE 4.12-5 AMADOR COUNTY HOUSING FORECAST

	2020	2025	2030	PERCENT CHANGE (2020-2030)
Total Population	38,531	39,613	40,160	4%
Household Population	34,139	35,378	35,860	5%
Group Quarters	4,392	4,235	4,300	-2%
Total Occupied Households	14,760	15,218	15,397	4%
Persons per Households	2.31	2.32	2.33	1%
Source: DOF 2020				

Employment

The civilian labor force in Amador County in 2022 totaled 16,920 individuals. 15,877 of these individuals were employed, and 1,016 were unemployed, resulting in an unemployment rate of 6 percent.

Table 4.12-6, Industry Employment Status in Amador County (Including Cities) provides an overview of the industries in which Amador County residents were employed in 2010, 2020 and 2022 as well as the annual employment growth rate from 2010 to 2022.

TABLE 4.12-6 INDUSTRY EMPLOYMENT STATUS IN AMADOR COUNTY (INCLUDING CITIES)1

SECTOR	EMPLOYMENT 2010	EMPLOYMENT 2020	EMPLOYMENT 2022	ANNUAL GROWTH RATE (2010- 2022)	EMPLOYMENT DISTRIBUTION (2022)
Population 16 years and over	32,748	33,789	35,155	7.3%	-
Total Employed over 16 years of age ⁷	14,318	14,280	15,877	10.9%	100%
Management, business, science, and arts occupations	4,513	4,796	5,510	6.3%	34.7%
Service Occupations	3,342	3,607	3,752	12.3%	23.6%
Sales and office Occupations	3,320	2,752	3,061	7.8%	19.3%
Natural Resources, construction, and maintenance occupations	1,673	1,757	1,947	16.4%	12.3%
Production, transportation, and material moving occupations	1,470	1,368	1,607	9.3%	10.1%
Source: U.S. Census 2022					

¹Does not include government employees.

Jobs to Housing Balance

Insufficient housing may impede economic growth by driving up the price of what housing is available, making it difficult for companies to attract new employees. This potential mismatch is referred to as a jobs-to-housing imbalance. It is generally considered ideal to have a jobs-to-housing balance of approximately one job per housing unit in a jurisdiction. A mismatch forces families seeking affordable housing to move farther away from the communities in which they work. In 2020, the ratio of employed workers to housing units in Amador County was 0.76, indicating that there was a slightly greater number of housing units in the County than jobs during this year, possibly due to seasonal occupancy.

4.12.4 Impacts

Method of Analysis

Impacts in relation to population and housing are examined in relation to whether implementation of the proposed Project, including the provision of housing and the direct or indirect effects of growth would have a physical effect on the environment.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on population and housing resources is significant if implementation of the Proposed Project would do any of the following:

 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure).

Effects Found Not to be Significant

As discussed in Section 4.12.3, the proposed Project site is undeveloped and supports cattle grazing. The County has designated the site as primarily RSC, which allows for residential development at various densities. Thus, the proposed Project would not displace housing or people or convert land designated for residential land uses to a non-residential use, resulting in the need for construction of housing elsewhere. Therefore, no further discussion of this issue is included within this DEIR.

Impact Analysis

Impact 4.12-1

WOULD THE PROJECT 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)?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Significant	No Feasible Mitigation	Significant and Unavoidable	

There are two types of growth-inducing impacts that a project may have: direct and indirect. Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

The proposed Project is planned to be built out over a 20-year period. At buildout, the proposed Project would provide approximately 700 dwelling units, accommodate approximately 1,660 residents, add approximately 100,000 square feet of retail and office uses, a potential 10-acre site for the consolidation of County civic offices, and provide approximately 235 permanent jobs. Parks, open space, an elementary school, and a fire station are also planned to provide a comprehensively planned area that supports housing, jobs, and community amenities.

Thus, the proposed Project would directly induce growth through the provision of housing and indirectly through employment opportunities that may attract new residents to the area (who may or may not

reside within the WWSP site). Further, the expansion of public services in the area (schools, fire stations, utility infrastructures, and wastewater treatment plants) would remove obstacles to growth or accommodate future growth. Connections and infrastructure would be completed, as necessary, when individual projects are developed within the WWSP site. Additionally, the proposed Project would include the implementation of an internal circulation network and connections to the existing roadways.

While the proposed Project would substantially induce both direct and indirect growth, this growth is not unplanned. Conversely, the County has envisioned growth in this area, as is evident by the County General Plan Land Use Diagram (Figure 3-1) that designates the proposed Project site as a combination of RSC and RM. These designations are intended to support a variety of land uses, including larger-scale service centers with combinations of residences, commercial, industrial, and public service uses serving countywide needs, and lands suitable for higher-density single- or multi-family uses in areas set aside for primarily residential planned development under specific plans or master plans.

Moreover, the proposed Project would accommodate a portion of the County's required allocation of the RHNA, which is 377 units for the 2021-2029 RHNA cycle. With a buildout spanning 20-years, the WWSP would also facilitate compliance with future RHNA cycles.

Yet, as identified above, CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic effects are connected to physical environmental effects. As discussed throughout this DEIR, the proposed Project would involve changes to the environment that would be significant and unavoidable (see Sections 4.1, Aesthetics)

Similarly, the County General Plan EIR determined that impacts to population and housing are significant and unavoidable. The purpose of the General Plan is to accommodate the most recent population growth, housing, and employment projections in an orderly manner (AECOM, 2016). Yet, despite the acknowledged need for housing, there are no policies in the General Plan that would reduce the impacts associated with housing to accommodate population growth. Thus, the County's approach is to enact policies that would serve manage growth. Likewise, the proposed Project, abiding by the County's policies and implementing additional policies specific to the WWSP, would work to manage growth but would not be able to effectively mitigate the environmental impacts of growth to less than significant levels. Impacts in relation to growth are significant and unavoidable.

4.12.5 Cumulative Impacts

Impact 4.12-2

WOULD THE PROJECT RESULT IN IMPACTS TO POPULATION AND HOUSING IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	No Feasible Mitigation	Significant and Unavoidable

The scope for the cumulative impact analysis for population and housing considers the cumulative project list as identified in Chapter 4.0. Consistent with the General Plan, the County has worked to concentrate development in centers to maintain rural open space and the natural environment. Despite efforts, the building of housing as envisioned in the General Plan would adversely impact on the physical

environment, both directly through the provision of additional housing and indirectly removing obstacles to growth. The proposed Project along with cumulative projects listed in Chapter 4.0 would work to satisfy housing needs as identified in future RHNA cycles. Yet, the physical effects on the environment that would occur from the conversion of open space to a more suburban environment would be significant and unavoidable. The County's General Plan also views the County's open grasslands, rangelands, and oak woodlands as valuable scenic resources. The cumulative loss of these resources would involve changes to the environment that would be cumulatively significant and unavoidable (see Sections 4.1, Aesthetics).

4.12.6 Mitigation Measures

There are not feasible mitigation measures to reduce population and housing impacts to less than significant.

4.12.7 References

- Amador County Transportation Commission Staff. Amador County Transportation Plan. Available at: 2020-RTP Final.pdf (actc-amador.org). Accessed February 26, 2024.
- Denovo Group. 2023 Countywide 6th Cycle Housing Element Background Report Adoption Draft.

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- United State Census Bureau. Amador County Economic Characteristics: 2010-2022. Available at: DP03: Selected Census Bureau Table. Accessed February 28, 2024.

4.13 PUBLIC SERVICES

4.13.1 Introduction

This section describes existing public services in Amador County, including police protection, fire protection, schools, libraries, and recreation. This section sets forth demands for these services based on implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). Potential adverse physical impacts are evaluated based on the provision or need for new or physically altered governmental (police and fire stations, library facilities) or recreational facilities (parks) to meet acceptable response times, service ratios, or increase in usage of recreational facilities such that deterioration would occur from implementation of the proposed Project. See also Section 4.17, Wildfire for a discussion of wildfire hazards, wildland-urban interface, and evacuation and Section 4.4, Biological Resources for a discussion of open space preservation.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to public services include concerns regarding hiking/walking/bicycle trails and pedestrian/bicycle access; the new elementary school site within the Project area; and designated open space. The NOP and written and verbal comments received are included in **Appendix A**.

4.13.2 Regulatory Setting

Federal

There are no federal regulations related to public services or recreation that are relevant to the proposed Project.

State

California Occupational Safety and Health Administration

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration has 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.

Emergency Response/Evacuation Plans

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth requirements for managing multiagency and multijurisdictional responses to emergencies and natural disasters. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

California Fire Code

California Code of Regulations, Title 24, Part 9, incorporates adoption of the 2021 International Fire Code of the International Code Council with necessary California amendments. The California Fire Code (CFC) and Office of the State Fire Marshal provide regulations and guidance for local agencies in the

development and enforcement of fire safety standards. The CFC establishes minimum requirements that would provide a reasonable degree of safety from fire, panic, and explosion. The CFC applies to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure within the state. The CFC includes a mandate for automatic sprinkler systems in new buildings and structures, including floors of buildings where the fire area exceeds 5,000 square feet, has an occupant load of 100 or more, or is on a floor other than the level that leads directly outside. The CFC also includes requirements for fire flow, fire hydrant location, and fire department access.

California Education Code

The California Code of Regulations (CCR), Title 5, Education Code, governs the siting, design, and construction of new public schools within the state. An important consideration in the selection of school sites is safety. Certain health and safety requirements when siting schools are provided in Title 5, Article 2, Section (§) 14010, including proximity to airports, proximity to high-voltage power transmission lines, presence of toxic and hazardous substances, hazardous air emissions, and facilities within one-quarter mile, and proximity to railroads. As specified in Article 2, §14010, standards for school site selection are to be consistent with net acreage and enrollment requirements of the California Department of Education's (CDE's) 2000 School Site Analysis and Development Guidebook. The Guidebook includes a "rule of thumb" approach for school site size of 10 acres for an elementary school of 500 students, 25 acres for a middle school of 1,000 students, and 35-40 acres for a high school of 2,000 students. The assumption is that the land purchased for school sites will be in a ratio of approximately 2:1 between the developed grounds and the building area. If the availability of land is scarce and real estate prices are exorbitant, the site size may be reduced. CDE policy states that if a school site is less than the recommended acreage, the district shall demonstrate how the students will be provided with an adequate educational program, including physical education, as described in the district's adopted course of study. Through careful planning, a reduced project area school site could follow the recent trend of school downsizing and meet CDE criteria (CDE, 2000).

Senate Bill 50

The California Legislature passed Senate Bill (SB) 50 in 1998 to add Government Code Sections 65995.5-65995.7, which authorized school districts to impose fees on new residential and commercial construction in excess of mitigation fees authorized by Government Code §66000. School districts must meet a list of specific criteria, including the completion of an annual update of a School Facility Needs Analysis, to impose additional fees under the Government Code. Under the terms of this statute, payment of statutory or developer fees would mitigate in full the impacts of CEQA on school facilities associated with a qualifying project. The fees are assessed based upon the proposed square footage of the new or expanded residential or commercial development. Currently, the fees are \$4.79 per square foot of residential space and \$0.78 per square foot of commercial space (Office of Public School Construction, 2022).

SB 50 created the School Facility Program where eligible school districts may obtain state bond funds. State funding requires matching local funds, which generally come from developer fees. Although SB 50 states that payment of developer fees is deemed to be complete and full mitigation of the impacts of new development, fees and state funding do not necessarily fully fund new school facilities or improvements to existing facilities. Amador County Unified School District (ACUSD) currently levies

development impact fees on development within the District's boundaries consistent with SB 50 (\$4.79 per square foot of residential space and \$0.78 per square foot of commercial space).

Quimby Act

The Quimby Act (California Government Code §66477) was established by the California Legislature to preserve open space and parkland in rapidly urbanizing areas of the state. The Quimby Act allows cities and counties to establish requirements for new development to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two.

The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is greater than 3 acres per 1,000 residents, then the community may require dedication based on a standard of up to 5 acres per 1,000 persons residing in the subdivision. If the existing amount of parkland in a community is less than 3 acres per 1,000 residents, then the community may require dedication based on a standard of only 3 acres per 1,000 persons residing in the subdivision. The Quimby Act requires a city or county to adopt standards for recreational facilities in its General Plan if it is to adopt a parkland dedication or fee ordinance. It should be noted that the Quimby Act applies only to the acquisition of new parkland; it does not apply to the physical development of new park facilities or associated operations and maintenance costs. Therefore, the Quimby Act effectively preserves open space needed to develop park and recreation facilities, but it does not ensure the development of the land or the provision of park and recreation services to residents. In addition, the Quimby Act applies only to residential subdivisions. Nonresidential projects could contribute to the demand for park and recreation facilities without providing land or funding for such facilities. Quimby Act fees are collected by the local agency (park district, city, or county) in which the new residential development is located.

Local

Amador County General Plan

The Amador County 2016 General Plan includes the following goals and policies related to public services and recreation (Amador County, 2016b).

Land Use Element

- **Goal LU-3:** Ensure the provision of effective law enforcement, fire, emergency medical services, and animal control throughout the county.
- **Policy LU-3-1:** Ensure that effective public safety facilities, staffing, and equipment are provided to maintain service levels as the county's population and development change.
- **Policy LU-3.2:** Coordinate with fire districts to maintain and improve fire service levels in the county.
- **Goal LU-8:** Maintain high quality childcare facilities, schools, and libraries.
- **Policy LU-8.1:** Work with Amador County Unified School District (ACUSD) to maintain local schools as community gathering and recreation locations. Work toward joint use of school facilities for recreation and lifelong learning, wherever feasible and desirable.

- **Policy LU-8.3:** Work with ACUSD to ensure that new school facilities can be planned, financed, and constructed as necessary to serve current population and future development.
- **Policy LU-8.4:** Provide for County library facilities and services consistent with community needs.
- **Policy LU-8.5:** Ensure that new residential developments include onsite pedestrian facilities to provide safe routes to schools.
- **Goal LU-12:** Reduce fire risks to existing and future structures.
- **Policy LU-12.1:** Ensure that appropriate levels of emergency services, including fire protection, can be demonstrated for new development.
- **Policy LU-12.2:** Ensure that new roadways meet County standards for firefighting access. These standards include minimum width, surface, grade, radius, turnaround, turnout, and bridge standards, as well as limitations on one-way roads, dead-end roads, driveways, and gate entrances.
- **Policy LU-12.3:** Continue to ensure that the County's development code addresses evacuation and emergency vehicle access, water supplies and fire flow, fuel modification for defensible space, and home addressing and signing.

Open Space Element

- **Goal OS-1:** Ensure provision of park and recreational facilities serving residents and visitors.
- **Policy OS-1.2:** Support efforts by ACRA to provide a range of recreational facilities and programming to serve all county residents, including facilities and programs geared toward youth and seniors.
- **Goal OS-2:** Encourage the development and use of recreational and transportation trails within Amador County.
- **Policy OS-2.1:** Promote the development of a network of recreational trails for pedestrians, hikers, equestrians, and bicyclists. Where possible, promote the functional use of trails as transportation corridors.
- **Policy OS-2.2:** Link trails to existing infrastructure, including other recreation opportunities, parks, schools, neighborhoods, and commercial areas. Coordinate with surrounding counties and communities to connect trails to regional and statewide systems.

Safety Element

- **Goal S-2:** Reduce fire risks to current and future structures.
- Policy S-2.1: Consistent with state regulations and local code requirements, require new buildings to be constructed to provide fire-defensible spaces, separated from property lines and other buildings on the same or adjacent properties by adequate building setbacks clear of brush and fuel.

 Require new buildings in areas of moderate to high fire risk to be constructed using building materials and designs that increase fire resistance.
- **Policy S-2.2**: Guide new development to areas where adequate fire protection, roads, and water service are available to support fire response.
- **Goal S-3:** Maintain or improve fire response times.

Policy S-3.1: Support efforts by fire districts to obtain adequate funding to provide fire protection at desired levels. Implement impact fees if needed to provide adequate fire service.

Goal S-7: Respond appropriately and efficiently to natural or human-caused emergencies.

Amador County Recreation Agency Park and Recreation Master Plan

In October 2003, the Amador County Recreation Agency (ACRA) was formed as a joint powers authority (JPA) for the planning, financing, and operation of recreation programs and facilities in Amador County. ACRA's members include Amador County; the ACUSD; the cities of Amador, Ione, Jackson, Plymouth, and Sutter Creek; and the Volcano Community Services District (CSD). The 2016 Park Master Plan is an update to the previous 2006 Park Master Plan due to changes in population and economic growth projections, changes to the status of park and recreation facility improvements, the aging of the general population, and different community and government priorities. Thus, the 2016 Park Master Plan presents a reassessment of Amador County's current and future recreation needs (ACRA, 2016).

The Park Master Plan includes a classification and definition of park and recreational facilities (Neighborhood Parks, Community Parks Regional Parks, Natural/Historic Parks, and Special Use Facilities) and a list of existing park and recreation facilities. The Park Master Plan identifies a ratio of active parkland per 1,000 people and a park dedication requirement of 5 acres per 1,000 people or inlieu fees as allowed by the Quimby Ordinance. Although the active parkland ratio varies considerably between locations, overall, the County appears to be reasonably served due to the large amounts of acreage in Jackson and Ione (ACRA, 2016).

The Park Master Plan provides service standards for the different types of park facilities as listed in **Table 4.13-1, Park and Recreation Facility Service Area Standards.**

TABLE 4.13-1 PARK AND RECREATION FACILITY SERVICE AREA STANDARDS

PARK/FACILITY TYPE	CURRENT SIZE RANGE (ACRES)	RECOMMENDED SIZE RANGE (ACRES)	POPULATION SERVED	SERVICE AREA
Neighborhood	0.3 – 2.5	2-10	500-1000	Up to 0.5 mile
Community	6.5 – 71	10 - 100	1000 – 10,000	Up to 5 miles
Regional	89.7	10 – 100+	10,000 – 25,000	Countywide
Natural/Historic Area	0.5 – 25	0.5 – 25	Varies	Varies
Special Use	0.1 – 1.1	0.1 – 1+	Varies	Varies

Source: Amador County Recreation Area, Park, and Recreation Master Plan, 2016.

Amador County Recreation Agency Park Impact Fee Nexus Study

The Park Impact Fee Nexus Study was prepared in conjunction with the Park and Recreation Master Plan to establish the legal and policy basis for the imposition of updated park impact fees on new residential development for the cities of Amador City, Ione, Jackson, Plymouth, Sutter Creek, unincorporated Amador County, and regionally for ACRA. The Nexus Study recommended a maximum park impact fee for unincorporated Amador County of \$406 per single-family residential unit, \$364 per multi-family

residential unit, and for ACRA \$3,293 per single-family residential unit and \$3,085 per multi-family residential unit (ACRA, 2018).

Amador County Code

The Amador County Code, Chapter 15.04, Adoption of California Building Codes and Related Codes of the Amador County Code, §15.04.010 I, incorporates by reference the CFC, 2019 Edition, with the exception of §15.04.025, which amends the California Building Code to require an automatic fire sprinkler system to be installed in every R3 occupancy building and building area of 5,000 square feet or greater.

Chapter 7.72 of the Amador County Code provides for development fees for new development projects in the Amador Fire Protection District (AFPD), as determined by the AFPD per Resolution No. 21-180.

Chapter 7.86, Facilities Development Fee of the Amador County Code provides for the collection of a development fee to defray all or a portion of the cost of public facilities, including public services and public buildings, related to the development project, in the amount determined by resolution of the Board of Supervisors. Per §7.86.030, the required determinations include: the purpose and use of the fee; the relationship between the fee's use and the type of development project; the relationship between the need for the public facility and the type of development project; the relationship between the amount of the fee and the cost of the public facility attributable to the project.

Chapter 7.90, Park and Recreation Impact Fees of the Amador County Code provides for the collection of a development mitigation fee to mitigate park impacts caused by new residential development and to implement the goals and objectives of the Amador County Park and Recreation Master Plan. In-lieu fee credit for the construction of park and recreation facilities and service improvement is also allowed under certain conditions listed in §7.90.100.

Chapter 17.50, Recreation Dedication and Fees of the Amador County Code provides for the dedication of land or payment of fees for park and recreational purposes as a condition of approval of a tentative map or parcel map. The amount of land which may be required for dedication by a subdivider shall be equal to 3 acres per 1,000 population ratios, based on an average population density of 2.56 persons per dwelling unit.

Wicklow Way Specific Plan

The WWSP provides policies and design guidelines regarding parks and public services that are intended to be implemented upon approval. The WWSP is included in Appendix B of the Draft EIR.

Chapter 4.1 Land Use Policies

Park Policies

- **Policy 4.14:** Sufficient land shall be dedicated for parks to meet the County requirement of 5 acres of parks for every 1,000 residents.
- **Policy 4.15:** Parks shall be located throughout the WWSP Area and linked to residential neighborhoods via sidewalks, bike paths and trails, where appropriate. During the review of tentative maps or planned development applications, the County shall verify that parks are provided in the

appropriate locations and that they are accessible to residents via sidewalks, bike paths and trails.

Public/Quasi-Public Policies

- **Policy 4.17:** Land shall be reserved for public services and facilities, as required by Amador County. Public services and facilities sites shall be in the general locations as shown in WWSP Figure 4.1 Specific Plan Land Use Designations.
- Policy 4.18: Land shall be reserved for schools as required by the ACUSD in accordance with state law. The elementary school sites shall be in the general location shown in WWSP Figure 4.1 Specific Plan Land Use Designations and have comparable acreages as established in WWSP Table 4.1 Land Use Summary.

Chapter 7.1 Public Services Policies

Policy 7.1: Provide public services, including police, fire protection, schools, and other public services necessary to meet the needs of the WWSP area resident.

Park Policies

- **Policy 7.4:** Provide safe, attractive, and durable park and recreational facilities within the WWSP area.
- **Policy 7.5:** To promote walking and cycling, community and neighborhood parks shall be connected to the pedestrian and bicycle network.
- Policy 7.6: Park designs shall accommodate a variety of active and passive recreational facilities and activities that meet the needs of WWSP area residents of all ages, abilities, and special interest groups, including the disabled.
- **Policy 7.7:** All park plans shall include a lighting plan and all park lighting fixtures shall be shielded and energy efficient.
- **Policy 7.8**: Parks shall be designed and landscaped to provide shade, easy maintenance, water efficiency, and to accommodate a variety of recreational uses.
- **Policy 7.9**: Park land dedications are net areas in acres and exclude easements, wetlands, public rights-of-way and steep slopes or structures.

Appendix B Design Guidelines

Neighborhood Connectivity

 To minimize barriers between neighborhoods and to enhance connectivity, street patterns should be encouraged to allow connection points between neighboring subdivisions.

Guidelines for Edges along Parks and Open Space Areas

Where applicable, neighborhoods should provide access, for service and fire protection, to parks, schools, and natural creek corridors. Locked gates into subdivisions are not permitted where they would preclude public access to a park or public open space area.

- Where residential lots back up or side onto the open space areas, the use of open-style fencing is appropriate. However, where privacy, security, or noise attenuation is of concern (such as adjacent to public trails), solid fencing may be used between residential lots and open space (subject to Fire Department standards).
- Where residential lots back or side onto an open space area, multiple connection points shall be provided, via live-end cul-de-sacs, pedestrian pathways, or other means. Connection points should be provided.
- Pedestrian connection points to park and open space features should be easy to find within neighborhoods, along designated pedestrian/bicycle routes with high visibility to residents.

4.13.3 Environmental Setting

The section describes the existing conditions for police and fire protection, schools, libraries, and recreation, including facility/park location, staffing, equipment/resources, standards/ratios, and emergency response times. The proposed Project would include a 3-acre site for a new fire station and an 8.5-acre site for a new elementary school, two neighborhood parks (10 acres), 53.7 acres of open space, and a bikeway and pedestrian network.

Police Protection

The Amador County Sheriff's Office (Sheriff's Office) Patrol Bureau provides law enforcement and crime services to the residents of the unincorporated areas of Amador County, as well as the City of Plymouth and City of Amador City. The Patrol Bureau includes approximately 27 deputies who patrol approximately 592 square miles of land and 12 square miles of water. The Sheriff's Office serves a population of approximately 38,400 residents (Sheriff's Office, 2023). Based on this information, the officer-to-population ratio is 0.70 officers to 1,000 residents.

The California Highway Patrol provides traffic enforcement and accident investigation on County roads along State Highways 88 and 49. The nearest office is the Amador Area Office located at 301 Clinton Road, Jackson, CA (CHP 2023). The Sheriff's Office includes six patrol beats. Beats 10, 20, and 30 include portions of the County. Special assignment beats include Beat 40 which is East Bay Municipal Utility District (EBMUD) patrol; Beat 50, which is contract cities, and Beat 80, which is predominately USFS land. The Project site is within Beat 10. The Sheriff's Office is at 700 Court Street, approximately 3 miles north of the Project site (Sheriff's Office, 2023).

Fire Protection

The AFPD would provide fire protection, suppression, emergency medical services, and hazardous materials management to the WWSP area. There are seven stations that provide fire service. Fire Station 131, located in the City of Jackson and part of the Jackson Fire Department (JFD), is the closest fire station to the Project site and operates under an automatic aid agreement with the AFPD (Amador County, 2016a).

Local fire protection services in Amador County are provided by seven separate but cooperative, districts, which include AFPD, Ione Fire Department, JFD, Jackson Valley Fire Protection District, Lockwood Fire Protection District, Sutter Creek Fire Protection District, and Kirkwood Public Utilities District. These local fire protection districts are responsible for responding to structural fires and

providing emergency medical services within their service areas and are staffed by paid and volunteer personnel (Amador County, 2016). The proposed Project site is in the AFPD service area; however, Fire Station 131 in the City of Jackson and within the JFD service area is the closest fire station to the Project site (approximately 1.25 miles to the east).

AFPD's service area encompass approximately 491 square miles, constituting 85 percent of the unincorporated area in the County. AFPD serves the communities and surrounding areas of Amador Pines, Fiddletown, Pioneer, Pine Grove, Pine Acres, Volcano, Martell, Drytown, Willow Springs, River Pines, and the City of Plymouth (Amador County, 2016a; AFPD, 2023a). The AFPD is staffed by approximately 30 paid and 20 volunteer firefighters (AFPD, 2023a).

JFD provides fire protection services to approximately 45 square miles in the Jackson vicinity, including the City of Jackson, from two fire stations: Station 131 located at 175 Main Street and Station 132 located at 10600 Argonaut Drive. The JFD operates cooperatively with the AFPD under an automatic aid agreement. The JFD is composed of paid and volunteer firefighters (Amador County, 2016; JFD, 2023).

The Insurance Services Office (ISO) rating is the recognized classification for a fire department or district's ability to defend against major fires. According to the ISO, newly developing urban areas should have a fire station opened within 1.5 miles of all commercial development and 2.5 miles from all residential development when "build-out" exceeds 20 percent of the planning area. A rating of 10 generally indicates no protection, whereas an ISO rating of 1 indicates high firefighting capability. According to Amador County's Final Municipal Services Review 2018-2021, the AFPD achieved an ISO rating of 4/4 as of the last grading, significantly improved over the prior rating of 6/8 (Amador County, 2018). JFD received an ISO rating of 3 in the immediate vicinity of the stations (improved from 4 as of the 2017 Municipal Services Review) in 2023.

Emergency response time standards vary by level of urbanization of an area: the more urban an area; the faster a response is required. The response time guideline established by the California EMS Agency is five minutes in urban areas, 15 minutes in suburban or rural areas, and as quickly as possible in wilderness areas. The AFPD's primary response zone includes suburban, rural, and wilderness classifications. AFPD's median response time is 7.4 minutes and its 90th percentile response time is 11 minutes. (Amador County, 2016a).

The AFPD receives development impact fees to fund additional fire protection facilities and equipment to meet increased demand within the AFPD. Currently, the residential fee is \$1,400.06 per single family unit, \$1,272.78 for multi-family units, commercial is \$0.53 per square foot, retail is \$0.42 per square foot, and public/institutional is \$0.38 per square foot plus an additional cost of \$0.41 to \$0.99 per square foot, depending on risk categorization (Resolution No. 21-180, Exhibit B).

Schools

ACUSD provides K-12 education to students living in Amador County. As shown in **Table 4.13-2 Amador County Unified School District Enrollment and Capacity, 2021-2022**, the ACUSD currently operates 13 schools throughout Amador County including two high schools, one continuation high school, one independent study, two junior high schools, and six elementary schools, as well as a County Office of Education-operated opportunity school. ACUSD had a 2021–2022 school year enrollment of 3,999

students. Districtwide enrollment is projected to increase to 4,610 students (15 percent) by the 2031-2032 school year (ACUSD, 2022a).

TABLE 4.13-2 AMADOR COUNTY UNIFIED SCHOOL DISTRICT ENROLLMENT AND CAPACITY, 2021-2022

SCHOOL	LOCATION	GRADE	ENROLLMENT	CAPACITY
Amador County Community School	525 Independence Drive	7-12	20	Not available (assume 20 at minimum)
Amador High	330 Spanish Street, Sutter Creek	9-12	621	850
Argonaut High	501 Argonaut Lane, Jackson	9-12	544	899
Independence High	525 Independence Drive, Sutter Creek	10-12	60	54
Ione Elementary	415 South Ione Street, Ione	K-5	496	697
Ione Junior High	450 South Mill Street, Ione	6-8	371	753
Jackson Elementary	220 Church Street, Jackson	K-5	455	517
Jackson Junior High	747 Sutter Street, Jackson	6-8	356	461
North Star Academy	525 Independence Drive, Sutter Creek	K-12	116	Not available (assume 116 at minimum)
Pine Grove Elementary	20101 SR-88, Pine Grove	K-6	223	405
Pioneer Elementary	24625 SR-88, Pioneer	K-6	165	315
Plymouth Elementary	18601 Sherwood Street, Plymouth	K-6	186	337
Sutter Creek Elementary	340 Spanish Street, Sutter Creek	K-6	386	517
Total			3,999	5,941

Source: Amador County Unified School District (ACUSD) 2022a; ACUSD 2022b.

The closest schools to the proposed Project site are Jackson Elementary (1.3 miles to the east), Jackson Junior High School (1 mile to the east), and Argonaut High School (along the eastern boundary of the Project site).

On May 24, 2022, the ACUSD Board of Trustees approved a school consolidation plan that would combine the Amador and Argonaut High Schools on the Argonaut campus, consolidate the Ione Junior High and Jackson Junior High on the Jackson Junior High site, and convert Ione Junior High to Ione Elementary. However, funding of these projects through Measure H did not pass on November 8, 2022, and additional financing for the addition of a 10-classroom wing and student support facilities at Argonaut High School is being pursued by ACUSD utilizing Certificates of Participation and potential State funding through the School Facilities Program. As also identified by the ACUSD, most of the schools were built in the 1950s and 1960s and their critical systems and infrastructure are reaching the end of their useful life (ACPS, 2023).

Libraries

The Amador County Library (ACL) system provides books, magazines, newspapers, special collections, a law library, videos, DVDs, audio books, internet access, an adult literacy and life skills program, books at home delivery, and other services to the residents of Amador County (ACL, 2023) with an estimated population of 40,474 residents based on the 2020 census (DOF, 2020). The ACL system includes the Jackson Main Library, at 530 Sutter Street and four branch libraries: Ione Branch Library at 25 East Main Street; Pine Grove Branch Library at 19889 Highway 88; Pioneer Branch Library at 25070 Buckhorn Ridge Road; and Plymouth Branch Library at 9369 Main Street. The Jackson Main Library is the closest library to the proposed Project site, approximately 1 mile to the east.

Recreation

The ACRA provides parkland planning, financing, and operation of recreation programs and facilities in Amador County. ACRA's members are Amador County; the ACUSD; the cities of Amador City, Ione, Jackson, Plymouth, and Sutter Creek; and the Volcano CSD (ACRA, 2016).

There are currently 27 public parks and 10 recreation facilities owned, operated, and/or maintained by ACRA, the incorporated cities, the County, or local communities. Additionally, the ACUSD owns 13 schools that have recreation facilities. Public recreation facilities include neighborhood, community, and regional parks, as well as a variety of natural and historic area parks, and special use facilities. Of the 491 acres of parkland, approximately 192 acres are identified as active uses such as sports fields and group picnic areas, as summarized in Table 18 of the Parks and Recreation Master Plan. This equates to a ratio of about 5.7 acres per 1,000 County residents (based on 2015 population). The closest park to the proposed Project site is Detert Park, a community park located approximately one mile to the east in City of Jackson.

ACRA has adopted a policy requiring the provision of 5 acres of parkland for every 1,000 residents. The County receives funding for parks through many sources. Primary funding is through development impact fees under the Quimby Act and in-lieu fees. Development impact fees, as of 2018, are \$3,699 per unit for single-family residential (\$406 for neighborhood and community parks and \$3,293 for regional parks) and \$3,449 per unit for multi-family residential (\$364 for neighborhood and community parks and \$3,085 for regional parks) in the unincorporated County (ACRA, 2018). In-lieu fees are based on fair market value of land needed to meet the same ratio of persons to acreage of parkland. Other sources of revenue include General Fund monies, facility rental and program fees, grants, donations, member agency contributions, planned giving, sponsorships, special assessments, and public/private sponsorships. These fees are to be used to acquire land for parks or for expansion of existing parks and to pay for improvements to new parks or expansion of facilities at existing parks (ACRA, 2016).

4.13.4 Impacts

Methodology

Sources reviewed to prepare this analysis include the Amador County General Plan, the Recreation Master Plan, the Facilities Utilization Master Plan, and information from Amador County, County Sheriff, AFPD, ACUSD, and Amador County Library. The analysis addresses whether the proposed Project would require construction or expansion of additional facilities to maintain acceptable service ratios, response times, or other performance objectives.

The analysis also assumes that the proposed Project would be consistent with the City's General Plan goals and policies, emergency evacuation plans, the CFC, SB 50, and other applicable regulations; therefore, such policies and standards would not specifically be identified as mitigation but are discussed in the impact analysis.

Police and Fire Protection

This analysis evaluates the ability of the County Sheriff and AFPD to serve the proposed Project through a qualitative review of project characteristics and the adequacy of existing service levels.

Schools

To determine the proposed Project's impact on school facilities, student generation rates were obtained from the ACUSD's 2022 School Fee Justification Study, shown in **Table 4.13-3, Student Generation Rates**. Based on these generation rates and the number of residential units proposed, this analysis estimates that the proposed Project would generate approximately 208 elementary school students, 70 junior high school students, and 88 high school students, as shown in **Table 4.13-4 Proposed Project - Student Generation**. This would result in a total increase of 366 students.

TABLE 4.13-3 STUDENT GENERATION RATES

SCHOOL LEVEL	LOW DENSITY RESIDENTIAL / MEDIUM DENSITY RESIDENTIAL	HIGH DENSITY RESIDENTIAL
Elementary School (K-5)	0.362	0.1365
Junior High School (6-8)	0.1247	0.0407
High School (9-12)	0.161	0.036

Source: Amador County Unified School District 2022.

TABLE 4.13-4 PROPOSED PROJECT - STUDENT GENERATION

SCHOOL LEVEL	STUDENT GENERATION FROM LOW / MEDIUM DENSITY DWELLING UNITS (500 UNITS)	STUDENT GENERATION FROM HIGH- DENSITY DWELLING UNITS (200 UNITS)	TOTAL STUDENTS
Elementary School (K-5)	181	27.3	208
Junior High School (6-8)	62.35	8.14	70
High School (9-12)	80.5	7.2	88
Total	323.85	42.64	366

Source: Amador County Unified School District 2022.

Libraries

This analysis evaluates the ability of the ACL system to serve the proposed Project through a qualitative review of the capacity of the library system to serve this increase in population.

Recreation

To determine potential impacts to parks, ACRA has adopted a policy requiring the provision of 5 acres of parkland for every 1,000 residents, consistent with the Quimby Act. The WWSP proposes approximately 1,660 new residents. Using ACRA's ratio of 5.0 acres of parkland per 1,000 residents the Project would require 8.3 acres of parks.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on public services and recreation is significant if implementation of the proposed Project would do any of the following:

Public Services:

- 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:
 - Police protection
 - Fire protection
 - o Schools
 - Parks
 - Other public facilities

Recreation:

- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Analysis

Public Services

Impact 4.13-1

WOULD THE PROJECT RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF NEW OR PHYSICALLY ALTERED GOVERNMENTAL FACILITIES, NEED FOR NEW OR PHYSICALLY ALTERED GOVERNMENT 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?

OTHER FACILITIES?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM PS-1	Less than Significant

Fire Protection

New residential dwellings and commercial uses would result in increased demand for fire protection facilities and services within the AFPD service area, requiring the need for additional staff and equipment to maintain an adequate level of service (AFPD currently has an ISO rating of 6 for areas within 1,000 feet of fire hydrants and 8 for other areas).

The proposed Project would include a 3-acre site for a new fire station per Policy 4.17 and as shown on WWSP Figure 4-1. In addition, Policy 7.1 requires the provision of fire protection necessary to meet the needs of each WWSP area resident. Furthermore, future development projects within the WWSP area would be required to pay development impact fees to fund additional fire protection facilities and equipment. The phasing and construction of the new fire station would be determined in consultation with the AFPD and JFD. Physical impacts associated with the construction of the new fire station are evaluated at a programmatic level throughout this DEIR. Impacts of individual development projects within the WWSP would be evaluated through project specific CEQA review, including conformance with the General Plan and WWSP policies, AFPD requirements, and payment of development impact fees. Furthermore, a Development Agreement for individual projects would include the phasing and financing of public services, as specified under Mitigation Measure PS-1. However, since the proposed Project includes a fire station as a project feature, impacts would be less than significant.

Police Protection

New residents and employees generated by development under the proposed Project would increase the demand for new or expanded police service levels in the Sheriff's Office service area, resulting in the need for additional staff and equipment to maintain an adequate level of service. Development under the proposed Project would result in an increase of approximately 1,660 residents. The Sheriff's Office does not have an adopted staffing goal of the number of officers to County residents. In the absence of

such standards and to maintain the Sheriff's Office current average service level of 0.70 officers per 1,000 residents, the County would require one additional officer to maintain this service level.

The Sheriff's Office does not have the capacity to serve planned development at the current average service level. The main station, communications center, and jail in Jackson is outdated, overcrowded, and functioning at maximum capacity with current demand. However, the addition of one officer is unlikely to require the construction of new or expanded facilities but would contribute to existing demands on Sheriff's personnel. In addition, Policy 7.1 of the WWSP requires the provision of adequate police service to meet the needs of Plan Ares residents. The County currently has a jail expansion project under construction. The new 14,000 – square foot, two-story facility will add 40 beds in 20 cells, and includes dayrooms, program treatment rooms, exam rooms, and additional recreation yards.

Individual development projects within the proposed Project area would be subject to project-specific CEQA review, including conformance with the General Plan and WWSP and require additional mitigation measures, as necessary. Furthermore, a Development Agreement for individual projects would include the phasing and financing of public services, as specified under Mitigation Measure PS-1. Therefore, impacts would be less than significant with mitigation.

Schools

Implementation of the proposed Project would increase the demand for public school services in the ACUSD, resulting in the need for new or expanded school facilities and additional staff and equipment to maintain service standards. Based on the student generation rates presented in **Table 4.13-3** and the number of dwelling units proposed (500 Low/Medium Density units and 200 High Density units) the proposed Project would generate approximately 366 students This would be approximately 208 elementary school students, 70 junior high school students, and 88 high school students.

The Project would include an 8.5-acre elementary school site per Policy 4.18 and as shown on WWSP Figure 4.1 and listed in WWSP Table 4.1. In addition, Policy 7.1 requires the provision of schools necessary to meet the needs of WWSP area residents. Facility planning and timing of the development of the elementary school site would be determined by the ACUSD based on phasing and specific development projects and would be subject to additional CEQA review. Prior to development of the school site, elementary-age students within the proposed Project area would attend offsite schools. The closest elementary school is Jackson Elementary, 1.3 miles to the east. The closest middle school is Jackson Junior High School (1.3 miles to the east), and the closest high school is Argonaut High School (along the eastern edge of the Project site). Based on the data in **Table 4.13-4**, ACUSD would have available capacity to accommodate an additional 877 elementary school students, 487 middle school students, and 578 high school students. The new students would be fully accommodated at Argonaut High and Jackson Junior High; elementary school students would be accommodated at the new elementary school included as part of the proposed Project.

New development would be required to pay ACUSD school impact fees. Under SB 50, the ACUSD is limited to charging the statutorily created fee to offset impacts resulting from proposed development and does not provide for remediation of existing deficiencies in school services. This fee is typically insufficient to fund 100 percent of new school facility construction and operation; however, the California Legislature has declared that the school impact fee is deemed to be full and adequate

mitigation under CEQA (California Government Code §65996). Therefore, this impact would be less than significant.

Parks

The Project proposes the addition of up to 700 residential units and 26 acres of resident-serving commercial space with up to approximately 1,660 residents, which would increase the demand for use of existing public parks. The ACRA Park and Recreation Master Plan established population-based park standards for neighborhood and community parks, including three to five acres of park land per 1,000 residents (ACRA, 2016). As of 2015, the County provides 191.9 existing active park acres for the current population of 39,837 resulting in 4.8 active parkland acres per 1000 people, thus, an adequate amount of parkland currently exists. Therefore, this impact would be less than significant.

Other Facilities (Libraries)

The approximately 1,660 new residents generated by development of the proposed Project would incrementally increase the demand for library services within the ACL system. No library service standard has been identified in the General Plan or the ACL based on population served or other standards, to determine the need for additional library facilities and services. The ACL includes five libraries that serve the residents of Amador County with an estimated population of 40,474 residents (DOF, 2020). Generally, the existing libraries are adequate to serve the current population, including the Jackson Main library located approximately 1 mile to the east. Therefore, the added Project residents would not require the construction of new or expanded facilities. Furthermore, Policy 7.1 of the WWSP requires the provision of adequate public services to meet the needs of Plan Area residents. Therefore, impacts on library services would be less than significant.

Recreation

Impact 4.13-2

WOULD THE PROJECT 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?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant None Required Less than Significant				

Development under the Project could result in an increase of approximately 1,660 residents within the planning area, which would incrementally increase the use of existing park facilities, in particular regional parks. ACRA provides parkland planning, financing, and operation of recreation programs and facilities in Amador County. These existing parks and facilities are described above. As stated in ACRA's Park and Recreation Master Plan, the County's active parkland acreage to population ratio is 5.7 acres per 1,000 residents in Amador County based on a 2015 population of 36,312 residents (ACRA, 2016). ACRA has adopted a policy requiring the provision of five acres of parkland and/or payment of development impact fees. In the unincorporated County, these fees are currently assessed at \$3,699 per unit for single-family residential and \$3,449 per unit for multi-family and are used to acquire parkland, or expand, or improve existing neighborhood, community, and regional parks. As previously stated, based on the number of single-family and multi-family units proposed, the proposed Project would require 8.3 acres of parks.

The proposed Project would provide 10 acres of neighborhood parks at two centrally located sites as shown on Figure 2-7. As conceptually proposed, a 5-acre park would be provided during Phase A and a 7-acre park would be provided during Phase B. The park design would meet the standards for neighborhood parks specified in the ACRA's Park and Recreation Master Plan. In addition, the proposed Project would include a comprehensive system of bicycle and pedestrian linkages and 53.7 acres of open space areas to preserve environmentally sensitive areas and allow passive recreation use. Furthermore, the WWSP includes a number of park policies, including Policy 4.14, which requires park dedication to meet the County requirement of 5 acres of parks for every 1,000 residents; Policy 4.15, which requires linking parks to residential neighborhoods and the County verifying the location and accessibility of the parks; Policy 4.17, which states that land shall be reserved for public facilities as generally shown on Figure 4-1; and Park Policies 7.4 through 7.9 which include requirements for park design, park lighting, park landscaping, and park dedication.

The increase in population associated with the proposed Project would not create a significant impact on ACRAs parks outside of the Project area such that there would be a substantial deterioration of existing parks, as the new neighborhood parks would be accessible to all Project residents. Therefore, impacts on existing parks would be less than significant.

Impact 4.13-3

DOES THE PROJECT INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES WHICH MIGHT HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT?					
Significance Before Mitigation Measures Significance After Mitigation					
Less than Significant None Required Less than Significant					

As described under Impact 4.13-2, the Project would include 10 acres of neighborhood parks, pedestrian, and bicycle connections, and 53.7 acres of passive open space areas. The proposed Project's 10 acres of parks exceeds the ACRA's requirement of 8.3 acres of parks. Impacts of the proposed recreation and open space uses are evaluated in this DEIR as a proposed Project component. Project-level Park design would be evaluated and mitigated through project-specific CEQA review by the County. Therefore, impacts of the proposed recreational facilities would be less than significant.

4.13.5 Cumulative Impacts

Impact 4.13-4

WOULD THE PROJECT RESULT IN IMPACTS TO PUBLIC SERVICES AND RECREATION IN THE CUMULATIVE CONDITION?				
Significance Before Mitigation Measures Significance After Mitigation				
Significant MM PS-1 Less than Significant				

Chapter 4.0 describes CEQA requirements regarding cumulative analyses, the approach used in this DEIR, and includes a list of reasonably foreseeable, planned, and programed projects in the area. The proposed Project, in conjunction with the listed development projects, would contribute to increased demand on the public services described above. This increased demand has the potential to have a significant impact on the environment. Thus, implementation of the proposed Project would contribute

to a significant impact on the environment under the cumulative condition. However, with implementation of MM PS-1 and the inclusion of various proposed Project features such as a new school, parks, and fire station, passive open space, the proposed Project's contribution to the cumulative condition would be mitigated to a less than significant level.

4.13.6 Mitigation Measures

MM PS-1 Development Agreements

To evaluate and maintain the effectiveness of County services, individual development projects within the WWSP shall be subject to review and approval by Amador County, Sheriff's Department and AFPD for consistency with the General Plan, WWSP, and subject to subsequent CEQA review, permits and entitlements. These individual development projects shall be subject to a Development Agreement to outline financing and phasing of necessary public services, in consultation with service providers. A separate Community Facilities District may be established to fund government services which will directly benefit residents of the proposed Project including police, fire, library, and other government services.

4.13.7 References

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4.14 TRANSPORTATION

4.14.1 Introduction

This section of the DEIR evaluates potential impacts on the regional transportation system resulting from implementation of the Wicklow Way Specific Plan (WWSP or proposed Project). The analysis is based, in part, on a Transportation Analysis (TA) prepared by Abrams Associates (Abrams) for the Project, which is included as **Appendix F** of this DEIR.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to transportation include concerns generally regarding the number and location of access and emergency access points (ingress and egress), increased traffic, cumulative impacts, the format and content of the traffic analysis, and impacts to the highway system. The NOP and written and verbal comments received are included in **Appendix A**.

4.14.2 Regulatory Setting

Federal

There are no federal transportation laws or regulations applicable to the proposed Project.

State

Senate Bill 743

Senate Bill (SB) 743, codified in PRC Section 21099 on September 27, 2013, required changes to the guidelines implementing CEQA related to the analysis of transportation impacts. Specifically, SB 743 required the California Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative criterion to level of service (LOS) for evaluating transportation impacts. This alternative criterion also addresses reduction of greenhouse gas (GHG) emissions, development of multimodal transportation networks, and a diversity of land uses. To that end, the OPR published its *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018, and the California Natural Resources Agency (CNRA) certified and adopted changes to the CEQA Guidelines that identified vehicle miles traveled (VMT) as the appropriate metric to evaluate a project's transportation impacts. With the CNRA's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, no longer provides the basis for determining a significant transportation impact.

Assembly Bill 1358: The California Complete Streets Act

The California Complete Streets Act (AB 1358) requires general plan circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must "meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the general plan." Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate, including walking, biking, car travel, and transit. AB 1358 also requires circulation elements to consider the diverse users of the transportation system, including children, adults, seniors, and the disabled.

Local

Amador County Regional Transportation Plan

The Amador County Transportation Commission (ACTC) is the State-designated Regional Transportation Planning Agency and Local Transportation Commission serving the Amador Region. The Amador region includes Amador County and the five incorporated cities: Amador City, Ione, Jackson, Plymouth, and Sutter Creek. The ACTC is responsible for implementing the Regional Transportation Plan (RTP). The purpose of the RTP is to identify the region's short- and long-range transportation needs and to establish policies, programs, and projects designed to meet those needs. State law requires that the RTP be updated every five years. The ACTC is in the process of updating the currently adopted 2020 RTP. A decision was made during the 2020 RTP update that the RTP would not serve as the County's General Plan circulation element; as such, the goals, policies, and objectives serve as recommendations rather than directives. Therefore, the following goals, policies, and objectives provide guidance for the Project:

Goal 1A:

Implement improvements to all modes of transportation needed to reduce congestion and improve mobility; optimize connectivity; enhance safety; preserve existing infrastructure, communities, and the environment; and support socio-economic development throughout the region.

Goal 1B:

Integrate improvements to all transportation modes in a way that supports Amador County's economic development and enhances the integrity of its rural character, communities, and environment.

Policy 2C:

ACTC recommends that the cities and the County require any new development within their jurisdiction that may have potentially significant traffic impacts on the Regional Transportation System, to be fully analyzed by a project-specific Traffic Impact Study or by a Traffic Impact Study preformed for a General Plan Circulation Element, provided that it is adequate and accurate in detail.

Policy 2F:

ACTC recommends that the cities and the County require any new developments within their jurisdictions to fully mitigate their potential traffic impacts based on the categories below:

- 1. New development should pay for the full cost of any improvements that it would create the need for and that would not otherwise be required to maintain public safety or achieve the RTPs adopted Level of Service goals.
- 2. Should new development projects trigger the need for improvements to existing facilities prior to project occupancy. The development should construct the respective improvements in order to maintain public safety. The cities and county should determine if the new development may be eligible for reimbursement if the cost of implementing the improvements exceeds the project's required mitigation.
- 3. New development should pay the Regional Traffic Mitigation Fee (RTMF) if it would contribute an impact on any Tier 1 improvement in the RTP.
- 4. New development should pay its "fair share" toward the cost of any "Tier II" improvements in the RTP that it would contribute an impact to. For such cases, any "fair-share" payments required of new development should be directly proportional to the traffic impacts that it creates, capacity it consumes, and/or additional delay it creates.
- 5. Traffic impact mitigations that are inconsistent with the RTP of city/county General Plan

Circulation Elements are not recommended. Likewise, traffic impact mitigations for highly constrained locations that are infeasible to implement are not recommended. Therefore, new development that would either create or contribute to the need for an improvement that is inconsistent of infeasible should pay its "fair share" of an alternative mitigation measure that can help minimize or mitigate the traffic impacts it creates at such locations. In such cases, any "fair share" payments required of new development should be directly proportional to the capacity it consumes and/or additional delay it creates.

Policy 2H: The ACTC recommends that the cities and the County require new development to plan their

encroachments, build required frontage improvements, and dedicate sufficient right-of-way

needed to accommodate the RTP's planned improvements.

Goal 6A: Improve opportunities for bicycle and pedestrian travel by providing a safe, functional, and

convenient network of non-motorized transportation facilities throughout the region.

Goal 6B: Fulfill the mobility needs of pedestrians and bicyclists in a manner that reduces

pedestrian/bicycle/vehicle safety conflicts, improves multi-modal connectivity, and enhances

community character.

Amador Countywide Pedestrian and Bicycle Plan

The Amador Countywide Pedestrian and Bicycle Plan serves two purposes: (1) to be the foundation for the pedestrian and bicycle component of the RTP and (2) to organize high-priority pedestrian and bicycle projects among Amador County's member agencies to successfully compete for funding from federal, state, and regional sources. This plan aims to increase the chance that priority projects will obtain funding from the California Transportation Commission's Active Transportation Program, the primary construction funding source for pedestrian and bicycle projects.

Amador County General Plan

The following goals and policies of the Amador County General Plan Circulation and Mobility Element are applicable to the proposed Project:

Roadway Circulation

Policy CM-1.4: Encourage greater connectivity on local roads and improve the connections between

unincorporated communities. Ensure multiple routes are available between communities

wherever possible.

Goal CM-2: Maintain a safe, efficient, and comprehensive traffic circulation system.

Policy CM-2.4: Maintain a Traffic Impact Fee program whereby to encourage that new transportation needs

(including bicycle and pedestrian needs) generated by new development are paid for by the development on a fair-share basis. Increased roadway capacity should be funded through

developer fees to the extent legally possible.

Alternative Transportation

Policy CM-3.4: Consider transportation needs in the context of new development proposals. Promote land use

patterns that place residents near activity centers and essential services to reduce the need for

frequent automobile travel.

The following policy of the Amador County General Plan Conservation Element is applicable to the proposed Project:

Policy C-10.3: Guide new development to areas where pedestrian and bicycle access to existing activity centers is possible in order to reduce the need for automobile travel and VMT.

The following goal and policy of the Amador County General Plan Noise Element are applicable to the proposed Project:

- **Goal N-2:** Minimize noise conflicts from transportation sources.
- **Policy N-2.4:** Encourage the use of alternative transportation modes such as walking, bicycling, and mass transit to minimize traffic noise.

Wicklow Way Specific Plan

The following policies of the Wicklow Way Specific Plan are applicable to the proposed Project:

- **Policy 6.1:** Consistent with the California Completed Streets Act of 2008 and the Sustainable Communities and Climate Protection Act (SB 375), create a safe and efficient circulation system for all modes of travel.
- **Policy 6.2:** Encourage non-vehicular travel options by providing sidewalks, trails, and bikeway connectivity between neighborhoods and destination points.
- Policy 6.3: The roadway network in the Plan Area shall be organized in a grid-like pattern of streets and blocks, except where topography and natural features make it infeasible, for the majority of the Plan Area to create neighborhoods that encourage walking, biking, public transit, and other alternative modes of transportation.
- Policy 6.4: Circulation within the Plan Area shall be ADA (Americans with Disabilities Act) accessible and minimize barriers to access by pedestrians, the disabled, seniors, and bicyclists. Physical barriers such as walls, berms, and landscaping that separate residential and nonresidential uses and impede bicycle or pedestrian access or circulation shall be minimized.
- Policy 6.5: Traffic calming measures shall be utilized, where appropriate, to minimize neighborhood cutthrough traffic and excessive speeds in residential neighborhoods. Roundabouts and traffic circles shall be considered on low-volume neighborhood streets as an alternative to four-way stops or where traffic signals will be required at project build-out.

4.14.3 Environmental Setting

Roadway Network

State Route 88 - State Route 88 (SR-88) begins in San Joaquin County at SR-99 and terminates at the California/Nevada border. Near the north side of the proposed Project site, SR-88 is a two-lane conventional highway classified as a principal arterial. The posted speed limit is 55 mph. SR-88 also has paved shoulders on each side.

Wicklow Way - Wicklow Way is a four-lane thoroughfare that begins at SR-88 on the Project's north side and continues south towards the proposed Project site, approximately 0.3 miles that terminates just past the existing Walmart. As part of the proposed Project, Wicklow Way would be extended through the Project area to connect with Stony Creek Road.

Stony Creek Road – Stony Creek Road is a two-lane roadway that begins at Argonaut Lane in the City of Jackson, continues southwest past Pardee Reservoir, and terminates at Buena Vista Road. This road is generally on the southeast and south sides of the Project site.

Pedestrian and Bicycle Facilities

Pedestrian and bicycle activities are limited in the WWSP area. There are no sidewalks along SR-88 to accommodate pedestrian activity; there is solid striping and pavement between the roadway and shoulder that allows for bicycle traffic. There are sidewalks along a portion of Wicklow Way, but not the full extent of the roadway. There are no bike lanes or shoulders that would allow for bicycle traffic to be separated from vehicle traffic. Along Stony Creek Road, there is a sidewalk along the eastern portion of the road, as well as striping and markings to separate bicycle traffic from vehicular traffic.

Transit Service

Amador Transit provides bus service to the area. Route 5, Sutter Creek-Jackson Shuttles A and B serve the proposed Project area, with transit stops both along Wicklow Way near Walmart and near Argonaut High School. Route 5 follows a circular route encompassing 37 stops. It starts at the Sutter Hill Transit Center, providing a 1-hour frequency of service and operating between 9:05 a.m. and 5:03 p.m. on weekdays.

4.14.4 Impacts

Method of Analysis

- According to the California Legislature, "New methodologies under the California Environmental Quality Act [were] needed for evaluating transportation impacts that are better able to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations."
- As a result, agencies analyzing the transportation impacts of projects now look at VMT metrics. Specifically, the OPR Technical Advisory provides that, generally, VMT is the most appropriate measure for determining transportation impacts. For the purposes of this section, VMT refers to the amount and distance of automobile travel attributable to the proposed Project. Other relevant considerations may include the effects of the proposed Project on transit and nonmotorized travel.
- The OPR Technical Advisory also provides agencies with recommendations on VMT screening thresholds. Screening thresholds are used to identify projects that are anticipated to result in less than significant transportation impacts without requiring a detailed transportation study. In general, the OPR screening thresholds screen out projects based on project size, maps, transit availability, and provision of affordable housing. In the absence of adopted County screening thresholds, the OPR guidance serves as the foundation for determining if the Project is screened out for further analysis. In relation to the proposed Project, the following screening threshold was applied:
- Screening maps: maps created with VMT data can illustrate areas that are currently below threshold VMT and would likely result in similar levels of VMT with new development. They can be used to screen residential and office projects (low generating VMT areas).

As noted above, Abrams prepared the Transportation Analysis (TA) for the proposed Project (Appendix F). In addition to evaluating the VMT, as discussed above, Abrams conducted an LOS analysis for informational purposes only. Intersection turning movement volumes, lane configurations, and traffic control were used to calculate the LOS at five study intersections for the AM and PM peak hours. Although LOS is a non-CEQA issue, for purposes of disclosure, a discussion is included below in Section 4.14.7. For additional information on the LOS calculations, please refer to Appendix F.

The analysis of potential impacts related to transit and non-motorized transportation resulting in implementation of the proposed Project is based on consistency with the applicable goals and policies of plans discussed in **Section 14.4.2**, **Regulatory Setting**.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on transportation is significant if implementation of the proposed Project would do any of the following:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Impact Analysis

Impact 4.14-1

WOULD THE PROJECT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN?					
Significance Before Mitigation Measures Significance After Mitigation					
Less than Significant None Required. Less than Significant					

Regional Transportation Plan

The RTP includes goals and policies aimed at reducing congestion, improving mobility, connectivity, and safety, preserving existing infrastructure, communities, and the environment, and supporting economic development. Further, the RTP includes policies, programs, and projects improving pedestrian and bicycling conditions that promote safety and connectivity. Since the proposed Project is a specific plan, the internal circulation system would be defined as part of and concurrent with new development applications. At that time, the circulation system would be reviewed in accordance with applicable regulations, guidelines, and policies.

Generally, the circulation system for the proposed Project includes a hierarchy of arterial and collector roadways and other improvements designed to connect with existing and planned development and transportation facilities. These roadways are designed to accommodate future anticipated travel

demands. Foremost, the Project would extend Wicklow Way from its northern terminus near Walmart to Stony Creek Road in the south. This would provide connectivity from SR-88 to Stony Creek Road and ease reliance on the existing north-south connectors, such as Argonaut Lane. Further, this roadway would provide a linkage from the City of Jackson to the commercial land uses north of the Project site. The design of the supporting backbone roadway system creates a smaller neighborhood network of local roadways that would provide main connections into new residential subdivisions. The primary residential loop road would provide circulation throughout the Project area to connect residential areas to the collector street, parks, open space, and the future school. Local streets may be public or private, with private roadways supplementing the public roadway system.

The Project's system of pedestrian and bike paths adds to the mix of transportation choices available for residents. Off-street Class I and Class IA bike paths would be provided in landscape corridors and open-space areas. On-street Class II bike lanes would be provided on public streets⁸.

The extension of Wicklow Way, in conjunction with the overall circulation strategies of the proposed Project, is consistent with Goals 1A and 1B of the RTP, as collectively, they would reduce congestion and improve mobility, optimize connectivity, and support socioeconomic development throughout the region. Moreover, in accordance with Policy 2F of the RTP, Project applicants would be responsible for shouldering the financial burden for the roadway improvements to support development. The proposed Project would not conflict with the goals and policies of the RTP. No impact would occur.

Amador Countywide Pedestrian and Bicycle Plan

The Amador Countywide Pedestrian and Bicycle Plan provides a framework for pedestrian and bicycle facilities. This framework is implemented at the programmatic level, and there are no applicable policies specific to the proposed Project. Conversely, the proposed Project currently has broad strategies to include linkages among land uses and policies that promote connectivity. The proposed Project's system of pedestrian and bike paths and adds to the mix of transportation choices available for residents. As noted above, off-street bike paths are included in landscape corridors and open-space areas, and onstreet bike lanes are provided. The system of paths is enhanced by street design standards that place priority on pedestrian and bicyclist comfort and safety.

At the time that individual development applications are proposed, they will be reviewed for compliance with the WWSP and the Amador Countywide Pedestrian and Bicycle Plan. The proposed Project would not conflict with a program, plan, ordinance, or policy addressing bicycle and pedestrian facilities. No impact would occur.

Amador County General Plan

The Amador County General Plan Circulation Element contains goals, policies, and implementation programs that establish the county's circulation system to accommodate all forms of transportation. Collectively, the goals, policies, and implementation program are intended to ensure transportation

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⁸ Class I bike lanes provide a completely separated right of way for the exclusive use of bicycles and pedestrians, with crossflow by motorists minimized. Class II bike land provides a striped lane for one-way bike travel on a street or highway.

connectivity between incorporated cities, within existing and new development, and in areas such as the WWSP site.

Policy CM 1-4 promotes improved connections and encourages the provision of multiple routes between communities wherever possible. As discussed above, the proposed Project site circulation would be designed as individual developments are proposed within the WWSP area. Additionally, the WWSP states that the backbone roadway system includes a combination of arterial and collector streets to provide connections from existing and planned roadways adjacent to the WWSP area. These roadways are designed to accommodate anticipated future local and area traffic demands. The design of the backbone roadway system supports the creation of a smaller neighborhood network of local roadways.

Prior to project approvals, circulation plans would be reviewed for compliance with applicable goals and policies of the General Plan. As needed, modifications to individual projects would be implemented to maintain adherence. The proposed Project's current site plan includes the extension of Wicklow Way through the site to Stony Creek Road, which would create a north-south connector between the City of Jackson and the commercial uses north of the site. This is consistent with Policy CM 1-4, which encourages greater connectivity in unincorporated areas.

Additionally, Policy CM 3-4 states that development proposals shall consider transportation needs and promote land use patterns that place residents near activity centers and essential services to reduce the need for frequent automobile travel. As shown in **Figure 2-3**, proposed land uses within the WWSP are situated to encourage various forms of mobility, such as walking and biking, between commercial and residential uses or residential and civic center and open space uses.

The Amador County General Plan Conservation and Noise Elements also provide guidance in relation to transportation. The intent of these goals and policies is to design circulation systems to minimize environmental impacts on air quality and noise, which are further discussed in Sections 4.3 Air Quality and 4.11 Noise, respectively. The proposed Project is consistent with these policies, and proposed land uses have been situated to promote alternative modes of transportation among designations, which would subsequently reduce automobile dependency and therefore impacts on air quality and noise.

The Project would not conflict with the goals and policies of the Amador County General Plan. No impact would occur.

Impact 4.14-2

WOULD THE PROJECT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B)?				
Significance Before Mitigation Measures Significance After Mitigation				
Less than Significant No Mitigation Required Less than Significant				

As discussed in Section 4.14.4, CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts and states that generally, VMT is the most appropriate measure for evaluating transportation impacts. VMT refers to the amount and distance of automobile

travel attributable to a project. The Project VMT analysis was conducted using the methodologies and thresholds contained in the OPR Technical Advisory.

The Project was assessed in relation to applicable screening thresholds identified in Section 4.14.4. Specifically, the County in accordance with guidance provided by OPR's Technical Advisory, has determined that a significant VMT impact would occur if the proposed Project's home-based VMT per capita or VMT per employee exceeded the existing Amador County average home-based VMT per capita or VMT per employee, respectively (the Project is in a low-VMT-generating area).

For this analysis, Abrams used the Fehr & Peers VMT+ model. VMT+ uses a custom data set based on anonymized locational records, passively collected from smart phones, and it provides home-based VMT per capita and home-based VMT per worker in California, by census block group (Project site in census block group 060050003041). The model calculates VMT based on the number of vehicles multiplied by the typical distance traveled by each vehicle originating from or driving to a certain area. The volume of traffic and distance traveled depend on a mix of land use types, density, and location, as well as the existing and planned transportation system, including the availability of public transportation. The model divides areas within the County into census blocks, which are used for transportation analysis and other planning purposes. It should be noted that the conclusions are expected to be the same using the Amador County Transportation Commission's Travel Demand Model due to the proposed Project's location on SR-88 near the city limits of Jackson.

Based on the VMT+ Travel Demand Model, the County's average home-based VMT per capita is 33.2 miles, and the average VMT per employee is estimated to be 22.9 miles. The employees of future businesses located within the proposed Project would be expected to have similar VMT to existing employees within the census block where the project is located and in other surrounding transportation analysis zones with similar land uses. The VMT per employee estimated by the Amador County travel demand model for the proposed Project area would therefore be assumed to represent the approximate VMT per employee that would be generated by the proposed Project as well.

Table 4.14-1, Project Generated VMT Per Capita, summarizes the proposed Project's home-based VMT per capita and provides a comparison to the county average VMT per capita. **Table 4.14-2, VMT Project Generated VMT Per Employee**, summarizes the proposed Project's VMT per employee and provides a comparison to the county average VMT per employee. As seen in **Table 4.14-1** and **Table 4.14-2**, the proposed Project is forecast to have an average VMT per capita of 25.3 miles and VMT per employee of 14.7 miles, both of which are lower than the respective county averages⁹. Therefore, with the proposed Project generating both lower VMT per capita and lower VMT per employee than the county-level data, the Project would have a less than significant impact on VMT.

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⁹ This assumes the retail/commercial portion of the project would be local serving and would not include any big-box stores with over 50,000 square feet, which could then be considered regional serving.

TABLE 4.14-1 PROJECT GENERATED VMT PER CAPITA

SCENARIO	PROJECT AVERAGE VMT PER RESIDENT	VMT IMPACT THRESHOLD ¹	IMPACT?
2024 Plus Project	25.3 miles	33.2 miles	No

¹ Existing plus project VMT impact threshold for residential projects in Amador County is a VMT per resident that is no higher than the countywide average VMT per resident which is 33.2 miles.

TABLE 4.14-2 PROJECT-GENERATED VMT PER EMPLOYEE

SCENARIO	PROJECT AVERAGE VMT PER EMPLOYEE	VMT IMPACT THRESHOLD ¹	IMPACT?
2024 Plus Project	14.7 miles	22.9 miles	No

¹ The existing plus project VMT impact threshold for commercial projects in Amador County is a VMT per employee that is no higher than the countywide average VMT per employee which is 22.9 miles.

Impact 4.14-3

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)?						
Significance Before Mitigation	tigation Mitigation Measures Significance After Mitigation					
No Impact	No Mitigation Required.	No Impact				

The proposed Project would introduce new roadways that would connect to the existing roadway network and provide internal circulation. Individual developments proposed within the WWSP area would be required to submit circulation plans demonstrating that the roadway systems meet the County safety standards. The proposed land uses are typical urban uses and no unique roadway features, challenging topographic features, complex traffic patterns, or incompatible vehicles would be introduced as part of the development. The internal roadways would be designed in accordance with County standards, and the Amador County Fire Protection District (AFPD) and County Public Works Department would review the design plans to ensure compliance with AFPD standards (turning radii, street widths,) and traffic safety standards (line of sight, traffic calming, etc.). As a result, the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses. No impact would occur.

Impact 4.14-4

WOULD THE PROJECT RESULT IN INADEQUATE EMERGENCY ACCESS?					
Significance Before Mitigation Measures Significance After Mitig					
Less than Significant	No mitigation required	Less than Significant			

As discussed in **Section 4.9, Hazards and Hazardous Materials**, during construction of the proposed Project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind a slow-moving truck). Additionally, construction of the proposed Project could require temporary detours and/or lane

closures that could temporarily disrupt travel along construction routes for a period within the construction zone. As conditions of approval for future development applications within the Project area, construction management plans would be prepared and required to demonstrate that emergency access to all surrounding properties would be maintained throughout construction.

Once operational, the Project would introduce a variety of new land uses and an increased residential population, which would intensify the evacuation process in the event of an emergency. Further, the proposed Project would include a new circulation network that would also connect to existing roadways. As stated in the Amador County Code Municipal Code (ACMC), road and street networks, whether public or private, unless exempted, shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently and shall provide unobstructed traffic circulation during a wildfire emergency. Any such roads would also serve to provide emergency evacuation routes during a non-wildfire emergency. All future development within the Project area would be required to adhere to the ACMC. In addition, all future development would be subject to the review and approval of the agencies or their representatives that coordinate emergency services, such as the AFPD. Impacts on emergency access are less than significant. No mitigation is required.

4.14.5 Cumulative Impacts

Impact 4.14-4

WOULD THE PROJECT RESULT IN IMPACTS TO TRANSPORTATION IN THE CUMULATIVE CONDITION?						
Significance Before Mitigation	Significance After Mitigation					
Less than Significant	None Required.	Less than Significant				

Since the Project was not found to have a significant impact on VMT in the near-term scenario, a detailed evaluation of the project's cumulative VMT impacts was not conducted. The cumulative analysis is for determining if the Countywide VMT increases or decreases with the proposed Project, relative to the VMT generated that would otherwise be generated by a full General Plan buildout. Based on the data described above, the proposed Project's cumulative VMT impacts would also be assumed to be less than significant.

4.14.6 Mitigation Measures

No mitigation measures are required.

4.14.7 Level of Service Analysis

As discussed in Section 4.14.4, LOS is no longer the standard methodology to examine transportation impacts under CEQA. However, LOS remains a useful tool for agencies to determine if, at a local level, a Project may trigger the need for circulation improvements. Abrams evaluated the LOS for five Project area intersections (three existing and two future). See Appendix F for the detailed LOS analysis.

The LOS scale ranges from A to F, with A being relatively free flow of traffic and F being stop-and-go traffic. To determine the intersection LOS, Abrams performed capacity calculations that provide delay times that correlate to an assigned LOS (A-F). As identified in General Plan Policy CM-1.1, the County's

LOS standard is LOS C for rural roadways and LOS D for roadways in urban and developing areas, which is a benchmark for the County to implement Goal CM-1, to maintain adequate regional and local transportation facilities. **Table 4.14-3**, Existing Plus Project Intersection LOS Conditions, identifies the LOS level for the five study area intersections with the addition of Project traffic.

TABLE 4.14-3 EXISTING PLUS PROJECT INTERSECTION LOS CONDITIONS

INTERSECTION		CONTROL	PEAK	EXISTING		EXISTING PLUS PROJECT	
			HOUR	Delay	LOS	Delay	LOS
1	4 10000	Side Street	AM	13.8	В	> 50.0	F
1	Wicklow Way and SR-88	Stop	PM	16.5	С	> 50.0	F
2	Wicklow Way and Former Kmart Building	Side Street Stop	AM	8.6	А	10.1	В
2			PM	9.0	А	11.0	В
	Wicklow Way and Walmart	Side Street Stop	AM	9.3	Α	16.1	С
	Main Access		PM	11.0	В	25.3	D
4	Wicklow Way and Project Access / Walmart Rear Access	Valmart Pear Access All Way Stop	AM	7.5	А	9.7	А
4			PM	7.4	Α	9.1	А
-	Wicklow Way and Stony Creek Rd	Side Street Stop	AM	N/A	N/A	11.6	В
5			PM	N/A	N/A	11.5	В

As shown in **Table 4.14-3**, all intersections except for Wicklow Way at SR-88 operate at an acceptable LOS, which would operate at LOS F during both peak hours.

The baseline scenario, the results of which are presented in **Table 4.14-4**, evaluates the existing conditions with the addition of traffic from reasonably foreseeable projects in the area and general baseline growth in traffic. For this analysis, baseline volumes were developed based on the assumption that the Project completion date would be 2026, with a 5% per year growth in background traffic plus the addition of traffic from the assumed reoccupation of the former K-Mart Building. This scenario also includes additional through traffic from Argonaut High School, based on the planned expansion to a maximum capacity enrollment of 1,325 students. Based on an evaluation of the school's attendance boundaries (which include the entire county under the approved school consolidation), it was conservatively assumed that about 20 percent of the school's traffic would come from the west on SR-88 and would use Wicklow Way to access the high school. As shown in **Table 4.14-4**, all the study intersections would continue to have acceptable conditions under the baseline scenario except for the intersection of Wicklow Way and SR-88, which would operate at LOS F during both peak hours.

TABLE 4.14-4 BASELINE PLUS PROJECT INTERSECTION LOS CONDITIONS

INTERSECTION		CONTROL	PEAK HOUR	BASELINE		BASELINE PLUS PROJECT	
				Delay	LOS	Delay	LOS
4 Mishley May and CD 00	Side Street	AM	15.5	С	> 50.0	F	
1	Wicklow Way and SR-88	Stop	PM	34.5	D	> 50.0	F
2	2 Wicklow Way and Former Kmart Building	Side Street AM PM	AM	8.7	Α	10.4	В
2			PM	9.4	Α	12.2	В
2	3 Wicklow Way and Walmart Main Access	Side Street	AM	9.4	Α	18.3	С
Acces			PM	11.4	В	30.9	D
4	Wicklow Way and Project Access / Walmart Rear Access All Way Stop	All May Stop	AM	7.5	Α	10.3	В
4		All Way Stop	PM	7.4	Α	9.2	Α
5	Wicklow Way and Stony Creek Rd	Side Street Stop	AM	0.0	NA	16.2	С
			PM	0.0	NA	15.0	С

Lastly, Abrams evaluated the five WWSP area intersections under a cumulative condition, which is the year 2045 cumulative volumes based on the Amador County Travel Demand Model plus the forecast trips from the proposed Project. As identified in **Table 4.14-5**, Cumulative Plus Project Intersection LOS Conditions, except for the intersection of Wicklow Way at SR-88 and Wicklow and Wicklow Way at the main Walmart entrance, all intersections continue to operate at an acceptable LOS.

TABLE 4.14-5 CUMULATIVE PLUS PROJECT INTERSECTION LOS CONDITIONS

INTERSECTION		CONTROL	PEAK HOUR	CUMULATIVE		CUMULATIVE PLUS PROJECT	
				Delay	LOS	Delay	LOS
4 100 00	Side Street	AM	17.2	С	> 50.0	F	
1	Wicklow Way and SR-88	Stop	PM	> 50.0	F	> 50.0	F
2	Wicklow Way and Former Kmart	Side Street Stop	AM	8.7	Α	10.5	В
2	Building		PM	9.6	Α	12.5	В
2	3 Wicklow Way and Walmart Main Access	Side Street Stop	AM	9.5	Α	19.3	С
3			PM	11.9	В	38.1	E
4	Wicklow Way and Project Access /	All Way Stop	AM	7.6	Α	10.4	В
4	Walmart Rear Access		PM	7.4	Α	9.3	Α
5	Wicklow Way and Stony Creek Rd	Side Street Stop	AM	N/A	N/A	17.5	С
5			PM	N/A	N/A	15.9	С

To address the circulation concerns, as conditions of approval for individual developments within the Project area, applicants would be required to pay a fair share contribution to the following improvements:

- Wicklow Way at SR-88 Installation of a traffic signal. This would also include prohibiting Uturns on the westbound SR-88 approach to allow for a right-turn overlap phase on Wicklow Way (i.e., a green arrow for motorists turning right from Wicklow Way onto SR-88). This traffic signal is forecast to be required for construction traffic and for the first phase of the proposed Project.
- Wicklow Way at the Main Walmart Entrance Installation of a traffic signal. This intersection is forecast to exceed the County's LOS standards (LOS D) under baseline plus Project conditions, and it is recommended that the intersection be monitored to determine if additional changes are needed. However, under cumulative plus Project conditions, this intersection would operate at LOS E (on the side street approach) and is forecast to come very close to meeting Caltrans Peak Hour Warrant for a traffic signal. Therefore, it is recommended that the County plan for the future installation of a traffic signal at this location. It should be noted that a traffic signal in this location could also help facilitate safe pedestrian crossings and could serve to slightly reduce travel speeds and calm traffic on the adjacent segment of Wicklow Way.

The LOS tables above present LOS without any improvement measures. The recommended improvement measure for the poor LOS at Wicklow Way and SR-88 is the installation of a traffic signal. With the traffic signal, the intersection would meet established LOS standards under all scenarios (i.e., LOS F is only to occur without the traffic signal).

4.14.8 References

- Amador County. 2016. Amador County General Plan. Prepared by Amador County. Adopted on October 4, 2016. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan. Accessed: March 12, 2024.
- Amador County. 2024. Transportation Analysis, Wicklow Way Specific Plan, Amador County. Prepared by Abrams Associates Traffic Engineering, Inc. Appendix F.
- Amador County Transportation Commission (ACTC). 2017. Amador Countywide Pedestrian and Bicycle Plan. Prepared by ACTC. Adopted in October 2017. Available at: https://actc-amador.org/wp-content/uploads/2017/11/AmadorCountywidePedestrianBicyclePlan_FINAL.pdf. Accessed: March 12, 2024.
- ACTC. 2020. Amador County Regional Transportation Plan Final. Prepared by ACTC. Adopted on March 5, 2020. Available at: https://actc-amador.org/wp-content/uploads/2021/01/2020-RTP_Final.pdf. Accessed: March 12, 2024.

4.15 Tribal Cultural Resources

4.15.1 Introduction

California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources (TCR) are included in environmental assessments for projects that may have a significant impact on TCRs. TCRs can only be identified by members of the Native American community, thus requiring consultation under CEQA.

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to tribal cultural resources include concerns regarding compliance with AB 52, SB 18, and National Historic Preservation Act Section 106. The NOP and written and verbal comments received are included in **Appendix A**.

4.15.2 Regulatory Setting

Assembly Bill 52

Assembly Bill (AB) 52, signed into law on September 25, 2014, as an amendment to CEQA, established a new category of resources called "tribal cultural resources" that are separate from cultural resources and consider tribal cultural values in addition to scientific and archaeological values when determining impacts and mitigation. Pursuant to PRC, Division 13, Section (§)21074, TCRs are unique or non-unique sites, features, places, cultural landscapes that are geographically defined in size and scope, sacred places, or objects with cultural value to a California Native American tribe and are either:

- a. Included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR);
- b. Included in a local register of historical resources, as defined in subdivision (k) of §5020.1; or
- c. Determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant PRC §5024.1(c) (eligible for the National Register of Historic Places (NRHP), <u>and</u> after the lead agency takes into consideration the significance of the resource to the tribe.

AB 52 recognizes that Native American tribes are experts in their tribal cultural resources and that this knowledge should be included in environmental assessments. AB 52 (PRC §21080.3.1) requires that, within 14 days of a decision to undertake a project or determination that a project application is complete, a lead agency shall provide written notification to California Native American tribes that have previously requested placement on the agency's notice list. The Notice to Tribes shall include a brief project description, location, lead agency contacts information, and the statement that the tribe has 30 days to request consultation. The lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a tribe.

Consultation under AB 52 may include discussions about mitigation measures appropriate to reduce significant impacts to TCRs or alternatives to avoid significant impacts. Consultation may also include a

discussion of the type of environmental review necessary, the significance of TCRs, the significance of a project's impacts on TCRs, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation the tribe may recommend to the agency. Consultation is concluded when either the parties agree to measures to mitigate or avoid a significant impact, if one exists, and those measures are incorporated into the CEQA document; or a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached and fully documents the consultation efforts and results.

AB 52 specifies that a CEQA document must include:

- a. Any mitigation measures agreed upon during the consultation shall be incorporated into a mitigation monitoring and reporting program and shall be fully enforceable.
- b. If there will be a significant impact on a TCR, there will be a discussion of whether the project has a significant impact on a TCR and what measures have been taken or alternatives proposed to lessen the impact on the TCR.
- c. Only information that is not restricted from public distribution, in accordance with confidentiality laws and regulations, unless the Tribe provides prior consent. Confidential information shall be published in a confidential appendix to the CEQA document. Confidential information that was not obtained solely from the tribe does not require prior consent but is still subject to confidentiality requirements.
- d. If there are no mitigation measures resulting from the consultation process or consultation attempts, but there is substantial evidence that the project will cause a significant impact to a TCR, then the lead agency shall consider the following mitigation measures on its own:
 - i. Preservation and avoidance;
 - ii. Protecting cultural character, traditional use, and confidentiality; and
 - iii. Use of conservation easements.

Under AB 52, certification of an EIR cannot occur until one of the following occurs:

- a. The consultation process has occurred and has been concluded;
- The Tribe(s) that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process; or
- c. The Tribe(s) fails to request consultation within 30 days of receiving a project notification.

Senate Bill 18

Senate Bill (SB) 18 was signed into law in September 2004 with the intent to accomplish the following:

1. Recognize that California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places are essential elements in tribal cultural traditions, heritages, and identities.

- 2. Establish meaningful consultations between California Native American tribal governments and California local governments at the earliest possible point in the local government land use planning process so that these places can be identified and considered.
- 3. Establish government-to-government consultations regarding potential means to preserve those places, determine the level of necessary confidentiality of their specific location, and develop proper treatment and management plans.
- 4. Ensure that local and tribal governments have information available early in the land use planning process to avoid potential conflicts over the preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.
- 5. Enable California Native American tribes to manage and act as caretakers of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.
- 6. Encourage local governments to consider preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places in their land use planning processes by placing them in open space.
- Encourage local governments to consider the cultural aspects of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places early in land use planning processes.

SB 18 requires cities and counties to notify and consult with Native American Tribes in California about proposed local land use planning decisions for the purpose of protecting tribal cultural resources. Specifically, SB 18 requires that, prior to adoption or amendment of a general plan or specific plan, cities and counties shall conduct consultations with California Native American tribes that are on the contact list maintained by the Native American Heritage Commission (NAHC) for the purpose of preserving or mitigating impacts to places, features, and objects of special religious or cultural significance to Native Americans located within the city or county's jurisdiction. From the date on which a California Native American tribe is contacted by a city or county, the tribe has 90 days in which to request a consultation, unless a shorter timeframe has been agreed to by that tribe. "Consultation" is defined as the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

4.15.3 Environmental Setting

Section 4.5.3, Cultural Resources, of this EIR provides a summary of the prehistoric and ethnographic setting of the Project site, a discussion of the Northern Sierra Miwok, and the land use history of the proposed Project site.

4.15.4 Impacts

Method of Analysis

Records Search

Tribal cultural resources can include archaeological sites, features, and landscapes. To identify known cultural resources within the proposed Project site, a record search was completed on October 22, 2021, at the North Central Information Center (NCIC) at Sacramento State University (NCIC File No.: AMA-21-19). The NCIC search included the proposed Project site and an additional ¼-mile buffer zone. The NCIC search found that three previously performed archaeological surveys included some portions of the Project site. As a result of those efforts, eight resources have been identified within the Project site, and another three resources have been recorded within ¼ mile. All 11 resources consist of historic-age roads or railroads, rock alignments, homestead/ranch sites, and mining features. During an assessment of the eight resources within the Project site in 2021, one additional historic road was identified and recorded. Six of the nine resources within the Project site have been recommended as eligible or potentially eligible for the CRHR. No precontact resources have been recorded within the Project site or within a ¼-mile radius.

Sacred Lands File Search and Consultation

Montrose (formerly Analytical Environmental Services [AES]) sent a request for a search of the Sacred Lands File to the NAHC on October 18, 2021, and it was a reply was received on November 8, 2021, and reported that the search of the Sacred Lands File was negative. On November 19, 2021, the NAHC provided a list of 13 individuals representing 12 Native American tribes who might have information regarding the proposed Project site, including the following tribes:

- Buena Vista Rancheria of Me-Wuk Indians
- Calaveras Band of Mi-Wuk Indians
- Chicken Ranch Rancheria of Me-Wuk Indians
- Colfax-Todds Valley Consolidated Tribe
- Ione Band of Miwok Indians
- Jackson Rancheria Band of Me-Wuk Indians
- Serrano Nation of Mission Indians
- Shingle Springs Band of Miwok Indians
- Tule River Indian Tribe
- United Auburn Indian Community of the Auburn Rancheria
- Washoe Tribe of Nevada and California
- Wilton Rancheria

The Planning Director for the County of Amador, Chuck Beatty, sent Project notification letters to all 12 tribes identified by the NAHC on February 4, 2022. The letters included a description of the proposed Project, a map of the Project location, and an invitation to consult on the Project under PRC §21080.3.1 (AB 52). Responses were received from the following four tribes:

- Buena Vista Rancheria of Me-Wuk Indians
- Ione Band of Miwok Indians
- United Auburn Indian Community of the Auburn Rancheria
- Wilton Rancheria

Due to Project delays, consultation was re-initiated by the County in February 2023 with the four tribes that had responded to the initial outreach in 2022. Responses from each tribe are summarized below. Copies of correspondence with the NAHC and the consulting tribes are provided in **Appendix A**.

Buena Vista Rancheria of Me-Wuk Indians (Buena Vista Rancheria). The Buena Vista Rancheria responded to the initial outreach in 2022 and requested consultation on the Project. Due to Project delays, consultation was re-initiated by the County in February 2023. On February 28, 2023, the Buena Vista Rancheria provided a comment letter stating that the Project and its area are within Buena Vista Rancheria ancestral lands and area of interest. The Tribe expressed concern for the following resources:

- Oak woodland habitat
- Wetlands and vernal pools
- Ephemeral streams
- Ione manzanita
- Ione buckwheat
- California tiger salamander
- Western pond turtle
- California red-legged frog

The Tribe stated that streams, ecosystems, and the biological life they support have cultural value to the Tribe. The Tribe also expressed concerns about metals and hazardous materials within the Project site from historic mining operations and impacts to a nearby school and the surrounding community from dust, noise, and hazardous materials. The Tribe requested a full evaluation of all known historic and cultural resources within the Project site and a site visit to continue consultation on the Project.

The Planning Director for the County of Amador, Chuck Beatty, responded to the Tribe on March 1, 2023, and provided copies of three cultural resources documents that had been prepared for the Project, including a 1994 archaeological survey report (Foothill Resources, Ltd., 1994); a 2005 cultural resources report (ASI, 2005) and a 2021 cultural resources letter report (MES, 2021). Mr. Beatty suggested waiting for drier weather to schedule a site visit. No further response was received from the Tribe.

Ione Band of Miwok Indians (Ione Band). The Ione Band responded to the initial outreach on April 22, 2022, requesting consultation on the Project, copies of any records search or cultural resource inventory, and a site visit. The Planning Director for the County of Amador, Chuck Beatty, responded to the Tribe that same day and provided copies of three cultural resources documents that had been prepared for the Project, including a 1994 archaeological survey report (Foothill Resources, Ltd. 1994); a 2005 cultural resources report (ASI, 2005) and a 2021 cultural resources letter report (MES, 2021). Due

to Project delays, consultation was re-initiated with the Ione Band in February 2023. No further response has been received from the Tribe.

United Auburn Indian Community of the Auburn Rancheria (UAIC). The UAIC responded to the initial outreach on April 26, 2022, and requested consultation on the Project but also stated that they will defer to the Ione Band of Miwok Indians if they are able to provide consultation. The UAIC indicated that the Project site was potentially sensitive for unrecorded TCRs and requested copies of recent cultural resources studies. The Tribe stated that they may require a survey for TCRs in targeted portions of the Project site.

The Planning Director for the County of Amador, Chuck Beatty, responded to the UAIC on April 26, 2022, and provided copies of three cultural resources documents that had been prepared for the Project, including a 1994 archaeological survey report (Foothill Resources, Ltd., 1994); a 2005 cultural resources report (ASI, 2005); and a 2021 cultural resources letter report (MES, 2021).

In June 2022, the UAIC provided recommended mitigation measures for unanticipated discoveries of TCRs. Mr. Beatty responded on June 14, 2022, acknowledging receipt, and stating that the County was in agreement with the Tribe unanticipated discovery mitigation measure. The mitigation measure states the following:

The following mitigation measure is intended to address the evaluation and treatment of inadvertent/unanticipated discoveries of potential TCRs, archaeological, or cultural resources during a project's ground-disturbing activities.

If any suspected TCRs are discovered during ground-disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed-upon distance based on the Project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the Project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the Project area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB52, have been satisfied.

Wilton Rancheria. The Wilton Rancheria responded to the initial outreach on April 18, 2022, and requested a meeting with the County to discuss the Tribe's concern. The Planning Director for the County of Amador, Chuck Beatty, responded to the Tribe on April 22, 2022, and provided copies of three cultural resources documents that had been prepared for the Project, including a 1994 archaeological survey report (Foothill Resources, Ltd., 1994), a 2005 cultural resources report (ASI 2005), and a 2021 cultural resources letter report (MES, 2021). Mr. Beatty also stated that he would follow up to coordinate a site visit.

Due to Project delays, consultation was re-initiated with the Wilton Rancheria in February 2023. No further response has been received from the Tribe.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on public utilities and service systems is significant if implementation of the proposed Project would do any of the following:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 Public Resources Code Section 5020.1(k), or

A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis

Impact 4.15-1

WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PUBLIC RESOURCES CODE § 21074 AS EITHER A SITE, FEATURE, PLACE, OR 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:

- i) 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
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM TCR-1 Treatment of Unidentified Tribal Cultural Resources	Less than Significant

No known TCRs have been identified to date within or near the Project site. A records search conducted with the NCIC did not identify any precontact resources within ¼ mile of the proposed Project site. The search of the Sacred Lands File by the Native American Heritage Commission was negative. Consultation with 12 Native American tribes did not result in the identification of known TCRs. However, there is a potential for unidentified TCRs to exist on the Project site.

The Buena Vista Rancheria identified several natural resources that have cultural value to the Tribe, however, these items do not meet the criteria to be considered TCRs. Section 4.4, Biological Resources, identifies that with the implementation of mitigation measures, impacts to these listed items would be reduced to less than significant. The Tribe also expressed concerns about hazardous materials onsite from historic mining operations and impacts to Argonaut High School and the surrounding community from dust, noise, and hazardous materials. Section 4.3 Quality addresses the impacts to adjacent sensitive uses of construction-related dust. Section 4.9, Hazards and Hazardous Materials addresses potential impacts from historic onsite mining operations, and Section 4.11, Noise, addresses noise impacts. Each of these sections (4.3, 4.4, 4.9, and 4.11) identifies that with the implementation of mitigation measures, potential impacts would be reduced to less than significant impacts.

The UAIC indicated that the Project site was potentially sensitive for unrecorded TCRs.

Development of the proposed Project would require ground-disturbing impacts within the Project site that may impact as-yet unidentified TCRs. If encountered during grading, excavation, or construction, such resources could be damaged, destroyed, or removed, resulting in a direct loss and/or loss of integrity. This is a potentially significant impact.

Mitigation Measure TCR-1 requires that if any suspected Tribal Cultural Resources are found, they be examined by a tribal representative(s) and appropriate steps taken to treat the find in coordination with the County and the consulting tribe(s). This is consistent with PRC Section 21074. This mitigation measure would reduce the impact to a less-than-significant level.

4.15.5 Cumulative Impact

Impact 4.15-2

WOULD THE PROJECT RESULT IN IMPACTS TO TRIBAL CULTURAL RESOURCES IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Significant	MM 4.15-1 Treatment of Unidentified Tribal Cultural Resources	Less than Significant

Project construction could result in the damage or destruction of as-yet unknown Tribal Cultural Resources. This is considered to have a potentially significant cumulative impact.

Numerous state laws, regulations, and statutes seek to protect cultural resources, including SB 18 and AB 52. These would apply to development within the proposed Project site and surrounding region.

Mitigation Measure TCR-1 would reduce the proposed Project's contributions to cumulative TCR impacts by ensuring that any identified resources are examined by a tribal representative(s) and are appropriate steps taken to treat the find in coordination with the County and the consulting tribe(s).

4.15.6 Mitigation Measures

MM TCR-1 Treatment of Unidentified Tribal Cultural Resources

If any suspected TCRs are discovered during ground-disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed-upon distance based on the Project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area shall be immediately notified and shall determine if the find is a Tribal Cultural Resources, pursuant to PRC §21074. The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the Project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the Project area.

The applicant shall implement any measures deemed by the County to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find as necessary. Treatment that preserves or restores the

cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

4.15.7 References

- Amador County. 2016. Amador County General Plan. Prepared by Amador County. Adopted on October 4, 2016. Available at: https://www.amadorgov.org/departments/planning/general-plan-update-draft-environmental-impact-report-and-draft-general-plan. Accessed: March 2024.
- ECORP Consulting, Inc. 2005. Cultural Resources Inventory and Evaluation Ione Plymouth Amador County, California Project 2003-159. Prepared by Ecorp Consulting, Inc. Adopted in 2005. Accessed: March 2024.
- State of California Department of Parks and Recreation (State Parks). 2021. Primary Record, Cultural Resources Letter Report, Wicklow Way EIR, Amador County, CA. Prepared by AES. Adopted on November 3, 2021. Accessed: March 2024.

4.16 PUBLIC UTILITIES

4.16.1 Introduction

This section presents the environmental setting and potential impacts related to public utilities that may occur from the development of the Wicklow Way Specific Plan (WWSP or proposed Project) including a discussion of the conditions of service areas for the respective utility purveyors that would provide future service to the site and their ability to serve the site in relation to the Project's demand. In accordance with Appendix G of the CEQA Guidelines, this section examines impacts to water, wastewater, solid waste, energy, natural gas, and telecommunications. Currently there are no utilities that serve the site.

The following discussion is also based, in part, on the Water, Wastewater, and Stormwater Study Technical Memorandum (TM) prepared for the proposed Project (**Appendix D**).

Comments received in response to the Notice of Preparation (NOP) and at the Scoping Meeting related to public utilities included concerns regarding water and wastewater supply/treatment/capacity constraints, stormwater drainage and management, sewer pump/lift station, and phasing and financing of water and sewer infrastructure. The NOP and written and verbal comments received are included in **Appendix A**.

4.16.2 Regulatory Setting

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law requires many actions to protect drinking water and its sources (rivers, lakes, reservoirs, springs, and groundwater wells). The SDWA authorizes the United States Environmental Protection Agency (EPA) to set national health-based standards for drinking water to protect against both naturally occurring and manmade contaminants that may be found in drinking water. Contaminants are regulated by the EPA through the establishment of primary and secondary maximum contaminant levels and testing to make sure such standards are achieved. The EPA has delegated responsibility for California's drinking water program to the SWRCB Division of Drinking Water. SWRCB Division of Drinking Water is responsible for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA (EPA 2004).

State

Senate Bills 610 and 221

SB 610 and SB 221 went into effect in January 2002 with the intention of linking water supply availability to land use planning by cities and counties. SB 610 requires water suppliers to prepare a Water Supply Assessment Report for inclusion by land use agencies during the CEQA process for new developments subject to SB 221. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are available prior to approval of a large-scale subdivision of land under the State Subdivision Map Act. Large-scale projects include the following:

- Residential developments of more than 500 dwelling units (du);
- Shopping centers or businesses employing more than 1,000 people or having more than 500,000
 SF of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 SF of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 SF of floor space;
- Mixed-use projects that include one or more of the above types of projects; and
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-du project.

California Safe Drinking Water Act

Under the California Safe Drinking Water Act, the SWRCB is the primary agency responsible for administration and enforcement of the federal SDWA requirements. The SWRCBs' regulatory responsibility over public water systems includes issuing operating permits; conducting inspections and sanitary surveys; monitoring for compliance with regulations; and taking enforcement action to compel compliance when violations are identified.

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMPA Act) establishes a planning framework for water security with the objective of ensuring that water supplies are available to meet existing and future water needs throughout California. The Act requires that each urban water supplier that provides water for municipal purposes, either directly or indirectly, to more than 3,000 customers or supplies more than 3,000-acre feet per year (AFY), shall prepare, update, and adopt its urban water management plan (UWMP) at least once every five years. The UWMP must assess the reliability of water sources over a 20-year planning time frame; describe demand management measures and water shortage contingency plans; and discuss the use and planned use of recycled water.

Executive Order B-37-16

Executive Order (EO) B-37-16 was enacted in response to severe multi-year drought conditions. EO B-37-16 requires specific actions to use water more wisely (including strengthened standards for indoor residential per capita use, outdoor irrigation, commercial, industrial, and institutional water use, and water lost through leaks); eliminate practices that waste potable water (such as hosing off sidewalks and water system leaks); strengthen local drought resilience through updated requirements for Urban Water Shortage Contingency Plans; and improve agricultural water use efficiency and drought planning.

Senate Bill 606 and Assembly Bill 1668, Water Conservation and Drought Planning

SB 606 and AB 1668 were enacted to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change and longer and more intense droughts. The primary goals of SB 606 and AB 1668 are to use water more wisely; eliminate water waste; strengthen local drought resilience; and improve agricultural water use efficiency and drought planning.

California Integrated Waste Management Act

California Integrated Waste Management Act (AB 939) required all California cities and counties to reduce the volume of solid waste deposited in landfills by 50 percent by 2000 and to continue to remain at 50 percent or more diversion for each subsequent year. AB 939 also requires each California city and county to prepare, adopt, and submit to CalRecycle a Countywide Integrated Waste Management Plan that includes goals, policies, and objectives for coordinating regional efforts to divert, market, and dispose of solid waste. County policies and programs are required to be included in each jurisdiction's General Plan and demonstrate how the jurisdiction will meet the mandated diversion rate and provide at least 15 years of ongoing landfill capacity.

California Statewide Mandatory Organic Waste Collection

Senate Bill (SB) 1383 was enacted to set methane emissions reduction targets for California in a statewide effort to reduce emissions of short-lived climate pollutants, but also has implications in relation to solid waste. The law establishes targets to reduce organic waste disposal in landfills by 75 percent by 2025.

Regional

Mokelumne/Amador/Calaveras Integrated Regional Water Management Plan Update

The Upper Mokelumne Rivershed Watershed Authority (UMRWA) is a Joint Powers Authority comprised of six water agencies (Amador Water Agency [AWA], Calaveras County Water District, Calaveras Public Utility District, East Bay Municipal Utility District, Jackson Valley Irrigation District, and Alpine County Water Agency) and the counties of Amador, Calaveras, and Alpine. UMRWA performs water resource planning within the 550-square-mile Upper Mokelumne River Watershed located within Alpine, Amador, and Calaveras counties (UMRWA, 2023).

The Mokelumne/Amador/Calaveras (MAC) Integrated Regional Water Management Plan (IRWMP) Update includes resource management strategies for the Mokelumne River Watershed to address land use and water conflicts, environmental protection, water quality conflicts, supply management, forest management, fire management, and economic impacts. The MAC IRWMP Update includes goals and policies that address water supply reliability and infrastructure (UMRWA, 2018).

Local

Urban Water Management Plan

The AWA 2020 UWMP was prepared in accordance with the UWMPA as defined by the California Water Code. The UWMP describes the overall water system, water use, water conservation, water supply, water supply reliability, water shortage contingency planning, and water demand management measures within the AWA service area.

2020 Water Shortage Contingency Plan

The 2020 Water Shortage Contingency Plan (WSCP) was prepared in response to SB 606 and AB 1668, which require a stand-alone document that provides an action plan for water agencies to plan for drought or catastrophic water supply shortages. The WSCP, like the UWMP, includes an Annual Water

Supply and Demand Assessment. The WSCP also includes response actions/strategies based on severity of the shortage.

Water Master Plan Study

The AWA Water Master Plan Study (WMP) contains an assessment of the current conditions of the AWA's potable water distribution systems, provides a performance evaluation of AWA's surface water treatment plants (WTPs) and provides recommended improvements to accommodate growth for the 20-year planning horizon (2040). The WMP also describes fire flow, pressure, and velocity planning criteria. The WMP includes recommended capital improvements to address deficiencies in the water treatment and distribution systems (AWA 2021b).

Water Code

The AWA Water Code (Code) establishes procedures for operating and maintaining the water system within the AWA service area, including rates, fees, and charges for purchasing, pumping, treating, transmitting, and distributing water. The Code requires a determination of water availability for new services based on the proposed development's location, type, and quantity of services needed. Additionally, the Code requires the use of recycled water where feasible, establishes permanent water conservation Best Management Practices (BMPs) to conserve water, outlines the procedures for water supply planning to assist in the reasonable use of water and discourage the waste of water.

Wastewater Master Plan Study

The Wastewater Master Plan Study (WWMP) was prepared to develop a comprehensive capital improvement program (CIP) to improve infrastructure, operational efficiency, and increase disposal and storage capacity over the 20-year planning horizon (2021-2041).

Amador County Integrated Waste Management Plan

The Regional Agency Integrated Waste Management Plan (RAIWMP) for the Amador County Integrated Waste Management Agency outlines strategies to decrease the amount of solid waste going into disposal facilities by establishing source reduction, recycling, and composting programs. The plan contains goals, policies, and procedures that are consistent with the guidelines and regulations of the California Integrated Waste Management Board. The Amador County Integrated Waste Management Agency's five-year RAIWMP was approved in 2022.

Amador County Municipal Code

The Amador County Municipal Code (ACMC) contains several provisions that regulate the location, design, capacity, and connection of utility systems. Additionally, the ACMC contains provisions in relation to the recycling and diversion of construction and demolition debris; all construction and demolition projects to divert at least 65 percent of debris generated from the landfill, for either reuse or delivery to a certified recycling facility.

Amador County General Plan

The Amador County General Plan contains goals and policies relating to public utilities intended to safeguard adequate supplies and direct development in areas where there is existing infrastructure or a logical progression of planned infrastructure extension. Many of the goals and policies are intended to

provide guidance for implementation of State regulations and management plans. Goals and policies applicable to the proposed Project are listed below.

Land Use Element

- **Goal LU-5:** Maintain efficient solid waste service.
- **Goal LU-6**: Ensure that adequate water supply, wastewater disposal, and public services are available prior to development.
- **Policy LU-6.1:** Ensure that new development meets water supply, wastewater disposal, and public service standards.

Conservation Element

- **Goal C-1:** Ensure that all future development permitted in the County can be provided adequate amounts of water.
- **Policy C-1.2**: Guide future development to areas of the County where adequate water supplies can be ensured.
- **Policy C-1.4**: Encourage new development, renovation, landscape, and agricultural projects to include water conservation measures, including use of graywater, reclaimed, or recycled water for irrigation, water-conserving plumbing fixtures, and low-water landscapes.
- **Goal C-3:** Minimize negative effects of sewage treatment on water quality.
- **Policy C-3.1**: Guide future development to areas of the County with the ability to obtain adequate wastewater service and treatment capacity.
- **Policy C-3.2:** Encourage recycling and water-saving features in new development, including use of graywater, recycled, or reclaimed water for irrigation, to limit the water flows to septic systems and leach fields.
- **Policy C-6.1**: Encourage new development to be pedestrian-friendly and located near existing activity centers to limit energy use associated with automobile transportation.

Wicklow Way Specific Plan

The Draft WWSP (**Appendix B**) provides policies related to public utilities in Chapter 4- Land Use, Chapter 7 – Public Services and Chapter 8 - Utilities. These policies are intended to guide future development on the proposed Project site.

Land Use Policies

Policy 4.17: Land shall be reserved for public services and facilities, as required by Amador County. Public services and facilities sites shall be in the general locations as shown in Figure 4.1 – Specific Plan Land Use Designations of the WWSP.

Public Services Policies

Policy 7.2: Locate utilities in locations the minimize impacts on natural resources including oak woodlands, Rock Creek and its tributaries, and cultural resources.

Utility Policies

Policy 8.1: Provide the necessary utilities to meet the needs of Plan Area residents.

Policy 8.2: Ensure that the provision of services does not impact existing residents or businesses supply or

rates.

Policy 8.3: One or more community facilities districts shall be created to help finance backbone infrastructure and public facilities costs and other eligible improvements and/or fees.

Policy 8.4: Provide a mechanism for the maintenance and operation of public infrastructure and facilities

including open space.

4.16.3 Environmental Setting

Water

The AWA is the water purveyor for the proposed Project site and the primary provider of drinking water for the County. In addition to serving the residents and businesses in the unincorporated area, the AWA also sells water to the cities of lone, Jackson, Plymouth, Sutter Creek, Amador City, and several special districts.

Water Distribution System

The AWA owns and operates five potable water distribution systems throughout the County: two groundwater operations, two distribution and WTP systems (collectively referred to as the Amador Water System [AWS]), and a water project.¹⁰

As indicated, there is no infrastructure currently serving the proposed Project site. The proposed Project would connect to the existing AWA Tanner Water System. Water is distributed to AWS -Tanner through the Amador Transmission Waterline, a gravity pipeline which transports raw water from Lake Tabeaud to the AWS-Tanner WTP. Exiting the AWS-Tanner WTP the system conveys water via a gravity pipeline system throughout the service area. There are three pump stations in this system, two draw water directly from the AWS-Tanner WTP Clearwell and the third has water pumped or fed by gravity. ¹¹ There are also two storage tanks for this system and 53.8 miles of pipeline.

Currently, AWS-Tanner WTP does not have the capacity to meet demands (AWA 2022a). The AWS-Tanner WTP has an actual maximum capacity to provide 4.4 million gallons per day (MGD), with a

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¹⁰ AWS- Ione, AWS-Tanner, Central Amador Water Project (CAWP), Lake Camanche Village (CAM) system (groundwater), and the La Mel Heights (LaMel) system (groundwater),

¹¹ A Clearwell is a component of a municipal water purification system and refers to the final storage stage in the system following filtration and disinfection.

maximum daily demand of 4.49 MGD. Considering contractual obligations, the WTP has an existing and compounding deficit.

Water Supply

AWA retails potable and raw water for municipal, industrial, and irrigation uses in addition to the wholesale of water to other agencies, including several cities in the County. Surface water is the primary source for AWA water (91 percent) supplemented by a small percentage of groundwater (9 percent). Surface water, which is supplied from the Mokelumne River watershed (watershed) via Lake Tabeaud, is the sole source of water for the AWS.

The watershed is divided into the upper and lower watersheds. In all, it drains 2,143 square miles in parts of Alpine, Amador, Calaveras, San Joaquin, and Sacramento Counties. Most flow is derived from snowmelt. The Project site is in the 550-square-mile upper watershed (the area above Pardee Dam and Reservoir). The upper watershed is mostly protected and undeveloped, with a large portion within the Mokelumne Wilderness. Many tributaries flow into the Mokelumne River before it reaches Pardee Reservoir, which is operated for water supply and instream requirements (AWA, 2021a)¹².

The AWA's total water supply from the Mokelumne River is 16,150- AFY, with the AWS having water rights to 15,000 AFY (the remaining 1,150 AFY of water rights are attributed to the CAWP); as noted above, a portion of this water is treated at the WTPs before delivery and a portion is delivered raw. The Agency has historically been able to fully access AWS water rights and does not expect a reduction in available AWS supply.

In all, in 2020, the AWA delivered 3,087 acre-feet (AF) of potable water to retail customers, 1,407 AF of potable water to wholesale customers, and 268 AF of raw water to retail customers, with 2,982 AF of raw and potable water loss (AWA, 2021a). Out of the 7,744 AF of water supplied (including loss) throughout the five potable systems operated by AWA, the AWS supply of water accounted for 6,518 AF.

In addition to serving raw and potable water, the Agency provides wastewater collection and treatment services. The volume of wastewater treated within the Agency's service area in 2020 was 2,323 AF. More than one-third of this wastewater is recycled for multiple uses, while the rest is treated and discharged by the Agency or other wastewater treatment agencies in the area.

Water Demand

The proposed Project site is undeveloped and has no demand for water from municipal water sources. The annual grasslands and other onsite vegetation are not irrigated.

Agency-wide, the demand for water in the AWA's service area increased between 1995 and 2000, primarily caused by population growth. This was followed by a decrease in overall demand in the 2000s, due to significant reductions in water loss resulting from raw water canal improvements in 2002 and 2007. Demands continued to decline due to the 2012–2016 drought and mandated statewide

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¹² Managing water use for instream flow generally indicates that flow downstream is not diminished from its point of use.

reductions in water use. Further, it is noted that water demand has been lower than the projected demand targets due to system upgrades and conservation (AWA 2021a).

Wastewater

Presently there is no wastewater infrastructure at the proposed Project site. However, the proposed Project site is within the service boundaries of the AWA and ultimately, AWA would be the agency responsible for the operation and maintenance of the WWSP's proposed wastewater treatment plant (WWTP). The following discussion describes AWA current infrastructure and service commitments.

AWA owns and operates eleven wastewater systems consisting of nine septic tank effluent and community leach field (CLF) systems (both pumped and gravity systems), a WTP filtration backwash disposal system, and two conventional gravity collection systems. Both the CLF and conventional systems include wastewater lift stations. AWA also owns and operates two WWTPs.

The Project site is located within the Martell Wastewater Service Area, within the AWA Service Area (AMA 2022b). The Martell Service Area is approximately 1,600 acres and provides service for 144 active connections and 612 equivalent residential dwelling units. Customers are a mix of commercial, light manufacturing, and single-family residences.

Stormwater

Presently the WWSP site is undeveloped and there is no stormwater infrastructure. The site topography consists of three watersheds, two of which discharge to onsite natural drainage courses and the third to Stony Creek Road east of the proposed Project site. In the area bordering the proposed Project site, Stony Creek Road has a swell and culvert system to collect and transmit stormwater.

Solid Waste Disposal and Recycling

ACES Waste Services, Inc. provides solid waste disposal and curbside and yard waste recycling as the County contracted franchise hauler. Collected waste is taken to the Western Amador Recycling Facility (WARF) in Ione¹³. WARF is permitted to accept a maximum daily disposal of 333 tons per day (tpd) (CalRecycle 2023a). The WARF segregates recyclable materials and disposes of residual municipal waste at the Keifer Landfill in Sacramento County.

The Kiefer Landfill is 1,084 acres in size, with a permitted disposal area of 660 acres. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, green materials, agricultural debris, and other nonhazardous-designated debris. The landfill is permitted to accept a maximum of 10,815 tpd of solid waste; however, the average intake as of 2017 is only approximately 2,200 tpd. The Kiefer Landfill receives over 700,000 tons of waste per year. The site currently has a permitted capacity of approximately 117 million cubic yards and a remaining capacity of approximately 102 million cubic yards. The landfill has a closure date of 2080 (CalRecycle, 2023b.)

¹³ WARF is also referred to as the Buena Vista Landfill Transfer Station.

Energy Infrastructure

Amador County receives electricity from Pacific Gas & Electric Company (PG&E). PG&E provides electric services to 5.5 million customers, including 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines over a 70,000-square-mile service area that includes northern and central California (PG&E 2024). Existing overhead utility lines are located along the northern and eastern proposed Project site boundaries associated with existing residential and commercial developments in the surrounding area, and there is currently no service provided to the proposed Project site.

Natural Gas Infrastructure

PG&E also provides natural gas to northern and central California, including Amador County. Within their entire service area, PG&E operates approximately 49,100 miles of transmission and distribution pipelines, serving 4.5 million customers (PG&E 2024). Natural gas pipelines exist in surrounding developed areas, but there are no service connections at the Project site.

4.16.4 Impacts

Method of Analysis

Potential impacts on water, wastewater, storm drainage, solid waste disposal, and electric and natural gas services were evaluated based on the adequacy of existing and planned infrastructure and the capacity to meet additional demand for these services resulting from buildout of the WWSP. The proposed Project forecasted demand and planned infrastructure were evaluated in relation to information contained in the studies and parameters of the regulations presented in Section 4.16.2, Regulatory Setting.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on public utilities and service systems is significant if implementation of the proposed Project would do any of the following:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider, which serves or may serve the
 project that it has adequate capacity to serve the project's projected demand in addition to the
 provider's existing commitments;
- 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
- Result in non-compliance with federal, state, and local statutes and regulations related to solid waste.

Effects Found Not to be Significant

Telecommunications

There are several telecommunications-related services such as telephone, cable television, and internet within Amador County. There are multiple telecommunications providers that have capacity to serve the proposed Project site. The construction of telecommunications infrastructure would be installed in conjunction with other utilities. Therefore, this issue is not further discussed.

Impact Analysis

Impact 4.16-1

WOULD THE PROJECT REQUIRE OR RESULT IN THE RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED WATER, WASTEWATER TREATMENT OR STORMWATER DRAINAGE, ELECTRIC POWER, OR NATURAL GAS, THE CONSTRUCTION OR RELOCATION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Less than Significant	None required	Less than Significant.	

The proposed Project would include the construction of new water transmission, wastewater collection and treatment, stormwater drainage, electric power, and natural gas infrastructure. Primarily, this would require an extension and connection to existing infrastructure. However, due to the current lack of capacity at AWA WWTP facilities, the proposed Project would build an onsite WWTP to accommodate full build out of the WWSP that would be operated by AWA.

Phasing of infrastructure improvements and funding obligations would be detailed in future Development Agreements prepared at the time specific development is proposed.

Water

Water Distribution Infrastructure

As part of preparation of this DEIR, a Water, Wastewater, and Stormwater Technical Memorandum was prepared (**Appendix D**). This TM included identifying preliminary water distribution infrastructure requirements based upon the forecasted water demands of the proposed Project (see Impact 4.16-2). All water infrastructure improvements would be constructed using a phased approach based on AWA Standard Design and Construction Specifications for Treated Water Systems. The AWA minimum distribution pipe size is eight inches or six inches, if fully looped. In total, the proposed Project would require 10,609 linear feet (If) of new conveyance pipeline, which would connect to existing potable water lines adjacent to the WWSP site and subsequently be distributed through a looping system that would parallel proposed roadways.

In addition, the proposed Project includes an onsite groundwater well, which will provide a contingency water supply during dry years or emergency conditions. The extension and installation of infrastructure to distribute water would occur in conjunction with individual WWSP developments and would be subject to applicable mitigation measures and BMPs. There are no additional impacts that would occur due to the extension and installation of water distribution infrastructure.

Water Treatment Infrastructure

Implementation of the WWSP would increase the need for water treatment to provide potable water. As discussed in Section 4.16.3, the existing Tanner WTP does not have the capacity to meet the proposed Project potable water demands. The AWA commissioned a capacity study that evaluated the deficiencies, recommended improvements, and identified associated costs. The need for treatment from the Tanner WTP is not just because of the proposed Project, as noted, there is an existing need to expand capacity. The County's land use permitting process requires applicants to demonstrate availability of water treatment capacity and ability to connect to existing potable water systems prior to approval of discretionary actions. Furthermore, the proposed Project is required to comply with adopted mitigation measures in the County General Plan EIR, including:

Mitigation Measure 4.13-1a:4. Development Proposal Evaluation. If feasible, new units will be required to connect to nearby existing water or wastewater systems. Project applicants must demonstrate the availability of water supply, water treatment capacity and wastewater treatment.

If increased water or wastewater capacity is required, applicants must pay their fair share of the necessary improvements.

Thus, the proposed Project would be required to pay a fair share fee for the costs of improvements to the WTP to support potable water demands. Given that individual developments would be required to demonstrate adequate potable water supplies and that future applicants' developing portions of the WWSP would contribute a fair share fee for improvements to the Tanner WTP, impacts are considered less than significant.

Wastewater

Wastewater Collection and Distribution

The Water, Wastewater, and Stormwater TM estimated projected wastewater flows for the proposed Project to support a basis for the design of the collection and disposal system and evaluate the adequacy of infrastructure. The proposed Project's collection system includes approximately 10,920 If of eight-inch diameter gravity sewer pipeline and 2,250 4-inch sewer force mains, a lift station, and potential for additional lift capacity.

Wastewater Treatment

The proposed Project site is within the Martell Service Area, which transports wastewater flows to the Sutter Creek WWTP. The Sutter Creek WWTP is not owned by AWA and AWA contracts with the City of Sutter Creek to convey and treat flows. The Sutter Creek WWTP is at capacity. Therefore, the proposed Project involves the construction and operation of an onsite WWTP. The WWTP would be designed to meet the average and peak daily flows based upon the proposed land uses. Impacts of the WWTP are discussed collectively throughout this Draft EIR as part of full build-out of the WWSP (see analysis in Sections 4.1 through 4.17). For instance, construction emissions for air quality and gas include construction of the WWTP. Likewise, impacts to biological resources, cultural resources, and hydrological conditions post-project implementation consider the construction and operation of the WWTP. There are no additional impacts unique to the WWTP.

Stormwater Drainage

Currently stormwater is not managed onsite and free flows either into the natural drainages onsite or the swell and culvert system on Stony Creek Road. As discussed in Section 4.10, onsite drainage improvements included in the proposed Project consist of a combination of conventional subsurface and surface drainage systems, including pipe conveyance systems, culverts, bridges, and at-roadway and trail crossings of creeks and tributaries. Vegetated swales, soft armoring, mechanical storm filters, structural interceptors, and other BMPs would be employed at pipe outfalls or other appropriate locations for water quality management. Storm drain improvements within roadways and varied land use areas are required to convey the 100-year storm runoff to existing discharge locations. The proposed Project would also require one or more detention basins. Final design for the proposed Project would incorporate management strategies to minimize changes to the site's predevelopment runoff rates and volumes.

With these improvements, the proposed Project would have sufficient capacity to convey a 100-year storm event without causing flooding onsite or offsite. While new stormwater drainage facilities would be constructed within the proposed Project site, proposed facilities would connect to the existing municipal storm drain system, the capacity of which would not be adversely affected. Therefore, implementation of the proposed Project would not require the relocation or construction of new or expanded stormwater drainage facilities and impacts related to stormwater drainage would be less than significant.

Electricity and Natural Gas

Electric and natural gas lines would be extended to the proposed Project site via underground conduits. This would be done in conjunction with site preparation and grading. The extension of services would not result in any environmental effects aside from those discussed in other sections of this Draft EIR. Overall, while there would be various upgrades and connections to existing infrastructure within and surrounding the site, the extent of impacts has been examined in the context of proposed Project (i.e., grading for utility trenches would be considered in overall grading plan; refer to Sections 4.1 through 4.17) and therefore, impacts would be less than significant.

Impact 4.16-2

WOULD THE PROJECT HAVE SUFFICIENT WATER SUPPLIES AVAILABLE TO SERVE THE PROJECT AND REASONABLY FORESEEABLE FUTURE DEVELOPMENT DURING NORMAL, DRY, AND MULTIPLE DRY YEARS?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation

The Water, Wastewater, and Stormwater TM included a forecast of the proposed Project's water demand as shown in **Table 4.16-1**, **Project Water Demand**. These projections are based on AWA unit demands and data from other local agencies. These projections include a 15 percent allowance for system losses, as well as a safety factor to ensure adequate supply.

TABLE 14.16-1 PROJECT WATER DEMAND

FLOW CONDITION	DEMAND (GPD)	DEMAND (GPM)
Average Day Demand	294,000	204
Maximum Day Demand	434,000	301
Peak Hour Demand		592

Notes: Peaking factor for Maximum Day Demand is 1.5, which is typical for similar facilities. The peaking factor was only applied to non-irrigation demands. Peaking factor for Peak Hour Demands is 3.0, which is conservative for similar facilities. The peaking factor was only applied to non-irrigation demands.

As discussed in Section 4.16.2, the UWMPA, requires water suppliers in California to conduct long-term water resource planning. The AWA UWMP includes future predictions and supply reliability analysis, which indicates that AWA would be able to cover the service area's increased demands during dry and multiple dry years. As outlined in the UWMP, the AWA has implemented a transmission project and conservation efforts that have decreased the amount of water loss, resulting in the AWA having an actual lower gallon per capita per day of water use compared to the baseline target. The continuation of these efforts in conjunction with increasing the amount of recycled water available for distribution have positioned the AWA to deliver a reliable water supply through the UWMP planning horizon (2045).

The UWMP considers that the total amount of water delivered to customers over the planning horizon is expected to increase by seven percent. As noted in the UWMP, projections are based on California Department of Finance population projections, which are also the basis for the County General Plan (AWA, 2021). Therefore, given that the proposed Project is consistent with the General Plan, the proposed Project's water demand has been accounted for in the UWMP.

According to the UWMP, due to the size and priority of AWA's water rights, AWA anticipates being able to meet water demand even in dry years and multiple year droughts (AWA, 2021). Further, the Agency anticipates a surplus of water in a multiple-year (5 year) drought, enough to meet projected increased demands. Therefore, the proposed Project would have sufficient water supplies available to serve the demands and reasonably foreseeable future development demands during normal, dry, and multiple dry years. Therefore, impacts are less than significant, and no mitigation is required.

Impact 4.16-3

WOULD THE PROJECT RESULT IN A DETERMINATION BY THE WASTEWATER TREATMENT PROVIDER, WHICH SERVES OR MAY SERVE THE PROJECT THAT IT HAS ADEQUATE CAPACITY TO SERVE THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS?			
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation	
Less than Significant	None Required	Less than Significant	

The proposed Project includes construction of a new onsite WWTP. To meet conveyance and treatment requirements associated with wastewater generated by the proposed Project, the new WWTP and associated lift station are proposed in the northwestern portion of the WWSP site (see Figure 2-4). The WWSP designates one acre of land for the lift station, and 9.7 acres for the WWTP. All sewer improvements would be sized and constructed to AWA's standards using a phased approach. There may be a need for a second lift station within the southwest portion of the proposed Project site. Based on future, land development proposals, this would be studied in greater detail, and implemented per existing County development standards and regulations in coordination with AWA. The proposed wastewater collection and effluent discharge facilities required to manage wastewater generated by the Project are described in greater detail in **Appendix D**.

Considering the proposed Project would construct a new onsite WWTP, sized to process the proposed Project's generated wastewater, there would a less than significant impact, and no mitigation is required.

Impact 4.16-4

WOULD THE PROJECT 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?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

The project would have a short-term increase in the generation of solid waste during construction and a permanent increase in the generation of solid waste following full build-out of the WWSP.

Construction of the project would generate construction debris such as wood, metal, asphalt and concrete, containers and packaging, and other miscellaneous waste. In total, the proposed Project is estimated to generate 5,220 cubic yards of construction-related debris¹⁴. Amador County Code Chapter 7.27, Recycling and Diversion of Construction and Demolition Debris, requires all construction and demolition projects to divert at least 65 percent of debris generated from the landfill, for either reuse or delivery to a certified recycling facility. At the time of the approval of individual development proposals, project applicants would be required to prepare construction management plans to detail the manner that construction activities would meet or exceed the required diversion rate. Such plans would be approved prior to the issuance of grading and/or construction permits, and verification would be periodically required through the issuance of reports or onsite inspections.

The proposed Project would introduce 1,660 residents. Applying the latest CalRecycle published per capita rate of 6.3 pounds of solid waste per person per day, this equates to 2,070 tons per year of solid waste (CalRecycle, 2024). In addition, the proposed Project would generate waste associated with the commercial and public/quasi/public land uses of approximately 2,784 tons per year of solid waste, for a

¹⁴ Based on the total waste generation of 10,468 cubic yards of construction debris. Using 700 residential units (500 low density and 200 high density), 60.4 acres of commercial and public development.

total of 4,854 tons per year (CalRecycle, 2024). ¹⁵ As identified in Section 4.16.3 above, Kiefer Landfill has a permitted capacity of approximately 117 million cubic yards and a remaining capacity of 102 million cubic yards (CalRecycle, 2023b). Given Kiefer Landfill's maximum permitted throughput of 10,815 tons per day and remaining capacity of 56 million tons, the net increase in solid waste generation from construction would not exceed the capacity of the landfill.

Additionally, the designs for facilities, including for capacity and expansion, are based upon projections provided in planning documents prepared for each service area, such as local general plans. The Project is consistent with the planning projections provided in the General Plan; therefore, the solid waste generation has been considered in relation to the ultimate design and lifespan of area landfills and solid waste infrastructure. In accordance with AB 939, California counties are to provide at least 15 years of ongoing landfill capacity; Kiefer Landfill has an estimated closure date of 2080. Implementation of the General Plan policies and associated actions would further assist in solid waste reduction measures; therefore, impacts are less than significant, and no mitigation is required.

Impact 4.16-5

WOULD THE PROJECT COMPLY WITH FEDERAL, STATE, AND LOCAL MANAGEMENT AND REDUCTION STATUTES AND REGULATIONS RELATED TO SOLID WASTE?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

During construction and operation of the proposed Project, future project developers/applicants would be required to comply with all applicable County and State solid waste diversion, reduction, and recycling mandates. These include the Amador County Municipal Code Chapter 7.27, General Plan goals and policies, and various State regulations (see Section 4.16.2). Compliance with these regulations and mandates would assist in reducing the amount of waste deposited in local landfills. The proposed Project would not result in non-compliance with State or local county statutes and regulations related to solid waste Therefore, impacts related to regulatory compliance would be less than significant and no mitigation is required.

4.16.5 Cumulative Impacts

Impact 4.16-6

WOULD THE PROJECT RESULT IN IMPACTS TO PUBLIC UTILITIES IN THE CUMULATIVE CONDITION?		
Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Less than Significant	None Required	Less than Significant

As discussed under Impact 4.16-1, the proposed Project would require and include construction of new water, wastewater treatment, stormwater drainage, electric power, and natural gas infrastructure.

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¹⁵ This is based upon CalRecycle published rates of rllbs/1,000 sf/day for commercial uses (at 100,000 sf) and 0.007 lbs./sf/day for public/institutional with 48.4 acres of public/quasi-public uses totaling 2,108,304 sf.

Therefore, there would be a less than significant impact to existing public utilities caused by the proposed Project and there would not be a contribution to cumulative impacts.

Additionally, Impact 4.16-2 describes that existing water supplies include consideration for "...reasonably foreseeable future development...". Impact 4.16-2 is deemed less than significant due to the large amount of available water supply available relative the combined demand from the proposed Project and reasonably foreseeable projects in the area and consistency with General Plan projections, therefore, it would not contribute to a cumulatively considerable condition.

Impact 4.16-3 identified that the proposed Project would construct a new onsite WWTP, sized to process the proposed Project's generated wastewater and therefore would have a less than significant impact. Considering the above, the proposed Project would not contribute to a significant cumulative impact.

Impact 4.16-4 describes that the proposed Project would not generate solid waste exceeding state or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. As discussed under Impact 4.16-5, the proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. This would be enforced via Amador County's reviews and approvals of future land development proposals. Therefore, impacts related to solid waste would be less than significant for the proposed Project, and not contribute to a significant cumulative impact.

Overall, none of the impacts described above would result in a significant impact, nor would they contribute to a significant cumulative impact, therefore impacts are less than significant, and no mitigation is required.

4.16.6 Mitigation Measures

All impacts described above result in less than significant impacts. Therefore, the proposed Project requires no mitigation measures.

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4.17 WILDFIRE

4.17.1 Introduction

This section addresses potential wildfire hazards that may result from implementation of the proposed Wicklow Way Specific Plan (WWSP or proposed Project) and describes the existing environmental setting of the WWSP site, identifies associated regulatory requirements, evaluates potential impacts from the construction of the proposed Project, and identifies mitigation measures. Evaluation of potential impacts is based on a review of existing resources, data, and applicable laws, regulations, guidelines, and standards. This section focuses on the potential increase of wildfire risk as a result of full buildout of the WWSP on wildfire risk. Potential impacts to fire protection services are addressed in Section 4.13, Public Services.

A Notice of Preparation (NOP) was released for a 30-day public comment period on January 26, 2024. Comments received in response to the NOP include comments regarding the location of the site within an extreme fire zone, funding sources for more firefighting and emergency response resources, and the need for a new fire station. A copy of the NOP and comments received are included in **Appendix A**.

4.17.2 Environmental Setting

WWSP Area

The WWSP site is located in an area recognized as having the potential for wildfires to occur. Normal weather patterns of drought, high temperatures, and low humidity, particularly in the May through October fire season, have the potential to result in wildfires occurring. Historically, based on data from 1898-2020, this site has not experienced a wildfire. The closest fire recorded was approximately 0.7 miles to the southeast, when 22 acres burned in 2005. Also, approximately 1.7 miles to the north is the boundary of a 1961 fire that burned around 34,000 acres.

There are three main components that contribute to wildfire behavior. The first component is the fuels that feed the fire, whether there is much moisture available, whether the plants and shrubs being burned contain combustible oils and resins, and how dense the vegetation is (NPS, 2017). The second factor is the weather, where wind, humidity, and temperature all influence fire behavior. Wind can fuel an existing fire and help it spread, and higher temperatures and low humidity levels make it easier for fuels to ignite (NPS, 2017). The third factor is topography. For example, natural features such as a rocky slope or drainage can act as a natural fire break, fires can spread more quickly up steep slopes, and higher elevations impact humidity and temperature (NPS, 2017).

The WWSP site is characterized by mild to moderate slopes and the presence of open grassland areas interspersed with dense oak woodland. An area of riparian forest is also located to the north of the site. Onsite vegetation is dominated by annual grassland of approximately 126 acres. There are also 74 acres of woodland and 1.2 acres of riparian forest. The typical climate of the area consists of hot, dry summers and cold, wet winters. Annual precipitation averages around 28 inches per year, with little to no snow.

When wildfires result in significant loss of man-made buildings, they are called "Wildland-Urban Interface" (WUI) fires (CAL FIRE, 2023b). CAL FIRE identifies three main ways in which these types of fires are addressed to minimize losses in the WUI. These include identifying areas of increased risk,

requiring a defensible space be present around buildings to reduce the potential of wildfire exposure, and utilizing construction methods that reduce the possibility of ignition should wildfire exposure occur (CAL FIRE, 2023b). The WUI area for the proposed Project, is shown on **Figure 4.17-1**, **Wildland-Urban Interface**.

CAL FIRE classifies the severity of possible fire hazards in SRAs within California. Areas can be zoned as "Moderate," "High," or "Very High." These zones are generated using a model that considers factors such as fire history, natural vegetation, terrain, and weather to provide an evaluation of the possibility of wildfires occurring in an area. The Fire Hazard Severity Zone (FHSZ) was updated in 2022, and the area of the proposed Project site is now classified as "high," an increase from the previous classification of "moderate" as shown on **Figure 4.17-2, Fire Hazard Severity Zone.**

The areas surrounding the WWSP site to the south and west are similar in terms of vegetation and topography, except for the presence of Jackson Creek. An area of open space and the City of Jackson are located to the east of the site. To the north are SR-88 and large-scale commercial buildings. The 2022 FHSZ does not include land within the City of Jackson or the City of Sutter Creek. Aside from these areas, fire hazard severity in the area surrounding the WWSP site ranges from 'Moderate' to 'High' to the north of the site and 'High' to 'Very High' to the south and west.

The WWSP site is within the jurisdiction of the AFPD, which would provide fire and emergency services for the site. The AFPD has seven fire stations with 48 first responders, both paid and volunteer. The closest AFPD fire station is Station 116, located approximately 3.5 miles northeast of the WWSP site on the Jackson Rancheria Reservation. Station 116 provides fire protection services for the Tribe and Amador County. The WWSP site is also located immediately adjacent to the City of Jackson, which has two fire stations, one located 0.6 miles to the east and the other located 1.3 miles to the south-east of the WWSP site. As part of the development, 2.6 acres are set aside to develop a new fire station to support the increased need generated by development on the WWSP site.

4.17.3 Regulatory Context

Federal Regulations

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgement of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles:

- Firefighter and public safety are the first priorities in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.

- Sound risk management is the foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based on the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

State

California Fire Safe Regulations (Public Resources Code 4290)

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for protecting natural resources from fire on land designated as within the State Responsibility Area (SRA). The proposed Project site is within the Amador El Dorado Administrative Unit. All development applications within the SRA must be reviewed by CAL FIRE prior to issuance of County permits or entitlements, and all construction within SRAs after January 1, 1991, must meet minimum fire safety regulations. These regulations include requirements for onsite water storage for emergency use, road standards for fire equipment access, and fuel breaks.

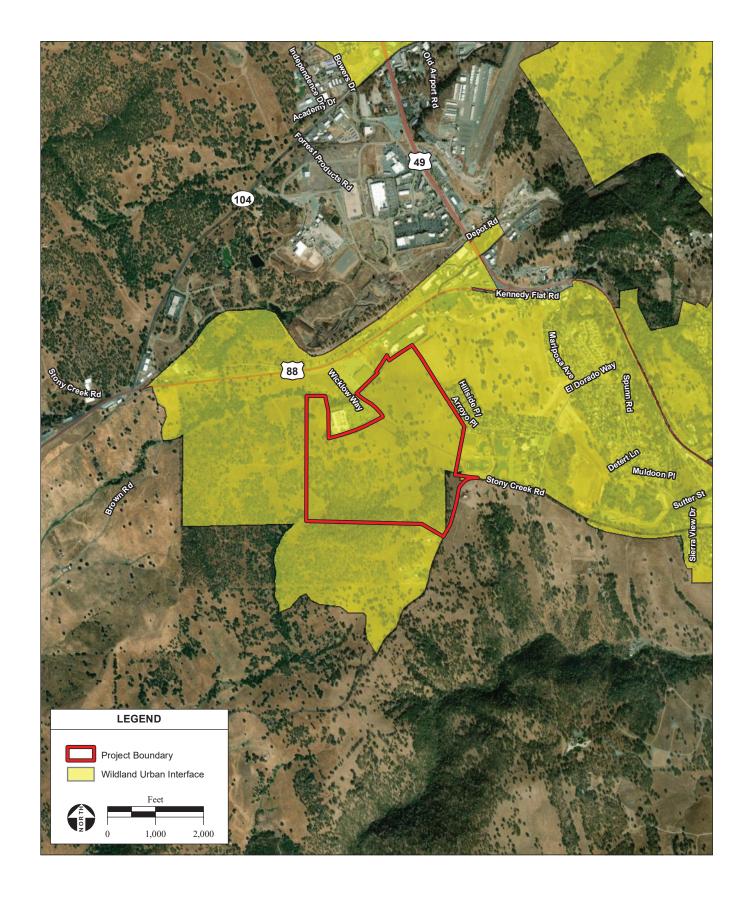
California Fire Safety Regulations (Public Resources Code 4291)

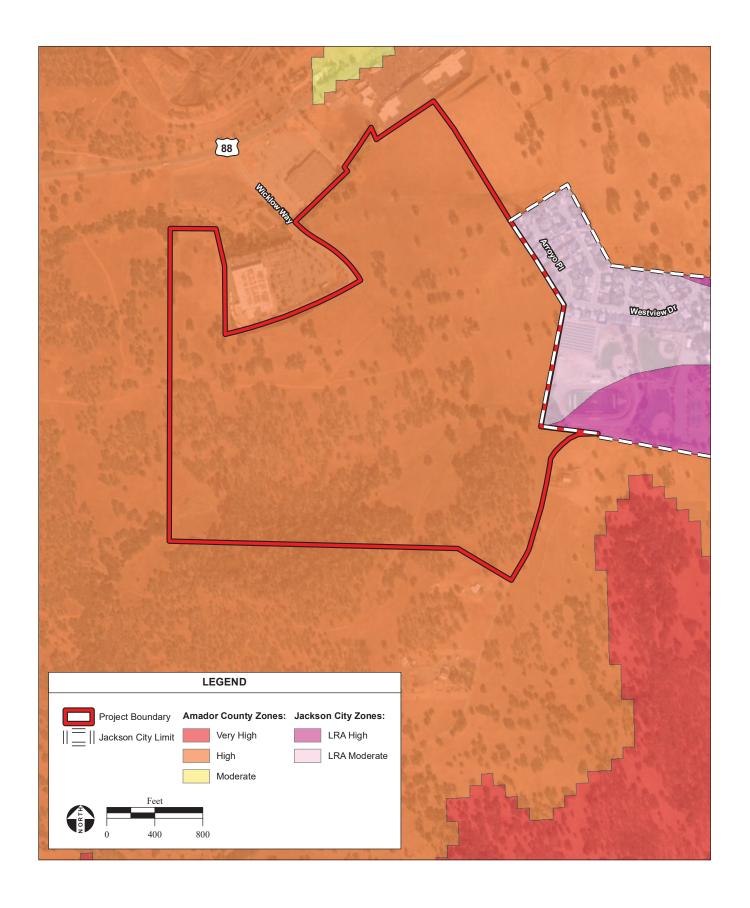
This code requires all entities that own or operate land or buildings in or adjoining environments that are at risk for fire, such as forested, shrub-covered, or mountainous areas, to take precautionary measures. These measures include maintenance of a 100-foot defensible space around structures, maintenance of trees, and the removal of accumulated vegetation on rooftops.

California Code of Regulations Title 24

California Fire Code

The California Fire Code (CFC) is Part 9 of the California Code of Regulations (CCR) and Title 24 and provides minimum building and fire safety standards for new construction. Standards include fire protection systems, fire and smoke protection, egress, fire-resistant materials, and other safety standards. CFC Section 503 outlines requirements for the provision and maintenance of roads to enable access to fire apparatus. CFC Appendix D106 provides additional detail and specifies that multiple-family residential developments of more than 200 dwelling units be provided with two separate and approved fire apparatus access roads. It also requires that they "shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. CFC Chapter 49 outlines requirements for Wildland—Urban Interface Fire Areas. In this situation, the Wildland-Urban Interface is defined as an area identified by the state as a "Fire Hazard Severity Zone." The CFC outlines requirements intended to mitigate the possibility of a wildfire being transmitted from vegetation to buildings. These include construction methods and materials able to mitigate wildfire exposure, manage hazardous vegetation and fuels, and maintain a defensible space.





California Building Code

The California Building Code (CBC) is Part 2 of CCR Title 24. Specifically, Chapter 7 includes regulations for fire and smoke protection. Chapter 7A includes requirements for flame-resistant materials and construction methods for wildfire exposure. The requirements in this chapter apply to Wildland-Urban Interface Fire Areas, which are defined as "areas in state-designated Fire Hazard Severity Zones or other areas designated by the enforcing agency to be at a significant risk from wildfires."

CAL FIRE

CAL FIRE is dedicated to conserving natural resources while also working to prevent wildfires in SRAs and protect human life and property. As part of agreements with local governments, CAL FIRE also provides general emergency services to the public in 36 counties (not just fire, but also medical, hazardous spill response, search and rescue, and natural disaster response [CAL FIRE, 2023a]).

Fire Hazard Severity Zones

Public Resources Code 4201-4204 specifies that lands within SRAs be classified into fire hazard severity zones. These zones are classified based on fuel loading, slope, fire weather, wind, and other relevant factors.

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California (Fire Plan) is a document providing broad overall direction to the many offices and administrative units within CAL FIRE. The document takes a holistic approach, providing eight overarching goals for the organization and objectives for each individual goal. Fire Plan goals include using adaptive management strategies, identifying fire hazards and other issues, and facilitating data collection and exchange. It seeks to determine the resources needed to effectively protect assets during a fire and to implement post-fire review and rehabilitation plans. It also prioritizes supporting and participating in local planning processes as they relate to fire protection and working with landowners to improve awareness of fire management and prevention methods.

Senate Bill 1241

Senate Bill 1241 requires that after January 1, 2014, when the Housing Element of a local general plan is reviewed, the Safety Element also be reviewed to include consideration of fire risk in very high fire hazard severity zones and in state responsibility areas. This review shall develop goals, policies, objectives, and implementation measures intended to protect communities from the unreasonable risks of wildfire.

Local

Amador County General Plan (2016)

The General Plan's Safety Element addresses potential wildfire risks and includes goals and policies related to lowering fire risk. The goals include supporting better fire suppression infrastructure and improving fire response.

Goal S-2: Reduce fire risks to current and future structures.

- Policy S-2.1: Consistent with state regulations and local code requirements, require new buildings must be constructed to provide fire-defensible spaces, separated from property lines and other buildings on the same or adjacent properties by adequate building setbacks clear of brush and fuel.

 Require new buildings in areas of moderate to high fire risk to be constructed using building materials and designs that increase fire resistance.
- **Policy S-2.2:** Guide new development to areas where adequate fire protection, roads, and water services are available to support fire response.
- **Policy S-2.3**: Incorporate fire safety site planning techniques within new development applications in high- or very-high-fire risk areas. Encourage building envelopes or cluster development techniques to increase defensible areas.
- **Policy S-2.4:** Work with fire districts or other agencies and property owners to coordinate efforts to prevent wildfires and grassfires, including consolidation of fuel buildup abatement efforts, firefighting equipment access, and water service provision.
- **Policy S-2.5:** Work with fire districts and other agencies to educate the public regarding fire risks and periods of elevated or extreme risk due to drought or other factors.

Goal S-3: Maintain or improve fire response times.

- **Policy S-3.1:** Support efforts by fire districts to obtain adequate funding to provide fire protection at desired levels. Implement impact fees if needed to provide adequate fire service.
- **Policy S-3.2:** Encourage cooperation and regional agreements among fire districts and state and federal fire agencies to maximize fire protection capabilities across the county.

Amador County Implementation Plan

The purpose of this Amador County Implementation Plan is to provide guidance and specific actions to implement the goals and policies of the Amador County General Plan. This includes tasks and procedures intended to directly implement policies and goals related to wildfires outlined in the Safety Element, as discussed above.

Program P-6: Effective County Services

To evaluate and maintain effectiveness of County services, the County will develop service standards for library, public safety, fire response, emergency response, human, and social services. Actual performance will be compared to these standards on an annual basis, and results will be presented to the Board of Supervisors with recommendations for action if necessary.

Develop a standard for public safety staffing, facilities, and equipment. Based on the cost of maintaining this standard, the County will establish a program consistent with the Mitigation Fee Act to levy proportional impact fees on new development proposals.

Program P-12: Emergency Response

To maintain effective emergency and disaster response and reduce hazards related to fire, flood, and public safety emergencies, the County will implement and periodically update disaster plans, including

the Multi-Hazard Mitigation Plan and Emergency Operations Plan, to meet federal, state, and local emergency requirements. This effort will include planning to coordinate response actions and the identification and planning of evacuation routes for dam failure, wildfire, and flooding.

- The County will regularly assess resources needed to effectively respond to disaster situations and ensure proper staffing levels at emergency response agencies.
- The County will regularly assess operational integrity of essential public facilities during emergencies and identify actions to maintain operations as necessary.
- The County will update equipment and training as necessary, including adopting training standards that meet or exceed state and national standards.
- The County will develop its capability to handle mass shelters in case of major disasters by maintaining a list of appropriate emergency shelter locations. These sites should be well connected to evacuation routes.

Program D-2: Fire-Safe Development

- The County will review new development applications in moderate, high, and very high fire hazard severity zones to confirm they meet the standards of Title 24 Wildland Urban Interface Building Codes and 14 CCR 1270.
- The County will require new structures and improvements to be built to support effective firefighting.
- New development applications in very high fire hazard severity zones shall include specific fire
 protection plans and actions, and/or comply with Wildland Urban Interface (WUI) codes for fire
 engineering features.
- The County will seek fire district input on development applications to allow proposed projects to incorporate fire-safe planning and building measures. Such measures may include (but are not limited to) buffering properties, creating defensible space around individual units, using fireresistant building materials, installing sprinkler systems, and providing adequate onsite water supplies for firefighting.
- Transportation improvements shall incorporate access for firefighting within and between existing neighborhoods to provide improved connectivity, but also in areas with no structures. Access standards include minimum width, surface, grade, radius, turnaround, turnout, and bridge standards, as well as limitations on one-way roads, dead-end roads, driveways, and gate entrances.
- Where public water is available, the County will consult with water agencies on the need for additional water, water mains, fire hydrants, and related appurtenances needed to meet required fire flow criteria and for sufficient water capacity to serve the peak demands of multiple fire engines to protect against wildland fires.
- A 100' setback for defensible space will be required, when possible, for high-density multiple-family residential or sensitive uses (e.g., care homes, schools, large daycare facilities, etc.) proposed in high or very high fire hazard severity zones.

Program D-10: Evacuation Planning and Routes

- When considering development proposals and discretionary actions, the County will ensure that actions will not prevent implementation of emergency response plans or viability of evacuation routes established by the Office of Emergency Services.
- Establish adequate fire buffers along heavily traveled roads by promoting grazing, thinning, mowing, plowing, disking, or controlled burning of roadside grass. Favor those methods that have the least impact on air quality, such as grazing.

Program C-3: Transportation Coordination.

Coordinate with the California Department of Transportation (Caltrans) on the following actions:

- Administration of state highways within the county.
- Approval of heliports and helistops.
- Maintenance of scenic highways, including SR-88.
- Mutual establishment of clear policies and objectives for meeting regional and local transportation needs.
- Develop methods to reduce dry-weather urban runoff and pollutants in highway and street runoff.
- Coordination on all plans, activities, and projects that may affect state roadway facilities.
- Establish adequate fire buffers along state highways by promoting grazing, thinning, mowing, plowing, disking, or controlled burning of roadside grass. Favor those methods that have the least impact on air quality, such as grazing.

The County will consult with local city governments and Caltrans to ensure transportation planning and improvement programs are consistent with the Noise Element.

Program C-4: Interagency Coordination

- County departments will maintain regular contact with other governmental agencies that provide services or functions in Amador County for the purpose of coordinating activities and avoiding conflict and overlap. Agencies include (but are not limited to) the cities within the County, Amador Unified School District, the Amador Water Agency, the Amador County Transportation Commission, the Amador Fire Protection District (AFPD), the Amador County Recreation Agency, the University of California Cooperative Extension, and Amador Transit. Related County departments will consider meeting with these agencies on a biannual basis.
- Work with fire districts and other agencies to educate the public regarding fire risks and periods of elevated or extreme risk due to drought or other factors.
- Increase cooperative efforts among fire districts, public agencies, and landowners. The County will continue to collaborate with the U.S. Forest Service, CAL FIRE, fire departments of adjacent counties, city fire departments, fire districts, and property owners to prevent and manage wildland fires. Efforts may include monitoring regional fuel buildup, maintaining fuel breaks, sharing firefighting equipment, and providing necessary water supplies. The County will continue to encourage the consolidation of fire districts.

Program F-3: Fire Services Funding

The County will consult with the AFPD to establish funding mechanisms, including impact fees, to offset fire protection costs for new development in areas of high wildfire risk.

Amador County Local Hazard Mitigation Plan Update (2020)

The Local Hazard Mitigation Plan (LHMP) updates a previous 2014 FEMA-approved document, prepared by both Amador County and the five incorporated communities and ten special districts in the area. This document is intended to undertake a hazard risk assessment and develop an associated mitigation, implementation, and monitoring plan. One of the planned mitigation actions was for the 2015 LHMP to be integrated into the County General Plan. This action was completed in 2016, and the LHMP is now incorporated by reference into the Safety Element of the County General Plan.

Amador County Code

Amador County has adopted a "Fire and Life Safety" Chapter (County Code Chapter 15.30) for the purpose of establishing a minimum for building and developing wildfire protection standards in SRAs. This includes design requirements for basic emergency access, vegetation modification, water supply reserves for emergency fire use, and whether a fire management plan is required. These requirements apply to any new construction within SRA approved after January 1, 1991. The County has also adopted design standards for projects of five or more units or lots in areas of high and very high fire hazard severity (County Code Chapter 19.50).

Wicklow Way Specific Plan

The WWSP includes policies that relate to wildfire management included in Chapter 7 - Public Services and Chapter 9 – Natural Resource Management. These policies would guide the development of future developments on the proposed Project site.

Chapter 7 Public Services

Policy 7.1: Provide public services, including police, fire protection, schools, and other public services necessary to meet the needs of the WWSP area residents.

Policy 7.6: Fire and Emergency Services

The AFPD provides fire protection, suppression, emergency medical services, and hazardous materials management to the WWSP. There are seven stations that provide fire service. Fire Station 131, located in Jackson, is the closest Fire Station to the WWSP site. However, at buildout, the proposed Project would generate the need for a new fire station. A three-acre site is planned within the WWSP Area, shown on **Figure 2-4**, to serve the site.

Chapter 9 Natural Resource Management

Resource Management - Open Space Policies

Policy 9.8:

Open space areas adjacent to buildings and development parcels shall maintain a fuel modification and vegetation management area in order to provide the minimum fuel modification fire break as required by State and local laws and ordinances. Additionally, development parcels adjacent to open space areas may be required to provide emergency access through the property to the open space by means of gates, access roads, or other means

approved by the ACFD. Ownership and maintenance of open space areas, including fuel modification requirements and fire hazard reduction measures, shall be outlined in the WWSP Open Space Operations and Management Plan to be prepared at the time a specific development is proposed.

Avoidance and Mitigation Strategies

Operations and Management Plan

Policy 9.3:

An Operations and Management Plan (O&M Plan) will be implemented in accordance with the applicable regulatory permits to continually monitor, report, and correct disturbances, if any, to the open space/preserve areas. This document will ultimately be approved by the regulatory agencies and will specify the permitted activities and features within the WWSP preserves. For the WWSP, preserve and open space areas will be managed in accordance with the Open Space Preserve Management Plan. The Preserve Management Plan governs management of preserve areas and provides mechanisms for consistent application of preserve management strategies. At minimum, preserve management strategies will address fire/fuel modification zones, mowing activities, grading and construction activities, pedestrian and bikeway paths, storm drainage systems (including outfall locations and the treatment and transfer of stormwater to receiving waters), utility crossings, and other permitted and prohibited activities. In addition, standards will be established to minimize potential future impacts on drainage corridors from sources of pollution, including urban runoff and neighboring land uses. Following habitat creation and completion of success monitoring by the applicant, onsite open space preserves will be managed by the County in accordance with the Preserve Management Plan. Funding for the management of onsite preserve and open space areas will be provided by an annual tax levy via creation of a Community Facilities District (or other funding mechanism).

4.17.4 Impacts

Method of Analysis

The analysis of wildfire impacts is based upon a review of project plans, maps, CAL FIRE data, and other available documents.

Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, an impact on wildfire hazards is significant if implementation of the WWSP would do any of the following:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.
- Exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose
 project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of
 wildfire.
- Require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and

• Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impacts Analysis

Impact 4.17-1

WOULD THE PROJECT SUBSTANTIALLY IMPACT AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN?		
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Less than Significant	None Required	Less than Significant

The proposed Project would add population and increase the number of buildings and development in the local area. The WWSP site would be accessed from two roads: Wicklow Way, on the northern border, which would serve as the main entrance, and Stony Creek Road, on the southern border. Wicklow Way would be accessed via SR-88, which runs east to west and provides connections to El Dorado County via SR-49, Lake Tahoe, and Sacramento County. Stony Creek Road is an east-west two-lane road that connects to SR-88 in the City of Jackson as well as SR-88 south of the City of Ione.

The proposed Project would add population and structures to the AFPD responsibility area, which would increase demand for emergency response and related services. The proposed Project is located along an identified evacuation route in both the City and County's adopted Emergency Evacuation plans. Identified evacuation routes include SR-88 and SR-49 as the primary evacuation routes in the County. The proposed Project would adhere to emergency access requirements specified in the General Plan. As such, the site would adhere to emergency vehicle access requirements of the Amador County Code (Chapter 15.30). Therefore, all road and street networks would provide for resident evacuation and access for emergency wildland fire equipment at the same time and would not obstruct traffic during a wildfire emergency. Final alignment, phasing, and specifications of fire access roads would be subject to approval by AFPD at the individual subdivision map stage.

Currently, the WWSP site is under the fire protection jurisdiction of the AFPD. It is assumed the County would maintain the cooperative agreement with CAL FIRE to provide support in the event of a major wildfire. Fire Station 131, located in Jackson, is the closest fire station to the site. This is 2.7 miles from the Wicklow Way entrance to the WWSP site and would take about 6 minutes to drive under normal conditions. The inclusion of a fire station on site would improve local emergency preparedness by providing additional fire dispatch services to the area. Given the proximity of the nearest fire station and the inclusion of a new fire station onsite, it is reasonable to expect that response times would not be substantially affected. Further, developers would be required to pay typical impact fees for capital improvements that would provide funding for new fire stations and related improvements. In summary, the proposed Project is not expected to impair evacuation procedures along this road, as there are no modifications proposed that would impede access or evacuation. For these reasons, the proposed Project would have a less-than-significant impact on emergency response and access.

Impact 4.17-2

WOULD THE PROJECT EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES?		
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Significant	WILD-1 and WILD-2	Less than Significant

Wildfire Risk: The WWSP site is undeveloped, and the vegetation community is dominated by annual grasslands and includes oak woodland and riparian forest. Based on CAL FIRE's fire hazard severity zones, the proposed Project site is identified as a High-Fire Hazard Area. Wildfires typically burn up slopes faster and more intensely than along flat ground and steeper slopes result in a faster-moving fire. Moderate or steep slopes greater than 20 percent, are considered a higher risk for wildfires. Fires also travel in the direction of the ambient wind, which usually flows uphill. The flatter areas of the site planned for development do not present an increased wildfire risk. However, approximately 25 percent of the WWSP site is designated for open space. Open space would wrap around the western and southern edges of the WWSP site and would provide similar opportunities for wildfire ignition as compared to the existing condition.

As noted above, most of the proposed development would be located within the relatively flat areas of the WWSP site and would replace existing grassland with irrigated landscape and buildings constructed to current building codes to further minimize the loss of structures in the event of a wildfire. However, the WWSP site is located within an area mapped by CAL FIRE as within a High-Fire Hazard Zone. In addition, due to the increasing threat of wildfires and loss of property and human lives associated, in part, with development within the WUI, the number of oak woodland areas to be preserved in open space adjacent to areas planned for development. The proposed Project would exacerbate wildfire risk and expose existing development to potential wildfire hazards. Therefore, the proposed Project's wildfire risk is considered significant.

Construction: Other factors that could exacerbate wildfire risks include construction activities due to the use of flammable materials, tools, and equipment capable of generating a spark and igniting a wildfire. During construction, heat or sparks from construction equipment and vehicles have the potential to ignite vegetation and start a fire. Construction sites also store and use flammable hazardous materials. The risk of wildfire would be especially high during weather events that include low humidity and high wind speeds. The following construction equipment has the potential to generate heat or sparks that could result in wildfire ignition:

- Earth-moving and excavating equipment (i.e., tractors, graders, mowers, bulldozers, backhoes, cranes, excavators, trucks, and vehicles) – heated exhaust or sparks in contact with vegetation may result in ignition.
- Chainsaws and other small gas-powered equipment/tools may result in vegetation ignition from overheating, sparks, fuel leaks, etc.
- Welders open heat source may result in metallic sparks coming into contact with vegetation.

- Woodchippers include flammable fuels and hydraulic fluid that may overheat and spray onto vegetation with a hose failure.
- Grinders sparks from grinding metal components may land on a receptive fuel bed.
- Torches heat source, an open flame, and resulting heated metal shards—may come in contact with vegetation.

The potential risk of wildfire ignition and spread associated with construction activities can be managed so that the potential for vegetation ignition is reduced. In addition, pre-planning and construction personnel fire awareness, reporting, and suppression training can lower the probability of ignition and increase the probability that fire can be controlled and extinguished in its early stages. Measures that would help reduce construction-related wildfire impacts include having adequate water available to service construction activities, implementing a construction-phase fire prevention plan, providing proper wildfire awareness, reporting, and suppression training to construction personnel, and requiring that all construction-phase components of the fuel modification be fulfilled prior to delivery of combustible materials/lumber to the WWSP site. Even with adherence to the required construction best practices, the proposed Project's construction activities require the use of equipment that can easily spark a fire, especially during windy days and the hot, dry summer and fall months (fire season in California). Because construction activities associated with the installation of infrastructure for the proposed Project may exacerbate fire risk in the WWSP area, the proposed Project impact is considered significant.

Operations and Maintenance

As each phase of the proposed Project is completed, operation and maintenance activities could also exacerbate wildfire risk because they would introduce the periodic use of flammable materials, power tools, and equipment, all of which have the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds. Compliance with the CFC and annual practices would help minimize the risk of fire; however, due to periodic weather conditions, use of equipment that has the potential to ignite a fire, and availability of fuel sources, operations and maintenance activities, this could result in a significant impact associated with exacerbating wildfire risk.

Implementation of Mitigation Measures WILD-1 (construction) and compliance with the fire break requirements as outlined in the WWSP would ensure the proper guidelines are followed by the developer during construction and operation to reduce the risk of fire. Thus, this would ensure all feasible steps are taken to minimize the potential for wildfires to expose future residents to hazards, reducing the impact to a less-than-significant level.

Impact 4.17-3

WOULD THE PROJECT DUE TO SLOPE, PREVAILING WINDS, AND OTHER FACTORS, EXACERBATE WILDFIRE RISKS, AND THEREBY EXPOSE PROJECT OCCUPANTS TO, POLLUTANT CONCENTRATIONS FROM A WILDFIRE OR THE UNCONTROLLED SPREAD OF WILDFIRE?		
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Significant	WILD-1 and WILD-2	Less than Significant

As discussed in Section 4.9, "Hazards and Hazardous Materials," and in Section 4.13, "Public Services," proposed Project construction would have the potential to inadvertently ignite a wildfire, for example, due to a spark from internal combustion engine equipment. However, compliance with applicable requirements in the Public Resources Code related to wildland fire safety in grass- or brush-covered areas would minimize this risk. While the WWSP site in general should be considered highly susceptible to wildfire as it has been identified as a High Fire Risk Area by CAL FIRE, implementation of Mitigation Measure WILD-1 would reduce the probability of equipment accidentally igniting a fire during construction by requiring fully functioning spark arresters on appropriate equipment and requiring that vegetation be cleared prior to using spark-inducing equipment.

During operation, the risk associated with the developments planned under the proposed Project would be similar to other existing development in the City of Jackson and other urban areas of the County. Typical activities, such as vegetation maintenance and automobile sparks and emissions could result in an accidental ignition. The WWSP includes required maintenance of a fuel break between the planned open spaces/oak woodland area in the western/southern portion of the 201-acre site. The maintenance of a fuel break would reduce the probability of a fire jumping from the developed to the open space portions of the site and vice versa. All new development within the proposed Project area would be constructed in compliance with federal, state, and local regulations. This would include the Amador County Implementation Plan, which outlines requirements for fire-safe development within the County.

The WWSP area does not include steep slopes. As discussed in Section 4.7, Geology and Soils, the proposed Project would have a less than significant impact with regards to landslides, erosion, and loss of topsoil. The loss of vegetation after a wildfire can leave soil more prone to erosion and topsoil loss in its post-fire condition. Implementation of Mitigation Measure WILD-2 Post Fire Activities would require reseeding of the burned area with native seeds. Implementation of this mitigation would ensure that the proposed Project would have a less-than-significant impact.

Impact 4.17-4

WOULD THE PROJECT REQUIRE THE INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE (SUCH AS ROADS, FUEL BREAKS, EMERGENCY WATER SOURCES, POWER LINES OR OTHER UTILITIES) THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT?

SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Significant	WILD-1	Less than Significant

Infrastructure required for development of the proposed Project is discussed in detail in Chapter 2, Project Description. The potential risk of wildfires due to general site clearing, grading and construction activities is discussed above under Impact 4.17-2. The following identifies proposed Project infrastructure and its contribution to wildfire risk:

Water Supply: Development of the proposed WWSP site would require connection to the existing water mains Any pipeline maintenance would not result in additional temporary or permanent impacts from exacerbating wildfire risk beyond those identified in Impact 4.17-2.

Stormwater Management: The proposed Project could install a combination of conventional surface and subsurface drainage systems, including drainage basins, bio-swales, outfalls, existing natural swales, and seasonal creeks. All drainage system improvements would be designed and constructed pursuant to County standards, subject to approval by the County Planning Department. These stormwater features are static, do not generate heat/sparks and would not impede site access or otherwise hinder evacuation or emergency response efforts. Installation of these features would not result in additional temporary or permanent impacts from exacerbating wildfire risk beyond those identified in Impact 4.17-2.

Fire Protection: Development of the WWSP area would result in the implementation of a fire hydrant network, a dedicated fire water pipeline system, and fire department hose connections. These features are static, do not generate heat/sparks and would not impede site access or otherwise hinder evacuation or emergency response efforts. The availability of onsite fire water would reduce potential wildfire impacts. Installation of these features would not result in additional temporary or permanent impacts from exacerbating wildfire risk.

Power Lines: Proposed Project electric power lines onsite would be installed below ground and would not exacerbate wildfire risk or result in additional temporary or permanent impacts from exacerbating wildfire risk.

Construction associated with installing onsite infrastructure and ongoing maintenance of this infrastructure could increase the potential for wildfires due to the use of a variety of heavy and light-duty equipment that could result in sparks potentially igniting a fire. This is considered to have a significant impact. Implementation of the Construction Fire Prevention Plan as described in Mitigation Measure WILD-1 would reduce this impact to a less than significant impact.

Impact 4.17-5

WOULD THE PROJECT EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES?		
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Significant	WILD-2	Less than Significant

Wildfires can greatly reduce the amount of vegetation within a burned area. Plant roots stabilize the soil and above-ground plant parts slow water flow, allowing it to percolate into the soil. Removal of surface vegetation resulting from a recent wildfire reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris. If water-resistant soil conditions exist post-fire, the rate of surface water runoff will increase as water percolation into the soil is reduced. The potential for surface runoff and debris flows therefore increases significantly for areas recently burned by large wildfires (Moench and Fusaro, 2012).

Slopes have the potential for slope failure, landside erosion, and debris flow. It is expected that such conditions could be exacerbated in a post-fire landscape where surface vegetation has been removed (burned) and erosion potential increases. However, the WWSP site is relatively flat; thus, it is unlikely,

given where future development is proposed that there would be substantial adverse effects involving landslides to residences located downslope under post-fire conditions. The topography throughout the WWSP site would not be susceptible to landslides or slope instability. Furthermore, future development within the WWSP area would comply with all design guidelines, CBC requirements, geotechnical recommendations, and other applicable regulations, which would further reduce potential impacts regarding landslide hazards.

The proposed Project's drainage system could involve a combination of conventional surface and subsurface drainage systems, including underground pipe conveyances, drainage basins, bio-swales, outfalls, existing natural swales, and seasonal creeks. Onsite detention features would employ Best Management Practices (BMPs) to slow water, filter out containments, and encourage infiltration and evapotranspiration. While wildfire might damage bio-swales or vegetation in seasonal creeks, the majority of the drainage facilities would be managed within the developed area and would likely not be affected by fire. It is anticipated that topographical and developed drainage features would be unaffected under post-fire conditions and would result in a minimum increase in the risk of post-fire flooding and increased runoff. However, in the event of a wildfire as build-out is occurring there could be areas not yet developed where post-fire conditions could result in substantial erosion, which could affect developed areas, exposing people or structures to significant risks. Therefore, the impact is considered significant.

Implementation of Mitigation Measure WILD-2 would ensure potential impacts associated with post-fire flooding, runoff, or slope instability are evaluated and addressed using erosion control techniques, reseeding grasses, and tree removal, if required, to ensure any potential impacts would be reduced to a less than significant level.

4.17.5 Cumulative Impacts

The cumulative context for emergency response and evacuation efforts or plans includes the future buildout of Amador County under the General Plan as evacuation routes and plans are interconnected between all communities within the County.

The cumulative context for wildfire risk impacts is all of Amador County, including the City of Jackson and surrounding WUI area, as these impacts depend on the specific conditions and features on the WWSP site and surrounding wildlands. Because post-fire hazards are site-specific, these concerns would not combine with other developments, resulting in a cumulative effect. Therefore, post-fire hazards are not addressed on a cumulative level.

Impact 4.4-6

WOULD THE PROJECT RESULT IN IMPACTS IN THE CUMULATIVE SETTING?		
SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
Less than Significant	None required	Less than Significant

Emergency Response

Amador County has stated that planned population growth and local regulation of associated development within the jurisdictional boundaries of incorporated cities and unincorporated areas prevent the occurrence of existing cumulative public services, including fire response, by implementing adopted General Plans that include a policy framework. This would ensure adequate capacity exists to support proposed development (Amador County, 2016). Thus, the County's 2030 General Plan EIR determined there would not be a significant cumulative impact related to emergency response.

The proposed Project combined with other projects that include new residential, commercial, and public development contributing to an increase in population, may have a cumulative impact on the ability of the City and County to protect residents, workers and structures from wildfires. Buildout of the County General Plan would increase population and/or activities and ignition sources, which may increase the chances of a fire that would require a response from the County, and possibly other jurisdictions that have mutual aid agreements with the County, such as CAL FIRE or the City of Jackson.

Per the County's General Plan, existing standards for future development that are expected to provide adequate access, fire flows, fire suppression techniques, and other facilities to maintain an appropriate level of fire protection would continue to derive from the CBC, the CFC, and the California Mechanical Code. By complying with these requirements, each project would avoid creating obstacles to the routine extension of fire protection and emergency services in the vicinity. As development continues in the area, the increased population could warrant improvements to existing fire suppression facilities and/or acquisition of new equipment and new staff. It could also warrant increased responses from neighboring fire districts, such as CAL FIRE. As development continues in the area, the increased population could warrant improvements to existing facilities and/or acquisition of new equipment and new staff. It could also warrant increased responses from neighboring fire districts, such as CAL FIRE. It is assumed that new development within the AFPD service area would increase the total revenue that the County collects through parcel taxes and fees for various inspections, building plan reviews, hydrant inspections, etc., which would provide funding to the AFPD to handle the cumulative increase in demand. The proposed Project would include fire access and circulation throughout the WWSP site including emergency access and areas an onsite fire station. Implementation of the proposed Project would not decrease or inhibit adequate response action or times from fire stations. Therefore, the proposed Project's contribution is not considerable and would not impair emergency response resulting in a lessthan-significant impact.

Evacuation

As discussed above, the cumulative context for evacuation efforts or plans includes future buildout of the County of Amador, including new development described under the 2030 General Plan, as well as development in the City of Jackson. The County's Emergency Evacuation Plan identifies SR-88 and SR-49 as the primary evacuation routes in the County. During evacuations for major emergencies, traffic congestion occurs and affects the ability of the public to evacuate in a safe, timely manner. The proposed Project, combined with other development in the County, would contribute to an increase in population that would have a cumulative impact on the ability of established evacuation routes to provide for safe and timely evacuation of affected residents. The County has not identified any existing cumulative impact related to emergency evacuation in the General Plan EIR.

The proposed Project would provide new roadway access at main site entries on Wicklow Way and Stoney Creek Road, which would provide quick access to SR-88 and SR-49. Access points for both SR-88 and SR-49 are located adjacent to the WWSP area. During buildout of the WWSP area over the next 20 years, coordination with the County, AFPD and, if necessary, the California Highway Patrol would be initiated to ensure emergency vehicle access is not impaired along local roadways and is maintained in areas under construction. The proposed Project would include fire access and circulation throughout the WWSP area, including emergency access and onsite fire station. As identified in the Amador County Implementation Plan, there is currently a high-priority effort to maintain and improve evacuation routes. This includes specific efforts to require fire-safe development, improve evacuation routes and maintain interagency cooperation and coordination. The proposed Project's contribution to the potential to impair emergency evacuation would not be considerable because of the onsite fire station and requirement to adhere to all State building codes to minimize the spread of a wildfire. Furthermore, potential future projects would have to individually assess and mitigate significant impacts related to building in the present and future environmental conditions related to emergency evacuation when future development within the WWSP area is proposed. Therefore, the proposed Project's contribution is not considerable and would not impair the County's emergency evacuation plan; therefore, cumulative impacts are less than significant.

4.17.6 Mitigation Measures

MM WILD-1 Construction Fire Prevention Plan

Prior to construction activities, including site clearing, grading, or trenching, the project developer(s) shall work with the AFPD to prepare a Construction Fire Prevention Plan to be provided to all future developers. The plan shall address training of construction personnel and provide details of fire suppression procedures and equipment to be used during construction. Information contained in the plan shall be included as part of project-related environmental awareness training to occur prior to any ground disturbance. At a minimum, the plan shall be consistent with the requirements in CBC Chapter 33 and CFC Chapter 33 and shall include the following:

- Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gaspowered equipment, use of spark arrestors, and hot work restrictions;
- Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days;
- Specifications for adequate water supply to service construction activities;
- Onsite fire awareness coordinator role and responsibility;
- Construction worker training for fire prevention, initial attack firefighting, and fire reporting;
- Emergency communication, response, and reporting procedures;
- Coordination with local fire agencies to facilitate access through the WWSP site;
- Implement all construction-phase fuel modification components prior to combustible building materials being delivered to the site;
- Emergency contact information; and

 Demonstrate compliance with applicable plans and policies established by state and local agencies.

MM WILD-2: Post Fire Activities.

Following any onsite wildfire during WWSP build-out in areas where development may be affected by post-fire risks, a post-fire field assessment shall be conducted by an engineering geologist or civil engineer, in coordination with the Amador Fire Department, to identify any areas that may be subject to increased risk of post-fire flooding, landslide or erosion. Any recommendations identified by the geologist to mitigate such risk shall be provided to the Amador County Planning Director and any applicable Emergency Operations Center for consideration of the work necessary to allow safe re-entry and/or re- occupation of the affected area.

4.17.7 References

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5.0 CEQA CONSIDERATIONS

5.1 Introduction

The California Environmental Quality Act (CEQA) Guidelines Section (§)15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, construction, development, and operation. As part of this analysis, implementation of the Wicklow Way Specific Plan (WWSP or proposed Project) as analyzed in the Draft Environmental Impact Report (DEIR) identifies:

- Significant environmental effects (Section 5.2);
- Significant environmental effects that cannot be avoided (Section 5.3);
- Significant irreversible environmental changes (Section 5.4);
- Growth-inducing impacts (Section 5.5);
- Mitigation Measures proposed to minimize significant effects (Section 5.2); and
- Alternatives (Chapter 6.0, Alternatives).

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

The Executive Summary and Chapter 4.0, Environmental Analysis, of this DEIR provide a comprehensive identification of the proposed Project's significant environmental effects and feasible mitigation measures that could minimize significant adverse impacts. These sections identify the level of significance of each environmental impact both before and after mitigation.

5.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The CEQA Guidelines §15126 (b) require that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed Project on various aspects of the environment are discussed in detail in technical Sections 4.1 through 4.17 contained in Chapter 4.0, Environmental Analysis, of this DEIR. There are project-specific and cumulative impacts that cannot be avoided if the Project is approved in Aesthetics, Air Quality, Greenhouse Gases, and Population and Housing. Because these impacts cannot be feasibly mitigated to a less-than-significant level, they would remain significant and unavoidable. The remainder of all proposed Project impacts can be mitigated to a less-than-significant level through the adoption of recommended mitigation measures. The following is a list of significant and unavoidable impacts.

Aesthetics

- Impact 4.1-1 Substantial adverse effect on a scenic vista.
- Impact 4.1-3 Substantially degrade existing visual character or quality of public views of the site and surroundings.
- Impact 4.1-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
- Impact 4.1-5 Cumulative impacts to aesthetics.

Air Quality

- Impact 4.3-1 Conflict with implementation of air quality plans.
- Impact 4.3-2 Result in a net increase of any criteria pollutant.
- Impact 4.3-3 Expose sensitive receptors to a substantial number of people.
- Impact 4.3-4 Result in other emissions that could affect a substantial number of people.
- Impact 4.3-5 Result in cumulative impacts to air quality.

Energy

Impact 4.6-2 Conflict with or obstruct plans for renewable energy or energy efficiency.

Greenhouse Gases

- Impact 4.8-1 Generate an increase in greenhouse gas emissions.
- Impact 4.8-2 Conflict with a plan, policy, or regulation to reduce greenhouse gas emissions.
- Impact 4.8-3 Cumulative impacts to greenhouse gases.

Population and Housing

Impact 4.12-1 Induce substantial unplanned population growth in an area, either directly or indirectly.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

The CEQA Guidelines §15126.2(d) require a discussion of any significant irreversible environmental changes caused by the proposed Project. Generally, a project would result in significant irreversible changes if (1) the primary impacts, such as the use of nonrenewable resources, and the secondary impacts, such as road improvements that provide access to previously inaccessible areas, would generally commit future generations to similar uses, or (2) an environmental accident associated with the proposed Project could cause such irreversible changes.

Implementation of the WWSP would result in a long-term commitment of site resources converted to suburban development. The proposed Project would result in or contribute to the following irreversible environmental changes:

- Conversion of undeveloped land. Approximately 164 acres of undeveloped land would be converted to suburban uses, thus precluding other alternate land uses in the future.
- Irreversible consumption of nonrenewable resources.

Determining whether a proposed Project may have a significant irreversible change requires a determination of whether key resources will be degraded or destroyed. The Project site is located within an undeveloped rural area within Amador County, and the proposed Project would result in the commitment of most of the Project site to eventual suburban development, permanently degrading the visual character of the site, removing open space (oak woodlands), and thereby precluding other uses for the life of the proposed Project. Restoration of the site would not be feasible given the degree of disturbance and urbanization of the area.

Development associated with the proposed Project would result in the irreversible effect on nonrenewable resources. The following resources will be permanently and continually consumed by project implementation: water, electricity, natural gas, and fossil fuels. Lumber and other forest products, such as asphalt, sand, gravel, and concrete, would be used in construction. As discussed in Sections 4.6 Energy, and 4.8 Greenhouse Gases, the long-term development of the WWSP site would result in consumption of fossil fuels and natural gas from construction and operational activities, traffic, heating and cooling of structures, and lighting. Use of these resources would have an incremental effect on the regional consumption of these commodities and therefore result in long-term, irretrievable losses of non-renewable resources, such as fuel and energy. Compliance with applicable building codes, planning policies (including WWSP Design Guidelines and Standards), and mitigation measures would ensure that resources are conserved to the maximum extent feasible.

The CEQA Guidelines §15126.2 (d) also require a discussion of the potential for irreversible damage that would result from potential environmental accidents associated with the proposed Project. Construction of the proposed Project would involve the use and/or storage of hazardous materials/wastes such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. Additionally, operation of the proposed Project would involve hazardous materials associated with various proposed land uses, including cleaning products, paints, solvents, adhesives, etc., as described in Section 4.9, Hazards and Hazardous Materials. However, all such activities would be regulated by and required to comply with federal, state, and local agencies hazardous materials regulations, the Amador County Hazardous Materials Area Plan, and LHMP regulations.

5.5 GROWTH INDUCING IMPACTS

CEQA Guidelines Section 15126.2 (d) requires that an EIR "discuss the growth-inducing impact of the proposed Project," including "ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Also, the EIR must discuss the characteristics of the proposed Project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Direct growth-inducing impacts are generally associated with the provision of urban services and the extension of infrastructure to an undeveloped area. Indirect or secondary growth-inducing impacts consist of growth induced in the region by the additional demands for housing, employment, and goods and services associated with population increase caused by, or attracted to, new development. Under CEQA, growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered to have a significant impact if it could be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

5.5.1 Growth Inducement Potential of the Proposed Project

As discussed above, CEQA Guidelines §15126.2(e) requires that EIRs include an evaluation of potential growth inducement impacts. The proposed Project could result in growth-inducing impacts if (1) the Project fosters economic or population growth or (2) the Project includes construction of additional housing, either directly or indirectly, in the surrounding environment. Additionally, this includes projects that remove obstacles to population growth, such as through the provision of expanded public utility capacity that may allow additional construction in the associated service area (e.g., the major expansion of a wastewater treatment plant). This CEQA Guidelines section also notes that "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Direct Growth Inducement

The proposed Project's potential to induce growth in the WWSP area is discussed in Chapter 4.12, Population and Housing. In this section, the Project was found to have significant potential to induce growth in the region due to the increased number of housing units and commercial and public/quasi-public development. The WWSP would require the addition of new infrastructure to an undeveloped area and would increase the capacity of the public service and utility systems that serve the site. Infrastructure upgrades would be completed, and these upgrades would increase the ability of service providers to serve currently undeveloped areas in the region. The proposed Project would increase the area's housing supply and introduce new employment to the area; therefore, implementation of the WWSP would lead to population and employment growth. However, population increases and employment growth would not surpass regional projections or conflict with local land use plans and policies.

The intent of the WWSP is to create a new community that meets the needs of the County through additional commercial, residential, public, quasi-public, and open space uses. Development of the proposed Project would provide 700 new dwelling units, accommodating approximately 1,660 residents in the unincorporated County. The addition of 1,660 people represents an approximately 4 percent increase to County as a whole and an approximately 7.5 percent increase to the population in the unincorporated area of the County.

The Project site is currently zoned for residential development of varying densities and retail, commercial and office uses, which indicates that the County has anticipated development of the site with these types of uses since adoption of the General Plan in 2016. The proposed uses—residential, commercial, public/quasi-public, and open space—are consistent with the existing WWSP site zoning. Additionally, the Amador Countywide 2021-2029 Housing Element identifies the site in the resource inventory as a parcel available for affordable housing development. The proposed Project, which

incorporates 10 percent of residential units as affordable housing for middle-, low-, and very low-income households, is consistent with the Housing Element as it provides more units than required by the RHNA allocation, which is 377 units for the 2012-2029 RHNA cycle.

As discussed in Chapter 4.12, Population and Housing, the WWSP proposes approximately 700 new dwelling units that will accommodate approximately 1,660 residents. Growth inducement, as it pertains to CEQA and this DEIR, generally denotes unplanned growth. Given that the WWSP site is currently designated for development and was identified in the Housing Element's resource inventory as available for residential development, development as proposed is not considered unplanned. Thus, the proposed Project will not directly result in significant growth-inducing impacts.

Indirect Growth Inducement

The elimination of either physical or regulatory obstacles to growth is considered to have a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas where these services are not currently provided would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth. However, under CEQA, growth is not considered necessarily detrimental or beneficial.

As discussed above, a project would indirectly induce growth if it removed an obstacle to additional growth and development, such as a constraint on a required public service. An example of this indirect effect would be the expansion of water or wastewater infrastructure, which might allow for more development to be served by access to these services. The proposed Project includes construction of an onsite wastewater treatment plant to serve the Project. Additionally, the Project would result in the expansion of public services in the area, including but not limited to building a school, a fire station, and utility infrastructure.

As mentioned above, implementation of the WWSP would result in growth-inducing impacts if it fostered economic growth. The proposed Project would affect the local economy through the construction of new residences and neighborhood-serving commercial and public/quasi-public uses that would encourage people to live and work in the WWSP area. The proposed Project would provide direct employment opportunities for the community and the County through new commercial and public/quasi-public development. Additionally, the proposed Project would result in indirect employment, which includes those additional jobs generated through expenditure patterns of direct employment associated with the Project, such as coffee shops and food establishments. Indirect jobs tend to be near places of employment and residences.

As discussed in Chapter 4.12, Population and Housing, the WWSP proposes to add approximately 100,000 square feet of retail and office uses, a 10-acre site for the consolidation of County civic offices and provide approximately 235 permanent jobs. Thus, the proposed Project would induce growth indirectly through employment opportunities that may attract new residents to the Project area.

5.6 OTHER CONSIDERATIONS

Changes in population and housing are generally characterized as social and economic effects and are not considered physical effects on the environment. As noted in DEIR Chapter 2.0, Project Description, the proposed Project would induce unplanned population growth, from new housing units and commercial development to subsequent new employment opportunities.

CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (CEQA Guidelines §15382). The guidance for assessing economic and social effects is set forth in §15131(a) of the CEQA Guidelines:

"Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused, in turn, by the economic or social changes. The intermediate economic or social changes need not be analyzed in any more detail greater than is necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes."

An increase in population resulting from new development does not cause direct adverse physical environmental effects. However, as discussed in Chapter 4.0 of this DEIR, construction and operation of the proposed Project would result in direct and indirect physical environmental effects associated with increased population. These direct and indirect environmental effects include increased vehicle trips, associated increases in air emissions and noise, energy demand, water demand, and the need for more public services and utilities.

6.1 Introduction

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project and evaluate the comparative merits of the alternatives" (CEQA Guidelines §15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed Project.

The CEQA Guidelines §15126.6 explains the foundation and legal requirements for conducting the alternatives analysis in an EIR as follows:

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly." (§15126.6[b])
- "The specific alternative of 'no project' shall also be evaluated along with its impact."
 (§15126.6[e][1])
- "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (§15126.6[e][2])
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." (§15126.6[f])
- "Among other factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries..., and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." (§15126.6[f][1])
- "Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (§15126.6[f][2][A])

This chapter considers alternatives to the proposed Project that are feasible, would attain most of the basic project objectives, and would avoid or substantially lessen significant effects.

6.2 PROJECT OBJECTIVES

As described in DEIR Chapter 2.0, the following objectives apply to implementation of the Wicklow Way Specific Plan (WWSP or proposed Project) and will aid decision-makers in their understanding of alternatives to the proposed Project, associated environmental impacts, review, recommendation, and approval.

- Complete Comprehensive Planning for the WWSP Site. Formulate a specific plan, related documents, and required regulatory approvals to address Amador County regional growth that is compatible with surrounding uses and provides housing, adequate public services, and economic development opportunities.
- Mix of land uses. Create a comprehensively planned, residential-based community that balances residential, commercial, parks, public services, public/quasi-public uses, open space, and preserves biological resources and rural character.
- General plan consistency. Achieve compatibility with the vision for the WWSP site contained in the County's adopted General Plan, including neighborhood connectivity, commercial, schools, parks, and open space uses.
- Housing opportunities. Provide varying densities and housing types to respond to market demands, including market-rate-purchase, rental, and affordable housing units consistent with the General Plan.
- Regional housing needs allocation. Aid the County in meeting its obligation to accommodate a percentage of future regional population growth [as embodied in the Regional Housing Needs Allocation (RHNA) identified by the California Department of Housing and Community Development (HCD)] by increasing residential stock.
- **Community form.** Shapes the physical form and character of development so that the WWSP site is functional, creates a sense of place, and has a connection to existing commercial, and residential development.
- Organize neighborhoods. Incorporate multi-model transportation and walking links to commercial, park, and open space uses, as well as new and existing schools.
- Provide adequate school services. Provide more schools for new student populations to generate the full build-out of the WWSP.
- Area roadways. Provide a safe and efficient circulation system that interconnects and promotes
 pedestrian and bicycle circulation to existing and new commercial, residential, and school uses.
- Open space. Preserve existing open space, create new amenities, preserve rural character, biological and natural resources, oak trees for regional benefit.
- **Fiscal contribution.** Include a mix of land uses, public services, and facilities that are fiscally feasible, and implement funding mechanisms to maintain a neutral/positive fiscal impact to the County's General Fund.
- Long-Term Growth. Plan for long-term growth that can guide and meet market demands over a 20-year horizon.

6.3 SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED IN EIR

As required by Section (§) 15126.6 of the CEQA Guidelines, this DEIR examines a range of reasonable alternatives to the proposed Project. These alternatives must attain most of the basic project objectives listed above and avoid or substantially lessen potential significant impacts in the following resource areas: aesthetics, air quality, greenhouse gases, and population and housing.

6.4 POTENTIAL ALTERNATIVES CONSIDERED IN THIS EIR

Potential project alternatives considered in this DEIR include:

Proposed Project, described in Chapter 2.0.

Alternative 1: No Project. This Alternative consists of existing conditions at the time the State Clearinghouse confirmed receipt of the Notice of Preparation (NOP) for the EIR (**Appendix A**). The purpose of this Alternative is to allow decision-makers to compare impacts of approving the proposed Project with the impacts of not approving the proposed Project. Under this alternative, no development would occur, and the site would remain in its current undeveloped condition.

Alternative 2: Hybrid WWTP. This Alternative assumes that the capacity of the proposed onsite wastewater treatment plant (WWTP) would be reduced and the existing Sutter Creek WWTP would be expanded.

Alternative 3: Foothill Conservancy Site Plan. The Foothill Conservancy proposed an alternative site layout during the NOP scoping process. This Alternative site layout would provide affordable and senior housing, preserve rural character, and preserve onsite environmental attributes by reducing traffic and public service impacts as compared to the WWSP.

Alternative 4: Reduced Development. This Alternative is designed to meet County RHNA targets. This reduction in housing units allows other land uses to be scaled to meet a lower number of residences. The acreage of community commercial and public/quasi-public uses would be reduced by 50 percent; open space acreage would increase; a new fire station would be constructed; however, a new school would not be needed.

6.5 ALTERNATIVES CONSIDERED AND REJECTED

The State CEQA Guidelines §15126.6(c) require that an EIR identify alternatives that were considered and rejected as infeasible and briefly explain the reasons for rejection. Alternatives considered but not included for further study include the following:

All Residential. This Alternative would eliminate commercial, open space, and public service uses, allowing the site to be developed for only residential uses (low-, medium-, and high density). While construction of this Alternative is feasible, it would not achieve the following objectives of the proposed Project; complete comprehensive planning for the WWSP site, provide a mix of land uses, meet General Plan goals and policies, create multi-modal opportunities, provide adequate school facilities, preserve open space, and plan for long-term growth. Replacing commercial, open space, and public/quasi-public uses with residential development would not reduce any significant impacts of the proposed Project except for eliminating odor emissions from the WWSP WWTP. This Alternative could increase traffic and

noise impacts, air quality, and greenhouse gas (GHG) emissions because residents would need to travel offsite to access shopping and schools. Additionally, there is no current demand for more than 700 housing units (proposed Project).

No Residential. This Alternative would eliminate all residential uses and only allow for commercial, public/quasi-public and open space uses. While construction of this Alternative is feasible, it would not achieve the following objectives of the proposed Project; complete comprehensive planning for the WWSP site, provide a mix of land uses, meet General Plan goals and policies, create a residential community with a mix of uses, increase the County's housing stock to meet regional housing and RHNA numbers, provide safe area roadways, and create a positive fiscal contribution and plan for long-term growth for the County. Allowing only non-residential uses would not reduce significant impacts from the proposed Project because commercial uses have higher long-term trip generation rates than constructed residential uses and would result in more vehicle trips and associated traffic and noise impacts, as well as air quality and GHG emissions. Additionally, this Alternative would not eliminate odor emissions from the WWSP WWTP.

Reduced Density: This Alternative would reduce residential density as compared to the proposed Project by decreasing medium- and high-density residential development, increasing low-density units, and limiting the amount of open space and commercial and public-quasi-public uses to meet the smaller residential population. While construction of this Alternative is feasible, it would not achieve the following objectives of the proposed Project; complete comprehensive planning for the WWSP site, provide a mix of land uses, meet General Plan goals and policies, provide diverse housing opportunities, meet regional and RHNA numbers, create a sense of community, create multi-modal opportunities, and provide safe area roadways. Not only would this decrease the number of housing units (assuming that fewer residential lots could be accommodated onsite), but it could also result in increased impacts from removing protections to onsite sensitive habitats and reducing wildlife corridors. The proposed Project already removes the maximum area of oak woodland allowed and the removal of additional oak woodland would conflict with County and state protection policies. This Alternative would lower potential air quality and GHG emission impacts and lessen population growth; however, this amount of development would still result in significant impacts associated with the change in rural character and would not eliminate odor emissions associated with wastewater treatment.

Offsite WWTP. This Alternative would develop the site consistent with the WWSP, except that wastewater treatment would occur at an offsite location. While construction of the portion on the proposed Project site is feasible, it would not achieve the following objective of the proposed Project to complete comprehensive planning for the WWSP site. This Alternative would not eliminate any significant impacts associated with the proposed project except for the odor emissions associated with wastewater treatment would not occur. Further, the AWA has publicly claimed that existing AWA facilities do not have the capacity to accommodate the volume of wastewater generated from the residential, commercial, and public/quasi-public uses associated with the proposed Project.

Expanding AWA Facility: This Alternative would expand AWA's existing wastewater treatment plant and lift stations to increase capacity. This Alternative would develop the site consistent with the WWSP, except that wastewater treatment would be accommodated at expanded AWA offsite facilities. While construction of this Alternative is feasible, except for expanding offsite water treatment, it would not achieve the following objective of the proposed Project to complete comprehensive planning for the

WWSP site. This Alternative would not eliminate any significant impacts associated with the proposed project except for eliminating onsite odor emissions associated with wastewater treatment. Further, existing AWA facilities do not have the capacity to accommodate the volume of wastewater generated from the residential, commercial, and public/quasi-public uses associated with the WWSP. AWA has confirmed that there are no expansion plans which further supports the infeasibility of this this alternative.

6.6 ALTERNATIVES TO THE PROPOSED PROJECT

Based on the criteria listed above, the following four alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the proposed Project, but which may avoid or substantially lessen some of the significant effects of the proposed Project. These alternatives and associated impacts are analyzed in the following sections.

6.6.1 Alternative 1: No Project

Section 15126.6(e) of the State CEQA Guidelines requires analysis of the No Project Alternative. In accordance with the State CEQA Guidelines, the No Project Alternative for a development project on an identifiable property consists of the circumstance under which the Project does not proceed as provided by §15126.6(e)(3)(B) of the State CEQA Guidelines. Section 15126.6(e)(3)(B) provides that, "In certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." The No Project Alternative provides a basis for comparison between the environmental impacts of the proposed Project and the current environmental conditions resulting from not approving the Project.

Description

Under the No Project Alternative, adoption of the WWSP would not occur, and no new development or infrastructure improvements would be implemented. The existing conditions as mentioned in Chapter 2.0 Project Description would remain. The undeveloped site and existing uses (cattle grazing) would continue.

Land Use and Planning

The proposed Project is consistent with the site's current General Plan land use designations and Zoning Ordinance zone districts. However, the WWSP does conflict with General Plan policies related to preservation of oak woodlands and cultural resources and locating residential development within the ALUCP 55 dBA airport noise contour. However, with the implementation of mitigation measures these impacts are reduced to less than significant.

In contrast, the No Project Alternative would continue to protect oak woodlands and avoid impacts to cultural resources or conflicts with the ALUCP. Under the No Project Alternative, the County's zoning designations for the Project site would remain unchanged and the existing uses and onsite physical conditions would remain. The existing site would remain undeveloped and current cattle grazing activities would continue. This Alternative would be consistent with the site's current land use designations and zoning. No changes to land use would occur, and therefore no impacts to land use would result.

Neither the No Project Alternative nor the proposed Project would physically divide an established neighborhood associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access. Land use and planning impacts under the No Project Alternative would be similar to the proposed Project and result in no impacts.

Aesthetics

The proposed Project would result in significant and unavoidable aesthetics impacts because construction of various building types would obstruct public views and change the rural character of the site. The proposed Project also has significant and unavoidable impacts in relation to nighttime lighting.

Under the No Project Alternative, the existing rural character of the site would remain. This Alternative would not result in the introduction of new residential, commercial, or public/quasi-public structures or the addition of managed open space. Views from the highway and adjacent residential neighborhoods would continue to consist of rolling hills with a mix of oak woodland and oak savannah. The No Project Alternative would reduce the above-mentioned impacts and would not result in any site improvements that would change the existing visual environment; therefore, no aesthetics impacts would occur.

Agricultural Resources

The proposed Project site is not designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In addition, the Project site is not under a Williamson Act contract and is not designated or zoned for agricultural use. Therefore, the proposed Project would result in no impacts to agricultural resources within the Project area.

Under the No Project Alternative, the existing agricultural character of the Project site would remain. No development would be built, and the site would remain undeveloped and continue to serve cattle grazing activities. Because the No Project Alternative would result in no changes to Important Farmland, Williamson Act land, or land zoned for agricultural uses of the site, agricultural impacts under this Alternative are the same as the proposed Project.

Air Quality

The proposed Project would result in significant and unavoidable air quality impacts during construction and operation. The proposed Project is inconsistent with applicable air quality plans, specifically the Amador County State Implementation Plan (SIP), is cumulatively considerable, may temporarily expose people to toxic air chemicals, and result in other emissions. Implementation of mitigation measures would not reduce air quality impacts to a less than significant level.

Under the No Project Alternative, no potentially significant construction or operational emissions would occur since no development would occur. Additionally, by maintaining existing uses, an increase in traffic-related air emissions would not occur. Therefore, the significant and unavoidable operation-related reactive organic gases (ROG) and nitric oxide (NO_x) emissions would be avoided and remain below the Amador Air District (AAD) threshold, sensitive receptors to pollutant concentrations would be avoided, and overall air quality impacts would be reduced. Thus, the No Project Alternative would result in no impacts as compared to the proposed Project.

Biological Resources

The proposed Project would result in potentially significant impacts to biological resources associated with the loss of sensitive habitats such as oak woodlands, riparian areas, and protected wetlands, as well as possible disturbance to nesting birds, special-status reptiles and amphibians, and other special-status animal and plant species. With implementation of mitigations measures specified in Section 4.4, Biological Resources, these impacts would be reduced to less than significant levels.

Under the No Project Alternative, no development would occur, and the site would remain as it currently exists, undeveloped and used for cattle grazing. There would be no potential impacts to biological resources, including sensitive habitats (oak woodlands, wetlands, riparian areas, etc.) and sensitive plant and animal species (prairie wedge grass, North American porcupine, foothill yellow-legged frog, etc.). No development would occur, and the No Project Alternative would result in no development-related impacts to biological resources as compared to the proposed Project.

Cultural Resources

The proposed Project would result in potentially significant impacts to cultural resources associated with disturbance to CRHR eligible resources and ground-disturbing activities that could damage unknown subsurface archaeological resources and/or human remains. With the implementation of mitigation measures described in Section 4.5, Cultural Resources, impacts to cultural resources would be reduced to less than significant levels.

Under the No Project Alternative, no excavation or grading activities would occur, and the potential for impacts to unknown subsurface historical resources from implementation of the Project would be avoided. No development would occur and therefore no impacts to CRHR-eligible resources would result. Thus, no archaeological, cultural, or historic resources impacts are associated with the No Project Alternative as compared to the proposed Project.

Energy

The proposed Project would result in potential impacts because it would be inconsistent with State and local plans and policies related to renewable energy generation and green building energy efficient mandates. The proposed Project would result in potentially significant impacts due to energy consumption associated with construction and operation activities, including fossil fuel consumption, vehicle trips, water use, etc. With the implementation of mitigation measures described in Section 4.6, Energy, impacts from construction and operation of the proposed Project would be reduced to a less than significant level.

There would be no new development under the No Project Alternative, and the existing vacant land would remain undeveloped and used for cattle grazing. Consequently, no grading or construction activities would occur under this Alternative and there would be no potential impacts to energy resources from wasteful, inefficient energy consumption. There would be no impact on energy resources under the No Project Alternative as compared to the proposed Project.

Geology and Soils

The proposed Project would not result in impacts to geology and soils as it relates to earthquakes, soil erosion, disasters associated with unstable soils, or expansive soils. Additionally, the California Geological Survey has classified the proposed Project site as MRZ-4, meaning there are no mineral resources present and therefore no impacts to mineral resources. The proposed Project does have a risk of a significant impact to paleontological resources since there is a high onsite potential of the Rabbit Flat Member and Goat Hill Member of the Logtown Ridge Formation. However, as described in Section 4.7, Geology and Soils, with the implementation of Mitigation Measure GEO-1, significant impacts would be reduced to a less than significant level.

The No Project Alternative would not result in any development or related disturbance on the proposed Project site, with no associated impacts related to geology and soils. Neither the proposed Project nor the No Project Alternative would result in significant impacts associated with geologic hazards and conditions; however, this Alternative would have even less potential for geology impacts as there would be no onsite excavation or grading and no introduction of additional structures or people. Further, because the No Project Alternative does not involve ground disturbance, it would result in no impacts to paleontological resources and would therefore have less impacts as compared to the proposed Project.

Greenhouse Gas Emissions

The proposed Project is anticipated to have significant and unavoidable GHG impacts from construction and operation activities. Construction activities such as off-road equipment and on-road vehicles and operational activities resulting in vehicle emissions and electricity use for heating and cooling of buildings, would generate GHG emissions. Similar to the air quality analysis, the No Project Alternative would not result in new GHG emissions or impacts over existing conditions based on the current use of the site for cattle grazing.

Additionally, the proposed Project does not currently require that buildings have all electric appliances and is therefore inconsistent with the 2022 Scoping Plan, as described in Section 4.8, Greenhouse Gases. The No Project Alternative would not involve any development and therefore would have no impact as compared to the proposed Project.

Hazards and Hazardous Materials

The proposed Project would not result in any significant impacts related to hazards and hazardous materials and would not change existing hazardous conditions. No new hazardous materials such as fuel for construction equipment and cleaning projects would be used. The No Project Alternative would have no impacts associated with hazards and hazardous materials as compared to the less than significant impacts for the proposed Project.

Hydrology and Water Quality

The proposed Project would result in less than significant impacts related to Hydrology and Water Quality. Drainage and water quality conditions onsite would remain unchanged. As described in Section 4.10, Hydrology and Water Quality, the proposed Project would increase onsite impervious surfaces, alter drainage patterns, and introduce uses that could generate pollutants and impact water quality from stormwater runoff. However, these impacts would be less than significant as conformance with

applicable storm water standards, water quality regulations, and best management practices (BMPs) would be required. Because the No Project Alternative would not result in any development, it would therefore result in no impacts related to the generation of impervious surfaces, increases in runoff rates, storm drain capacity, flooding, erosion/sedimentation, hydromodification, drainage alteration, and water pollutants as compared to baseline conditions. The No Project Alternative would have no impacts associated with hydrology and water quality materials as compared to the less than significant impacts for the proposed Project.

Noise

With implementation of mitigation measures, the proposed Project would result in less-than-significant noise impacts as discussed in Section 4.11, Noise. Two impacts would be significant but reduced to less than significant with mitigation: generation of short-term construction noise and noise associated with future land uses; and exposure of residential uses to noise associated with the Westover Airfield. The remaining impacts—generation of excessive ground-borne vibration or ground-borne noise levels—and cumulative noise impacts would be less than significant with no mitigation measures required.

The No Project Alternative would not result in any development and, therefore, no new stationary or mobile noise sources or impacts to existing noise-sensitive land uses. Existing onsite noise conditions would continue without the introduction of new noise sources that could potentially impact offsite receptors. Therefore, no impact would occur, and no mitigation would be required, and the No Project Alternative would have no noise impacts as compared to the proposed Project.

Population and Housing

As discussed in Section 4.12, Population and Housing, the proposed Project would result in significant and unavoidable impacts to population and housing due to direct population growth from the provision of housing and indirectly through employment opportunities that may attract new residents to the area.

The No Project Alternative would result in no new residential, commercial, or public/quasi-public development, no increase in population and housing, and therefore no impacts to population and housing as compared to the proposed Project. While the No Project Alternative would not contribute to population growth, there would be no provision of new housing, or more specifically, affordable housing, that would benefit the existing community and contribute to the County's required allocation of the RHNA. As a result, the No Project Alternative would be environmentally inferior to the proposed Project regarding population and housing.

Transportation

The proposed Project would introduce new roadways that would connect to the existing roadway network and provide internal circulation. The internal roadways would be designed in accordance with County standards, the AFPD, and the County Public Works Department. The proposed Project-generated VMT is estimated to be lower than the adopted significance threshold for the County.

Under the No Project Alternative, no development is proposed, no construction-related traffic impacts would occur and no additional traffic beyond existing conditions would be generated. No new residential, commercial, or public development would occur, and no new roadways would be constructed; therefore, no disproportionate increases to VMT would occur. The proposed Project would

not result in any significant or unavoidable impacts associated with transportation and traffic and impacts would be less than significant. Under the No Project Alternative, no impact would occur, and no mitigation would be required as compared to the less than significant impacts of the proposed Project.

Tribal Cultural Resources

The Buena Vista Rancheria identified several natural resources that have cultural value to the Tribe and could be affected by the proposed Project; however, these items do not meet the criteria to be considered tribal cultural resources (TCRs). However, development of the proposed Project would require ground-disturbing impacts within the Project site that may impact as-yet unidentified TCRs. With the implementation of mitigation measures, as described in Section 4.15, Tribal Cultural Resources, potentially significant impacts would be reduced to a less than significant level.

Under the No Project Alternative, no construction would occur, onsite disturbance would be avoided, and no potential TCRs would be unearthed. Since no ground-disturbing activities would occur under this Alternative, there would be no impact. Therefore, the No Project Alternative would result in no impacts as compared to the less impact to TCRs from the proposed Project.

Public Services

The proposed Project would result in potentially significant impacts related to public services, including fire and police protection, schools, parks, etc., due to increased service demand generated by new residents and employees. However, with the implementation of mitigation measures as described in Section 4.13, Public Services, these potential impacts would be reduced to a less than significant level.

The No Project Alternative would not result in new housing, commercial or public/quasi-public development that would increase population requiring public services to accommodate increased demand. Therefore, the No Project Alternative would have no impact on public services as compared to the less impact to public services from the proposed Project.

Public Utilities

The proposed Project would include the construction of new water transmission, wastewater collection and treatment, stormwater drainage, electric power, and natural gas infrastructure. It would include a new onsite WWTP to accommodate full build out of the WWSP. With the implementation of mitigation measures, impacts generated by the proposed Project on existing utilities would be less than significant. Impacts associated with public utilities would be less than significant, as discussed in Section 4.16, Public Utilities.

The No Project Alternative would not result in any new development on the Project site; therefore, it would not result in demand for additional water, sewer, solid waste disposal, or other public utilities. Thus, the No Project Alternative would result in no impacts to public utilities as compared to the less than significant impact of the proposed Project.

Wildfire

The proposed Project site is located within a High-Fire Hazard Area as determined by CalFIRE. The site is undeveloped and dominated by annual grasslands and includes oak woodland and riparian forest. The

proposed development would be in relatively flat areas of the Project site which would result in a lower risk of fire hazards compared to development on moderate or steep slopes greater than 20 percent. There are no steep slopes on the Project site. Both construction and operational activities could increase wildfire risk because they would introduce use of flammable materials, power tools, equipment which have the potential to ignite adjacent vegetation and potentially start a fire. Additionally, the proposed Project would add new population and structures to the site and therefore increase development in the area.

Under the No Project Alternative, no development would occur, and no people would be drawn to the site. Therefore, it would not result in exposing people or structures to wildland fires or associated risks associated with wildfire and would not impact any adopted emergency response plan or evacuation plan. No impacts to wildfire would occur from this Alternative and there would be fewer impacts to wildfire as compared to the proposed Project.

6.6.2 Alternative 2: Hybrid Wastewater Treatment

Description

The Hybrid Wastewater Treatment Alternative (Hybrid Alternative) is the same as the proposed Project, including all the land uses in the same configuration, at the proposed densities, and 20-year phasing, except for wastewater treatment and conveyance. Under this Alternative there would be a hybrid approach to conveyance and treatment of wastewater reducing the capacity of the proposed onsite WWTP and expanding the existing Sutter Creek WWTP. Initial wastewater treatment would be handled at the Sutter Creek WWTP via upgrades to existing lines to accommodate new throughput along with upgrades and modernization of existing or new processing facilities at the existing Sutter Creek WWTP.

While the timing is unknown, when triggered, an onsite WWTP would be constructed. The WWTP built under this Hybrid Alternative would be reduced in size as compared to the proposed Project and only sized to accommodate buildout of the remaining WWSP land uses.

The Hybrid Alternative would allow for commercial and quasi-public uses to be constructed in advance of proposed residential uses and allow economics and demographics to drive housing density and product type and not preclude opportunities to address affordable housing (low income and senior) since development would be responsive to the housing needs in the County.

Land Use and Planning

The proposed Project conflicts with the General Plan policies regarding preservation of oak woodland and cultural resources and potential ALUCP conflicts from placing residential development within the Westover Airfield 55 dBA noise contour. With the implementation of mitigation measures, these impacts would be less than significant.

The Hybrid WWTP Alternative would have the same impacts on oak woodlands, cultural resources and from the 55 dBA noise contour. Like the proposed Project, mitigation measures outlined in Sections 4.4 and 4.11 would reduce these impacts to less than significant levels. This Alternative would result in less onsite ground disturbance (smaller WWTP footprint), however, offsite impacts from upgrades and modernization of the Sutter Creek WWTP and conveyance infrastructure would occur. Therefore, there

would be no reduction in overall earth moving activities and therefore the Hybrid Alternative would have similar impacts as the proposed Project.

Aesthetics

The proposed Project would have a significant and unavoidable aesthetics impact in relation to the loss of rural character. The Hybrid Alternative would result in essentially the same amount of development as the proposed Project, although it is acknowledged that the WWTP would be slightly smaller. In both cases, it is the introduction of development that creates impacts, and the Hybrid Alternative would not preclude this development. Therefore, the Hybrid Alternative would have similar significant and unavoidable aesthetic impacts as the proposed Project.

Agricultural Resources

As discussed in Section 4.2 Agricultural Resources, the proposed Project would not impact agricultural resources. The Hybrid Alternative would not impact designated farmlands or result in agriculturally related land use conflicts. Both the Hybrid Alternative and the proposed Project would not result in impacts to agricultural resources.

Air Quality

The proposed Project's land uses are consistent with the intent of the existing General Plan land use designations. However, there are not sufficient details to determine whether the proposed Project would result in increased or decreased air emissions as compared to General Plan land use designations. As discussed in Section 4.3, Air Quality, to be conservative the proposed Project is considered to induce growth at a rate greater than the General Plan. Thus, as described in Section 4.3, associated emissions are not accounted for in the SIP and therefore the proposed Project's impacts on air quality are considered significant and unavoidable.

The Hybrid Alternative would result in similar land uses and densities and is also speculative, like the proposed Project, and therefore inconsistent with the SIP. Without quantification, like the proposed Project, it cannot be determined if mitigation would reduce emission impacts to less than significant levels. Thus, the Hybrid Alternative would have similar significant and unavoidable air quality impacts as the proposed Project.

Biological Resources

Under the proposed Project, biological resource impacts on special-status species, oak woodlands, and vernal pools would be reduced to less than significant levels with mitigation measures outlined in Section 4.4, Biological Resources. The Hybrid Alternative would result in similar land uses in a similar configuration and at similar densities and therefore be similar to the less than significant impact classification of the proposed Project.

Cultural Resources

The proposed Project has the potential to impact known cultural resources. Since there are no site-specific development plans, it is unclear whether these resources can be avoided. The proposed Project also has the potential to impact undiscovered resources. However, impacts would be reduced to less than significant with implementation of mitigation measures outlined in Section 4.5, Cultural Resources. Applying the same mitigation, this Alternative would result in less onsite ground disturbance but would

have offsite ground disturbance associated with improvements to conveyance infrastructure and the Sutter Creek WWTP. Impacts on cultural resources from the Hybrid Alternative would be similar to the proposed Project, less than significant with mitigation.

Energy

The proposed Project has less than significant energy impacts with the implementation of mitigation measures identified in Section 4. 6, Energy. The Hybrid Alternative would include similar land uses and density as the proposed Project. Therefore, energy use would be similar. Regardless of a smaller onsite WWTP, energy would be consumed to transport and treat wastewater offsite. Like the proposed Project, the Hybrid Alternative would not fulfill the strategies outlined in the Energy Action Plan. However, as discussed in Section 4.6, Energy, these strategies are not enforceable. The Hybrid Alternative would also be required to implement mitigation measure ENE-1 would result in a less than significant impact with mitigation like the proposed Project.

Geology and Soils

Except for potentially significant impacts on paleontological resources, the proposed Project would not result in geology and soils impacts. Even shallow excavations have the potential to result in the permanent loss of scientifically important and regionally significant paleontological resources. With mitigation, this impact would be reduced to less than significant.

The Hybrid Alternative, with similar land uses, configuration, and densities as the proposed Project would result in less onsite ground disturbance, because of the smaller WWTP, but would have offsite impacts from improvements to conveyance infrastructure and the Sutter Creek WWTP. There would be no net reduction in earthmoving activities between the proposed Project and this alternative. Therefore, impacts would be like the proposed Project.

Greenhouse Gases

The proposed Project would have significant and unavoidable GHG impacts and there are no components of the Hybrid Alternative that would eliminate or lessen the production of GHG emissions. This Alternative would result in similar development. It is acknowledged that the WWTP would be reduced in size in relation to the proposed Project; however, the amount of wastewater throughput would be the same and conveyance and treatment would still consume energy that emits GHGs. Moreover, it would also entail offsite upgrades, improvements, and/or modifications to the Sutter Creek WWTP that would produce GHGs. As discussed in Section 4.3, Air Quality and 4.6, Greenhouse Gases, to be conservative the proposed Project is considered to induce growth at a rate greater than the General Plan. Thus, as described in Sections 4.3 and 4.6, associated emissions are not accounted for in the SIP and therefore the proposed Project's impacts on air quality are considered significant and unavoidable. Therefore, the Hybrid Alternative would have similar significant and unavoidable GHG impacts as the proposed Project.

Hazards and Hazardous Materials

The proposed Project's impacts from hazards and hazardous materials are less than significant and require no mitigation. Since land uses and densities for the Hybrid Alternative are like the proposed

Project and the types and quantities of hazardous materials used and wastes produced are similar, therefore impacts are similar.

Hydrology and Water Quality

The proposed Project would have less than significant hydrology and water quality impacts, and no mitigation is required. The Hybrid Alternative would be subject to the same regulatory requirements, BMPs, and design features to manage stormwater and runoff. The Hybrid Alternative would result in the same land uses, configuration, and densities, less onsite ground disturbance from a smaller onsite WWTP, but would result in offsite ground disturbance associated with improvements to conveyance infrastructure and the Sutter Creek WWTP. Thus, hydrology and water quality impacts would be less than significant for the proposed Project and this alternative.

Noise

The proposed Project would have significant noise impacts related to construction and placing homes within the Westover Airfield 55 dBA noise contour. Mitigation would reduce impacts to less than significant. The Hybrid Alternative would not alter the development intensity or the location of land uses. Residences would still be constructed at the site's interface with existing residential neighborhoods and within the 55 dBA noise contour for both the Project and this alternative. Therefore, no noise impacts would be eliminated or lessened. The Hybrid Alternative would require the same mitigation measures to reduce noise impacts. The Hybrid Alternative would have similar less than significant noise impacts with mitigation as the proposed Project.

Population and Housing

The proposed Project's impacts related to population and housing are significant and unavoidable. This is because, despite the County's acknowledged need for housing, there is no feasible mitigation to reduce impacts to accommodate population growth. Thus, consistent with the General Plan, the County's approach is to manage growth, providing suitable housing opportunities with the least impacts.

The Hybrid Alternative would introduce a similar amount of development with a similar land use plan as the proposed Project. The one variable is that the onsite WWTP would not be as large and initial wastewater throughput would be treated via an offsite WWTP. Significant and unavoidable impacts in relation to population and housing would remain and it would have similar significant and unavoidable impacts as the proposed Project.

Transportation

The proposed Project's transportation impacts would be less than significant regarding consistency with current policies and programs, VMT generation rates, hazardous conditions, and emergency access. The Hybrid Alternative would include a similar land use mix and configuration, and not alter the circulation system relative to the proposed Project. Therefore, the Hybrid Alternative would have similar less than significant transportation impacts as the proposed Project.

Tribal Cultural Resources

The proposed Project has the potential to impact undiscovered TCRs. This impact is reduced to less than significant with mitigation. The Hybrid Alternative would result in less onsite ground disturbance, but

offsite ground disturbance would occur from improvements to conveyance infrastructure and upgrades to the Sutter Creek WWTP. Therefore, it has the same likelihood to encounter unknown TCRs and would be subject to the same mitigation, reducing impacts to less than significant, as the proposed Project.

Public Services

The proposed Project would result in less than significant impacts to public services. The Hybrid Alternative proposes similar land uses and density. Therefore, the demand for public services would be similar. Both the proposed Project and this Alternative include a new onsite fire station and school. Like the proposed Project, the Hybrid Alternative would be required to pay a fair share development fee for services. The Hybrid Alternative would have similar less than significant impacts to public services as the proposed Project.

Public Utilities

The proposed Project would have less than significant impacts to public utilities. The Hybrid Alternative would also result in less than significant impacts. The demand for utility services would remain the same, the only difference would be that the Hybrid Alternative would not treat all wastewater onsite. To support this, conveyance would be achieved through improvements to existing trunk and distribution lines and expansion/modification of the Sutter Creek WWTP. This arrangement does not change the degree of any impact. The Hybrid Alternative would result in similar less than significant impacts to public utilities as the proposed Project.

Wildfire

The proposed Project's wildfire impacts are reduced to less than significant levels with the implementation of mitigation. The Hybrid Alternative would not reduce the number or structures or people exposed to wildfire hazards. Given that this Alternative would have similar land uses, it would experience the same wildfire risks and require the same mitigation. The Hybrid Alternative would have similar less than significant wildfire impacts as the proposed Project.

6.6.3 Alternative 3: Foothill Conservancy Site Plan

Description

The proposed Foothill Conservancy Alternative site plan layout is intended to provide affordable and senior housing, preserve rural character, preserve site environmental attributes, and reduce traffic and public service impacts as compared to full build-out of the WWSP. The proposed land uses included in the Foothill Conservancy Alternative (see Figure 6-1, Foothill Conservancy Alternative) are based upon suggestions, however, some of the assumptions described in the following analysis may be speculative. For instance, it cannot be definitively determined if the amount of ground disturbance would be less than the proposed Project, however, it is assumed that the number of residential units would be less. Further, the Foothill Conservancy Alternative assumes the same general circulation principles as the proposed Project with residential collector streets providing access to the varied land uses. Since the Foothill Conservancy Alternative did not identify land for a fire station, WWTP, or school, this analysis assumes that these components are not included. Lastly, the proposed Project includes an easement to allow for continuation of cattle movement through the WWSP site. The Foothill Conservancy Alternative includes private land ownership and includes a concept of small farms on the perimeter of the site, but does not address the easement, therefore, it is assumed that the easement precluded. See Chapter 2.0 and Appendix A for more information about this alternative.

Land Use and Planning

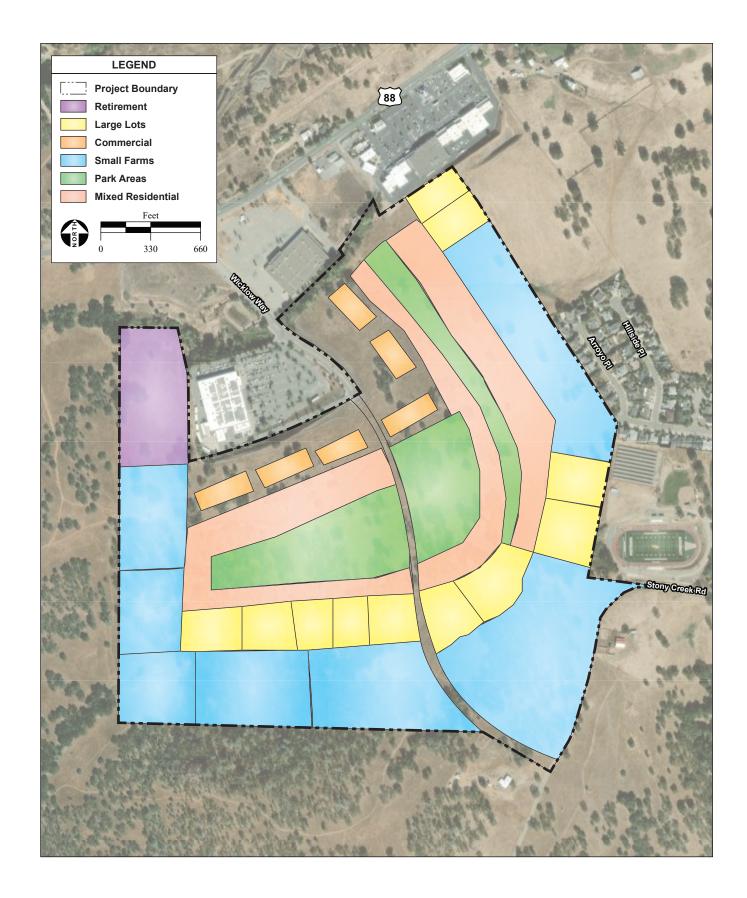
The proposed Project would unify two distinct areas of development reducing the geographic division between the City of Jackson and the Martell RSC. Land uses proposed in this Alternative would not physically divide a community but would not promote unification of land uses due to its suggestion of different, abutting land uses on the eastern edge of the site.

The General Plan designates the proposed Project site as RSC and RM; such designations indicate that the site is intended for larger-scale service centers with combinations of residential, commercial, industrial, public services, and higher density single or multi-family uses. The proposed Project would specify distinct land use designations, including public/quasi-public, community-commercial, parks, recreation, and open space. Consistent with these land use designations, the WWSP acts as a guide to the development of the proposed Project site.

Although the proposed Project site is located within the existing C1, R1 and R3 zone districts, onsite land uses would be governed by proposed PD residential zones, consistent with the County's Zoning Ordinance for residential development. In addition, the proposed Project would establish the CC - Community Commercial (CC), Public/Quasi-Public (P/PQ), Open Space (OS), and Parks and Recreation (PR) zones districts. The existing site zoning C1, R1, and R3 (commercial and residential) are not zones indicative of protecting natural resources. Land uses associated with the proposed Project zoning would be consistent with the existing zoning apart from the OS and PR zones, which are not development intensive, rather they protect natural resources.

The proposed Project conflicts with General Plan policies preserving oak woodlands, sensitive habitats and species, air quality and paleontological and cultural resources. In addition, the proposed Project would conflict with the ALUCP by placing residential development within the 55 dBA Westfield Airport noise contour. Mitigation measures would reduce these impacts to less than significant levels.

The Community Alternative would not protect oak woodlands in an open space preserve; rather small lot farming and "large lots" would be allowed, which could potentially have a greater impact on oak woodlands than the proposed Project. This Alternative would not avoid impacts to cultural resources or conflicts with the ALUCP. This Alternative includes five to ten-acre farms that are inconsistent with General Plan land use designations and zoning and the intent of these designations. Introducing small lot farming has the potential to create land use conflicts with existing residents east of the site. Depending on the types of agricultural activities, existing residents may experience unwanted odor, noise, or pests. Further, reducing the amount of residential development, could indirectly encourage development elsewhere in the County, that may have environmental impacts. Given that this Alternative has the potential to create land use conflicts that may have greater impacts (noise, odor, loss of oak woodland, cultural and paleontological resources) and may indirectly induce development elsewhere that could have environmental impacts, this Alternative has greater land use impacts than the proposed Project.



Aesthetics

The proposed Project would result in a significant impact from the loss of rural character. This Alternative would not completely reduce aesthetic impacts as views from publicly accessible areas, such as surrounding roadways, would still be altered, most notably in the northern portion of the site. Buffering the Project site with five-to-ten-acre farms along the southern Project boundary may assist in retaining some rural character; however, the proposed Project retain existing open space along the southern boundary would also retain some rural character.

The proposed Project also has significant and unavoidable impacts in relation to nighttime lighting. This Alternative would not reduce those impacts and would introduce new sources of lighting in areas that are designated as open space under the proposed Project. While this Alternative may reduce residential, and commercial sources of lighting, because light emanates and light pollution can be seen from a greater distance, there is the potential that this Alternative could create greater lighting impacts as compared to the proposed Project.

Given that this Alternative does not alleviate or reduce the degree of any significant and unavoidable aesthetic impacts, impacts are considered the same as for the proposed Project.

Agricultural Resources

The proposed Project site does not contain land designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland and there is no impact to agricultural resources. Similarly, the Community Alternative would have no impact in relation to designated farmland and therefore would have similar impacts as the proposed Project.

Air Quality

While the proposed Project's land uses are consistent with the intent of the existing General Plan land use designations, there are not sufficient details available at this time to determine if emissions would result in increased or decreased air emissions as compared to General Plan land use designations. Therefore, as discussed in Section 4.3, Air Quality, the proposed Project is expected to induce growth at a rate greater than the General Plan and therefore, associated emissions are not accounted for in the SIP. The proposed Project would cause potentially significant impacts regarding air quality standard attainment, affects to sensitive receptors, and other emissions. Even with mitigation, impacts would remain significant and unavoidable.

Given that the level of development is not specified in the Community Alternative, like the proposed Project, air emissions cannot be precisely quantified. Thus, like the proposed Project this Alternative would also result in potentially significant impacts. For this Alternative to have less impacts than the proposed Project it would have to be assumed that the level of development would be reduced. Using this assumption, in comparison to the proposed Project, this Alternative would still have significant and unavoidable air quality impacts although on a lesser scale.

Biological Resources

The proposed Project would impact special status plants, mammals, birds, amphibians, reptiles, invertebrates, oak woodlands, aquatic habitats, and wetlands and watercourses. With mitigation measures, all impacts would be reduced to less than significant levels.

While the Foothill Conservancy Alternative revises and redistributes land uses as compared to the proposed Project, it would not achieve reducing biological impacts. Onsite oak woodland habitat is protected by the Oak Woodlands Conservation Act and the Amador County General Plan and is considered a sensitive natural community by California Department of Fish and Wildlife (CDFW). Of the 74 acres of oak woodland onsite, the proposed Project would preserve 37 acres in an open space preserve with a conservation easement as shown on **Figure 4.4-2**. Under this Alternative, much of the proposed open space would be converted for small lot farming. This would not guarantee the same level of protection and would fragment the oak woodland habitat by replacing public open space with private land ownership.

The proposed Project protects seasonal wetlands and the perennial stream via the open space designation. The design of this Alternative does not protect seasonal wetlands as shown on **Figure 4.4-1**. Additionally, the unnamed perennial stream in the southern portion of the site would be fragmented by the proposed individual small lot farms, whereas these features are preserved within the open space areas of the proposed Project.

An impact on a sensitive natural community would be considered significant or substantial if sensitive habitat types were directly converted, disturbed through construction and maintenance, or indirectly disturbed by construction or ongoing development. Indirect impacts may occur due to narrow buffers from development, loss of connectivity of resources such as groundwater, non-discrete impacts such as pollution, and other project-related impacts. This Alternative may be able to reduce the degree of significance of some of these impacts if development intensity is reduced, but again, it would not eliminate impacts and may exacerbate some impacts by reducing habitat and sensitive species connectivity through the loss of the open space. However, like the proposed Project, impacts could be reduced to less than significant with mitigation. Since this Alternative may result in fragmentation of biological resources it would have greater impacts to biological resources as compared to the proposed Project.

Cultural Resources

The proposed Project has the potential to impact known cultural resources. Since there are no site-specific development plans, it is unclear whether the known resources can be avoided. There is also potential for unknown archaeological resources and human remains to be discovered during earth moving activities. Mitigation measures reduce impacts to less than significant. Likewise, this Alternative could potentially impact either known and/or unknown resources and implementation of mitigation measures would also reduce these impacts to less than significant levels. Since it is not known if this Alternative would have less ground disturbance, for this analysis it is assumed that it would have similar less than significant cultural resources impacts as the proposed Project.

Energy

The proposed Project would result in increases in energy demand. Energy consumption is related to increased vehicle trips, building energy use, water use, wastewater generation and processing, and the potential use of stationary sources such as emergency generators and boilers. With mitigation, the proposed Project's energy impacts are considered less than significant. The Foothill Conservancy Alternative would likely have similar energy impacts during construction, without the WWTP, it is likely that this Alternative would consume less energy during operation. However, this Alternative would still require the support of either a new or expanded WWTP facilities, thus it would not eliminate this source of energy consumption, it would be an indirect impact. Additionally, this Alternative, like the proposed Project is inconsistent with the goals of the Energy Action Plan since it does not consider the installation of renewable energy infrastructure or electricity storage. As discussed in Section 4.6, Energy, compliance with strategies in the Energy Action Plan are to be implemented when feasible. The Foothill Conservancy Alternative would be subject to the same mitigation measure as the proposed Project, to reduce impacts to less than significant and therefore, would have similar impacts.

Geology and Soils

Except for potential impacts to paleontological resources, the proposed Project does not result in geology and soils impacts. Even shallow excavations have the potential to result in the permanent loss of scientifically important and regionally significant paleontological resources. With mitigation, this impact is reduced to less than significant. The Foothill Conservancy Alternative would include ground disturbance that could impact paleontological resources that would be reduced to less than significant levels with proposed mitigation. Since it is not known if and where resources are located and the level of ground disturbance associated with the Foothill Conservancy Alternative is unclear, it would have similar less than significant geology and soils impacts as the proposed Project.

Greenhouse Gases

The proposed Project would have significant and unavoidable GHG impacts. The Foothill Conservancy Alternative would include the same sources of GHG generation as the proposed Project. Given that this Alternative reconfigures the mix of land uses, increasing commercial and reducing residential, it is not known if this Alternative would reduce the amount of GHG emissions as compared to the proposed Project without quantification. At a qualitative level, the Foothill Conservancy Alternative would be required to adhere to all the same regulations and implement the same mitigation measures as the proposed Project and would have the same GHG impacts.

Hazards and Hazardous Materials

The proposed Project's hazards and hazardous materials impacts are less than significant, and no mitigation is required. Likewise, this Alternative would have less than significant impacts in relation to hazards and hazardous materials. Generally, the types of household hazardous materials/wastes and industrial cleaning and/or electronic wastes associated with the proposed Project and Alternative land uses would be the same. Hazardous materials associated with small lot farms may use chemical applications including pesticides and herbicides in greater quantities as compared to the proposed Project open space uses. Since these are not commercial farms, the quantities of these chemical applications are assumed to be low and not require special permits.

The circulation network for both the proposed Project and this Alternative would be designed to County standards and adhere to all access requirements. Emergency evacuation plans are administered at the programmatic level and thus there are no proposed Project-related impacts and subsequently no impacts from this Alternative.

Overall, this Alternative would result in similar less than significant impacts from hazards and hazardous materials as the proposed Project.

Hydrology and Water Quality

The proposed Project would result in less than significant hydrology and water quality impacts and no mitigation is required. This Alternative would be subject to the same regulatory requirement, BMPs and design features that manage stormwater and runoff as the proposed Project. This Alternative would not necessarily result in less ground disturbance (and thus earth moving related siltation, erosion, etc.) or impervious surfaces. Therefore, this Alternative is considered to have the same less than significant impacts to hydrology and water quality as the proposed Project.

Noise

Project-related noise impacts are related to construction and homes in the Westover Airfield 55 dBA noise contour. Mitigation measures reduce Project-related noise impacts to less than significant levels. The Foothill Conservancy Alternative would have noise-related construction impacts, but they would be less than the proposed Project since development density would be less adjacent to the existing residential neighborhoods near Arroyo Place and Westview Drive.

Proposed Project-related transportation noise is less than significant. It is assumed that transportation related noise would remain less than significant under this Alternative, but not necessarily less given that proposed commercial uses replace some of the public/quasi-public and residential land uses and the level of development is unspecified.

Lastly, this Alternative would not eliminate noise impacts associated with the Westover Airfield 55 dBA noise contour. However, like the proposed Project, mitigation would reduce impacts to less than significant levels.

Given that this Alternative would reduce construction related noise impacts and have slightly less short-term impacts, overall, it would have similar less than significant operational noise impacts.

Population and Housing

The Project is consistent with the General Plan designations of RSC and RM that allow residential development at various densities. However, it was determined that impacts to population and housing are significant and unavoidable. This is because despite the County's acknowledged need for housing, there is no feasible mitigation to reduce impacts to accommodate this population growth. The County's approach is to manage growth in an orderly manner, providing suitable housing opportunities with the least number of impacts.

The Foothill Conservancy Alternative supports housing albeit on a lesser scale. There are no distinct housing numbers for this Alternative, rather the plan is to postpone determination of residential density

until water supply, sewage disposal and emergency services issues are resolved. However, as demonstrated in this DEIR there are adequate services to support the proposed Project's land uses.

This Alternative would limit the amount of residential development, potentially to less than is allowed under General Plan RSC and RM designations. This could hinder the County from achieving its RHNA targets as outlined in the General Plan Housing Element. This could create an impact from converting land designated for more intense residential uses to small lot farming and creating the need for the construction of housing elsewhere (an effect found not to be significant in relation to the proposed Project).

The Foothill Conservancy Alternative specifically identifies affordable senior housing. The proposed Project does not specify housing types and there are no restrictions on housing types within the residential planning areas which would allow senior housing to be constructed in conjunction with other housing products, potentially creating a more viable and market-driven development option. CEQA does not consider economic or social effects as impacts unless these effects are connected to physical environmental impacts. Therefore, while the provision of affordable senior housing is fulfilling a housing niche and potential future County need as demographics shift, it does not reduce impacts from the proposed Project.

Overall, both the proposed Project and this Alternative would involve changes to the environment that would be significant and unavoidable. The Foothill Conservancy Alternative could create the need for housing elsewhere, a potentially indirect environmental effect. Therefore, this Alternative has greater significant and unavoidable population and housing impacts as compared to the proposed Project.

Transportation

The proposed Project has less than significant transportation impacts and no mitigation is required. For the Foothill Conservancy Alternative, impacts related to transportation would primarily be related to the commercial and residential uses. Trips generated from these uses have different motivating factors and different trip generation characteristics. While speculative, in relation to VMT, depending on the type of commercial use needed, this could result in longer vehicle trips and an increase in VMT impacts. As discussed earlier, both the proposed Project and the Foothill Conservancy Alternative would be subject to the same regulations and standards guiding site access and safety. Overall, it is assumed that like the proposed Project, this Alternative would have less than significant transportation impacts, not require mitigation, and have similar less than significant impacts.

Tribal Cultural Resources

There are no known TCRs that have been identified within or near the proposed Project site. However, there is the potential for unknown unidentified TCRs to exist, therefore, mitigation is provided that would reduce impacts to the discovery of TCRs. The Foothill Conservancy Alternative includes earth moving activities that could also affect unidentified resources and would require the same mitigation to reduce potential impacts to less than significant levels. It is not known if this Alternative would result in less ground disturbance and therefore, it is considered to have the same less than significant impacts to TCRs as the proposed Project.

Public Services

Like the proposed Project, this Alternative would require public services. In general, the demand for public services is proportional to population. However, the types of calls and services can also be related to land uses. Residential and commercial uses typically result in increased calls in property crimes and to a lesser extent crimes against individuals. Senior housing tends to have a greater demand for emergency medical services and single-family land uses result in the need for more schools and parks.

The Foothill Conservancy Alternative does not include a fire station or school, both of which may be required to adequately serve future residents. If these facilities are not provided onsite, there could be an indirect environmental impact because of the need to construct these facilities offsite. It is likely that this Alternative would provide adequate park land to maintain established County service ratios.

However, given that this Alternative may have an indirect impact due to the need to access facilities offsite, it is considered to have greater public service impacts as compared to the proposed Project.

Public Utilities

The Foothill Conservancy Alternative does not include a WWTP. Currently, various published Amador County plans indicate there is inadequate wastewater conveyance or treatment facilities to accommodate new development. Even though this Alternative may result in less intensification of land uses, existing facilities lack capacity. Without inclusion of the WWTP, this Alternative lacks wastewater treatment capacity and would be required to connect to offsite services for which there is confirmation that no feasible option has been identified to handle 100 percent of the proposed Project's wastewater needs and by default this Alternative.

This Alternative recognizes the need to postpone the determination of residential density until water supply, sewage disposal and emergency services issues are resolved. However, the timing of such facilities is unknown and according to the General Plan EIR, resolution may be through provision of onsite facilities.

The proposed Project has less than significant impacts to public utilities. With the uncertainty of the provision of services, the level of impacts associated with this Alternative cannot be determined. AWA has identified that it is not feasible for 100 percent of the proposed Project's wastewater to be treated offsite. Moreover, if wastewater treatment were to occur offsite at a new or expanded facility, there could be greater impacts. Therefore, this Alternative has greater impacts of an unknown degree of significance as compared to the proposed Project.

Wildfire

The proposed Project's wildfire impacts are reduced to less than significant levels with the implementation of mitigation. Due to the location, climate, and vegetation at the site, this Alternative would be confronted with similar wildfire issues and be required to implement the same mitigation. This Alternative may reduce the number of structures or people exposed to wildfire and therefore may have incrementally less impacts. However, the proposed Project includes a fire station that would reduce response times and increase firefighting and emergency response resources, therefore, this Alternative would have greater impacts as compared to the proposed Project.

6.6.4 Alternative 4: Reduced Development

Description

The Reduced Development Alternative would involve similar concept as the proposed Project, but with an approximate 50 percent reduction in the number of residential units and a corresponding reduction in the amount of community commercial and public/quasi-public development. There are no feasible reduced development alternatives that would eliminate all significant unavoidable impacts associated with the proposed Project. Therefore, an alternative was chosen for analysis that could potentially lessen impacts and result in a feasible development that meets General Plan policies.

The Reduced Development Alternative is predicated on the number of residential units as assigned in the County's RHNA commitment. As discussed in Section 4.12, Population and Housing, State law requires that County Housing Elements identify RHNA targets set by the Department of Housing and Community Development to encourage each jurisdiction to provide its fair share of very-low, low, moderate, and above-moderate income housing. **Table 6-1, RHNA Targets** identifies the number and income category of residential units that would be developed under this Alternative.

TABLE 6-1 RHNA TARGETS

INCOME CATEGORY	HOUSING UNITS NEED
Very Low	109
Low	62
Moderate	72
Above Moderate	134
Total	377

Source: Denovo Planning Group, 2023

In accordance with this reduction, planning areas would also be reduced in size and overall site development would shift northward. This Alternative would also eliminate housing within the Westover Airfield 55 dBA noise contour. In addition, the southernmost medium density residential from the proposed Project would be eliminated, removing development from a biologically sensitive area and maintain a less fragmented tract of open space.

Given that this Alternative would reduce the amount of residential development, land uses from the proposed Project would also be reduced, providing 50 percent of the community commercial and public/quasi-public development, and having a WWTP sized to accommodate a reduced service area. Likewise, the other public services, would be proportionately reduced in size. It is assumed that the fire station would still be needed, however, a school site is not included in this Alternative.

Like the proposed Project, this Alternative would still require extension of infrastructure to the site to support development. However, circulation would be scaled to meet the lower demands. Wicklow Way would extend through the site to Stony Creek Road in part to accommodate traffic from the high school consolidation.

Land Use and Planning

Given that the Reduced Development Alternative would result in the same land uses but at a lesser scale, land use and planning impacts would be relatively similar, albeit proportionately less. The proposed Project conflicts with General Plan policies regarding the preservation of oak woodland, sensitive habitats and species and cultural and paleontological resources. The proposed Project would conflict with the ALUCP by placing residential development within the Westover Airfield 55 dBA noise contour, but mitigation would reduce these impacts to less than significant levels. As compared to the proposed Project, this Alternative would disturb less acres of oak woodland and sensitive species and habitats, result in less earth moving activities, and would remove homes from the Westover Airfield 55 dBA noise contour, therefore, these land use impacts would be less.

However, the Reduced Development Alternative may not fully achieve some of the goals and policies of the General Plan to the same level as the proposed Project including goals and policies that promote higher density or intensity of development in areas adjacent to existing communities, targeting future commercial and residential growth in the RSC, attaining a diverse and integrated mix of land uses, and encouraging commercial growth which provide jobs and reduces VMT, etc. (See **Table 3-1**, Consistency with Amador County General Plan Applicable Goals and Policies). Therefore, this Alternative would have similar less than significant land use and planning impacts as the proposed Project.

Aesthetics

The proposed Project would result in a significant and unavoidable aesthetic impact in relation to the loss of rural character. This Alternative would not eliminate these impacts, as views from publicly accessible areas would still be altered. Even though development would be shifted northward in this Alternative leaving the southern portion of the Project site retained as open space, due to topography and vegetation, viewsheds south of the Project site looking north would remain relatively unchanged under both the proposed Project and this Alternative.

The Reduced Development Alternative would require less lighting which would be noticeable as compared to the proposed Project. Given that there is no existing lighting to absorb the introduction of new lighting sources, nighttime illumination would be an impact that would be visible from greater distances (in comparison to publicly accessible views into the Project site). Thus, there are no feasible mitigation measures to reduce impacts from new sources of light. While, this Alternative would have a marked reduction of nighttime lighting in comparison to the proposed Project, it would still have a significant and unavoidable aesthetic impact, although it would be slightly less.

Agricultural Resources

The proposed Project has no impacts in relation to agricultural resources. This Alternative would also have no impact. It is assumed that the grazing and cattle movement area identified along the eastern portion of the proposed Project boundary would be retained under this Alternative. There are no designated farmlands or agriculturally related land use conflicts. This Alternative and the proposed Project would have no agricultural resources impacts.

Air Quality

While the proposed Project's land uses are consistent with the intent of the existing General Plan land use designations, due to the lack of explicit development plans there are not sufficient details, available at this time, to determine if emissions from the proposed Project would result in increased or decreased air emissions as compared to General Plan land use designations. Therefore, as discussed in Section 4.3, Air Quality, to be conservative the proposed Project is considered to induce growth at a rate greater than the General Plan and therefore, the associated emissions are not accounted for in the SIP. The Reduced Development Alternative is also speculative, and hence, it also cannot be determined if the emissions generated are consistent with the SIP. Mitigation measures identified in Section 4.3 would be required for this Alternative and without quantification, it cannot be determined if these emissions would be reduced to less than significant. However, this Alternative would decrease emissions proportionate to the decrease in development. Thus, while this Alternative would also result in significant and unavoidable air quality impacts, these impacts would be slightly less as compared to the proposed Project.

Biological Resources

Under this Alternative, the reduction in development would allow for an increase in open space. This would equate to a comparable reduction in impacts to biological resources, such as oak woodlands, seasonal streams, and wetlands. Proposed Project biological impacts can be reduced to less than significant levels with the implementation of mitigation. As identified in Section 4.4, Biological Resources, 37 acres of oak woodland would be preserved in an open space-designated conservation easement under the proposed Project, but this Alternative would preserve a greater amount of oak woodland habitat.

As discussed in Section 4.4, Biological Resources, an impact on a sensitive natural community would be considered significant or substantial if sensitive habitat types were directly converted, disturbed through construction and maintenance, or indirectly disturbed by construction or ongoing implementation of the proposed Project. Indirect impacts may occur due to narrow buffers from development, loss of connectivity of resources such as groundwater, non-discrete impacts such as pollution, and other project-related impacts. This Alternative would reduce the degree of significance of some of these impacts proportionate to the reduction in development However, like the proposed Project, it would require mitigation to reduce impacts to less than significant. Since the Reduced Development Alternative would impact less acres of sensitive areas, the amount of biological resources impacts would be reduced as compared to the proposed Project.

Cultural Resources

The proposed Project has the potential to impact known cultural resources. Since there are no site-specific development plans, it is unclear whether known resources can be avoided, but these impacts are reduced to less than significant levels with mitigation. The Reduced Development Alternative, which would also be subject to the mitigation measures outlined in Section 4.5, has the potential to result in less cultural resources impacts since there would be less development. Yet, this would also be dependent on the location of proposed development. Similarly, the proposed Project has the potential to impact undiscovered resources. Given that this Alternative would result in less ground disturbance, there is less likelihood to disturb unknown resources. Both the proposed Project and this Alternative

would have less than significant cultural resources impacts, however because of the reduced amount of land disturbance to unearth undiscovered resources, impacts for this Alternative are lower.

Energy

The proposed Project would result in increases in energy demand due to growth inducing aspects of development. Energy consumption is related to increased vehicles trips, building energy use, water use, wastewater generation and processing, and potential use from stationary sources such as emergency generators and boilers. With mitigation, the proposed Project's energy impacts would be reduced to less than significant levels. The Reduced Development Alternative would result in incrementally less energy impacts during construction and operation proportionate to the reduced development. However, this Alternative, like the proposed Project conflicts with the goals of the Energy Action Plan as it does not consider the installation of renewable energy infrastructure or electricity storage. As discussed in Section 4.6, Energy, compliance with strategies in the Energy Action Plan would be implemented when feasible. The Reduced Development Alternative would be subject to the same mitigation measure to reduce impacts to less than significant and both the proposed Project and it would have less than significant impacts. Since the Reduced Development Alternative would consume less energy, its impacts would be less as compared to the proposed Project.

Geology and Soils

Except for potential impacts to paleontological resources, there are no geology and soils impacts generated by the proposed Project. Even shallow excavations have the potential to result in the permanent loss of scientifically important and regionally significant paleontological resources. With mitigation, this impact is reduced to less than significant. The Reduced Development Alternative would have the potential to impact paleontological resources, however, it would be proportionately less in relation to the reduction in development. Like the proposed Project, this Alternative would include mitigation to reduce impacts to less than significant levels. Both the proposed Project and this Alternative would have less than significant impacts, however, due to the smaller amount of area to be developed, there is a lower likelihood of encountering paleontological resources and there would be less geology and soils impacts as compared to the proposed Project.

Greenhouse Gases

The proposed Project would have significant and unavoidable GHG impacts. The Reduced Development Alternative includes the same but less sources of GHG emission generation as compared to the proposed Project. However, it is not known, without quantification, if this Alternative would meet the SB 32 and Scoping Plan GHG emission reduction targets. Therefore, this Alternative would have less GHG emission impacts as compared to the proposed Project.

Hazards and Hazardous Materials

The proposed Project's hazards and hazardous materials impacts are less than significant and require no mitigation. Likewise, this Alternative would generate lower hazards and hazardous materials impacts. The land uses would remain the same, so the types of hazardous materials used, and wastes produced would be the same, however, at lower quantities. Therefore, this Alternative has less hazards and hazardous materials impacts as compared to the proposed Project.

Hydrology and Water Quality

The proposed Project would result in less than significant hydrology and water quality impacts and no mitigation is required. This Alternative would be subject to the same regulatory requirements, BMPs and similar design features to manage stormwater and runoff. However, since the Reduced Development Alternative would result in less development and therefore, ground disturbance, it would produce less siltation and erosion in the short-term and have less impervious surfaces that would redirect runoff in the long-term. Moreover, with less urbanization there would be a decrease chemical uses that could enter the storm drain system and potentially pollute runoff. Therefore, this Alternative would have less hydrology and water quality impacts as compared to the proposed Project.

Noise

Project related noise impacts are limited to construction noise and the placement of homes in the Westover Airfield 55 dBA noise contour. This Alternative would result in development occurring further north, potentially reducing construction noise related impacts at the interface with existing residential development to the east. Regardless, like the proposed Project, with mitigation construction related impacts from this Alternative would be reduced to less than significant levels. Likewise, this Alternative would remove housing from the Westover Airfield 55 dBA noise contour, eliminating this impact. It is noted that this impact is reduced to less than significant with Project-related mitigation. However, since it would result in less construction in the vicinity of the existing residences and removes residential land uses outside of the 55 dBA noise contour, this Alternative has less impacts as compared to the proposed Project.

Population and Housing

This Alternative is consistent with RHNA numbers, and therefore, is assumed to provide adequate housing through the current RHNA planning cycle (2029). Thus, this Alternative would not indirectly induce development in the near term since there is adequate land and allocation of units to provide for current RHNA commitments. Conversely, theoretically, the proposed Project is planned to be built out over a 20-year period, allowing flexibility to meet future housing needs, thereby not creating future indirect impacts.

As discussed in Section 4.12, while the County acknowledges the need to provide infrastructure and housing for growth, like the proposed Project, this Alternative conflicts with other General Plan goals and policies, however, it meets the County's approach to best manage growth with the least environmental impacts.

Overall, both the proposed Project and this Alternative would involve changes to the environment that would be significant and unavoidable. However, this Alternative would reduce the severity of these impacts due to reduced development. Therefore, this Alternative would result in slightly less significant and unavoidable population and housing impacts as compared to the proposed Project.

Transportation

The proposed Project has less than significant transportation impacts and no mitigation is required. Both the proposed Project and this Alternative would be subject to the same regulations and standards guiding site access and safety. As discussed in Section 4.14, VMT is the appropriate metric for evaluating

traffic impacts. Given that the land uses would be the same, the Reduced Density Alternative would likely have similar VMT characteristics, except for the need for residents to drive to school locations outside of the WWSP area. Like the proposed Project, this Alternative would have less than significant transportation impacts and would not require mitigation, therefore, impacts are similar.

Tribal Cultural Resources

There is the potential for yet undiscovered TCRs to be unearthed during construction of the proposed Project and mitigation would reduce impacts to less than significant levels. Similarly, the Reduced Development Alternative could impact unknown TCRs and would be subject to the same mitigation, resulting in less than significant impacts. Given that this Alternative would have less ground disturbance there is less potential to unearth undiscovered resources and therefore, this would have less TCR impacts as compared to the proposed Project.

Public Services

The provision of new or expanded public services is largely a function of an increase in population or new development. Therefore, under this Alternative, there would be a reduction in the need for public services. The proposed Project provides for both an onsite fire station and a school. This Alternative would include a fire station, but not the school. Like the proposed Project, this Alternative would be required to pay a fair share development fee for services which would be proportional to the amount of development and the number of future residents/homes. The proposed Project would result in less than significant impacts to public services and this Alternative would have less than significant public services impacts, although incrementally reduced as compared to the proposed Project.

Public Utilities

The proposed Project would result in less than significant impacts to public utilities and no mitigation is required, and as discussed in this DEIR and the WWSP, it would be required to pay fair share of development impact fees. The proposed Project includes a WWTP that would accommodate the wastewater and this Alternative also includes a WWTP and all other associated utility infrastructure required to meet reduced demands. As required, fair share development impact fees would be required for offsite infrastructure to support development. In general, impacts would be like the proposed Project but less due to reduced development. Therefore, it would have fewer public utilities impacts as compared to the proposed Project.

Wildfire

The proposed Project's wildfire impacts are reduced to less than significant with the implementation of mitigation. Due to the location, climate, and vegetation, at the Project site, this Alternative would be subjected to similar wildfire issues and would be required to implement the same mitigation. This Alternative would reduce the number of structures or people exposed to wildfire risk and therefore would have incrementally less impacts. Since this Alternative would result in less structures and fewer people in the area, it would have less impacts as compared to the proposed Project.

6.7 COMPARISONS OF THE PROPOSED PROJECT WITH ALTERNATIVES

Table 6-2 Summary of Impact Findings compares potential impacts of each of the Project alternatives to the proposed Project. Impact determinations assume mitigation measures have been applied.

TABLE 6-2 SUMMARY OF IMPACT FINDINGS

ENVIRONMENTAL RESOURCE	PROPOSED PROJECT	ALTERNATIVE 1: NO PROJECT	ALTERNATIVE 2: HYBRID WWTP	ALTERNATIVE 3: FOOTHILL CONSERVANCY	ALTERNATIVE 4: REDUCED DEVELOPMENT
Land Use and	LTS	NI	A	A	_
Planning	611				_
Aesthetics	SU	NI	_	_	▼
Agricultural	NI	NI	_	_	_
Air Quality	SU	NI	_	▼	▼
Biological	LTS	NI	_	A	▼
Cultural	LTS	NI	_	_	▼
Energy	LTS	NI	_	_	▼
Geology and Soils	LTS	NI	_	_	▼
Greenhouse Gases	SU	NI	_		▼
Hazards and Hazardous Materials	LTS	NI	_	_	•
Hydrology and Water Quality	LTS	NI	_	_	•
Noise	LTS	NI		_	▼
Population and Housing	SU	NI	_	A	•
Transportation	LTS	NI		_	_
Tribal Cultural Resources	LTS	NI	-	-	•
Public Services	LTS	NI	_	A	▼
Public Utilities	LTS	NI	_	A	▼
Wildfire	LTS	NI	_	A	▼

Notes:

NI = No impact

LTS = Less than significant impact

SU = Significant and unavoidable impact

- ▲ Alternative is likely to result in greater impacts to issue when compared to proposed Project.
- Alternative is likely to result in similar impacts to issue when compared to proposed Project.
- ▼ Alternative is likely to result in reduced impacts to issue when compared to proposed Project.

6.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR, which is typically selected based on an ability to avoid or substantially reduce significant environmental effects associated with project implementation.

As indicated in **Table 6-2**, the No Project Alternative would result in the least environmental impacts and would be the environmentally superior Alternative because it would avoid all impacts associated with the proposed Project for all resource areas. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The proposed Project would result in significant and unavoidable impacts for aesthetics, air quality, greenhouse gases, and population and housing. For most all other environmental resource topics, mitigation measures have been identified to reduce significant impacts to a less than significant level. However, while the No Project Alternative is identified as the environmentally superior alternative, it would not result in any new impacts because no development would occur. Therefore, the No Project Alternative does not meet the objectives of the proposed Project, as outlined in **Section 6.0.2**.

Of the remaining alternatives (not including the No Project Alternative), the following provides comparisons of the alternatives with the proposed Project.

Alternative 2: Hybrid WWTP

The Hybrid Alternative proposes similar land uses and in the same configuration and densities. The only difference would be that the onsite WWTP would be reduced in size and a portion of the site's wastewater would be conveyed and treated offsite. However, for offsite treatment to occur, there would need to be upgrades, improvements, modernization and/or expansion to the existing Sutter Creek WWTP and conveyance infrastructure. This would also cause various significant environmental impacts, which could be more impactful than the proposed Project. Additionally, there would be no reduction in overall ground disturbance. The Hybrid Alternative would also achieve the proposed Project objectives.

Alternative 3: Foothill Conservancy Site Plan

Overall, the Foothill Conservancy Alternative would have similar impacts as the proposed Project in relation to aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology, transportation, and TCRs. It would have less impacts in relation to air quality, noise, and wildfire. Finally, it would have greater impacts to land use and planning, agricultural resources, biological resources, population and housing, and potentially public services. However, this Alternative would not meet proposed Project objectives.

Alternative 4: Reduced Development Alternative

With this Alternative's reduction in development, almost all potential impacts would be reduced. Specifically, impacts would be less for the following: construction and post WWSP implementation air quality, GHG, and energy impacts and demands would be reduced, short-term construction impacts to adjacent residences and Argonaut High School would be reduced (noise, vibration and dust), more acres

of onsite oak woodlands would be protected and result in more open space for enhanced recreational opportunities and preservation of onsite biological ecosystems. There would also be less loss of rural character; potential impacts to cultural and historic resources and impacts to geologic and paleontological resources would be reduced; lower amounts of hazardous materials would be required; public service and public utility demands would be less; and wildfire impacts would be reduced. However, this Alternative would not meet the Project objectives; specifically, the provision of adequate needed housing, however, it would comply with current RHNA commitments.

Conclusion

Based on the above comparisons of the alternatives to the proposed Project, it is evident that none of the alternatives would conform with General Plan goals and policies better than the proposed Project. The following supports this conclusion:

- The proposed Project best satisfies the Project objectives.
- The alternatives do not eliminate significant environmental impacts. (See Table 6-2 for a resource specific comparison of each Alternatives' impacts in relation to the proposed Project);
- The alternatives will continue to incur significant and unavoidable impacts for environmental resources (aesthetics, air quality, greenhouse gases, and population and housing).

However, balancing housing, conformance with RNHA numbers and environmental impacts as presented in **Table 6-2** above, it is recommended that the environmentally superior Alternative be identified as the Reduced Development Alternative. Choosing this Alternative will provide Amador County decision-makers with flexibility to consider approval of a Project that meets housing mandates, complies with General Plan policies, and limits environmental impacts as compared to the proposed Project.

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