

Housing Element and General Plan Update **Draft Program Environmental Impact Report**

State Clearinghouse No. 2023120387

Volume 1: Draft PEIR

April 2025



**City of Irwindale
Community Development Department
Planning Division
5050 North Irwindale Avenue
Irwindale, CA 91706**

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**City of Irwindale
Community Development Department
Planning Division
5050 North Irwindale Avenue
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CONTENTS

City of Irwindale Housing Element and General Plan Update Draft Program Environmental Impact Report

	<u>Page</u>
Aronyms.....	vii
Executive Summary	ES-1
ES.1 Project Synopsis	ES-1
ES.2 Areas of Known Controversy	ES-9
ES.3 Summary of Project Alternatives.....	ES-9
ES.4 Summary of Impacts and Mitigation Measures	ES-10
Chapter 1. Introduction.....	1-1
1.1 Purpose of the Draft Program EIR	1-1
1.2 Type of EIR.....	1-2
1.3 Intended Uses of the PEIR	1-3
1.4 Scoping Process.....	1-4
1.5 Scope of the PEIR	1-4
1.6 Format of the Draft PEIR	1-6
1.7 Public Review of the Draft PEIR	1-7
Chapter 2. Project Description.....	2-1
2.1 Introduction	2-1
2.2 Regional Location and Existing Setting	2-1
2.3 Background.....	2-7
2.4 Purpose and Objectives of the Project.....	2-8
2.5 Project Description.....	2-12
2.6 Project Implementation	2-35
Chapter 3. Environmental Setting.....	3-1
3.1 Overview of the Environmental Setting	3-1
3.2 Cumulative Projects	3-2
Chapter 4. Environmental Impact Analysis.....	4-1
4.0 Introduction	4-1
4.1 Aesthetics	4.1-1
4.2 Air Quality	4.2-1
4.3 Biological Resources	4.3-1
4.4 Cultural Resources	4.4-1
4.5 Energy	4.5-1
4.6 Geology and Soils.....	4.6-1
4.7 Greenhouse Gas Emissions	4.7-1
4.8 Land Use and Planning.....	4.8-1
4.9 Noise.....	4.9-1
4.10 Population and Housing.....	4.10-1

	<u>Page</u>
4.11 Public Services	4.11-1
4.12 Transportation.....	4.12-1
4.13 Tribal Cultural Resources	4.13-1
4.14 Utilities and Service Systems.....	4.14-1
Chapter 5. Alternatives	5-1
5.1 Introduction to Alternatives	5-1
5.2 Project Objectives	5-2
5.3 Significant and Unavoidable Impacts	5-3
5.4 Alternatives Considered and Rejected.....	5-3
5.5 Alternatives Selected for Further Analysis in this PEIR.....	5-4
5.6 Summary of Alternatives to the Proposed Project	5-22
Chapter 6. Other CEQA Considerations	6-1
6.1 Significant and Unavoidable Impacts	6-1
6.2 Reasons the Project is Being Proposed Notwithstanding its Significant Unavoidable Impacts	6-2
6.3 Growth-Inducing Impacts	6-3
6.4 Significant Irreversible Environmental Effects	6-5
6.5 Potential Secondary Effects Related to Project Mitigation Measures	6-6
6.6 Effects Found Not to Be Significant	6-10
Chapter 7. List of Preparers	7-1
Lead Agency	7-1
Consultants	7-1
Chapter 8. References	8-1
 Appendices	
A. Notice of Preparation, Initial Study, and Scoping Comments	
A-1 Notice of Preparation	
A-2 Initial Study	
A-3 Scoping Comments	
B. Air Quality/GHG Model Outputs, Calculations, and Emissions Summary	
C. Biological Resources Plant and Wildlife Potential to Occur	
D. Energy Calculations	
E. Noise Assumptions and Modeling	
F. Transportation Assessment Report	
G. Native American Consultation Documentation	

Page**Figures**

Figure ES-1	Regional and Vicinity Map	ES-3
Figure ES-2	Proposed Housing Sites Inventory.....	ES-7
Figure 2-1	Regional and Local Location	2-3
Figure 2-2	Citywide Planning Area.....	2-5
Figure 2-3	Existing General Plan Land Use Map	2-6
Figure 2-4	Existing Zoning Map	2-9
Figure 2-5	Existing Residential Neighborhoods in Irwindale	2-11
Figure 2-6	Proposed Housing Sites Inventory.....	2-23
Figure 2-7	Site 1 - Allen Drive	2-25
Figure 2-8	Site 2 - 12881 Ramona Boulevard.....	2-26
Figure 2-9	Site 3 - 13201 Ramona Boulevard.....	2-29
Figure 2-10	Site 4 - Gold Line Reliance II	2-30
Figure 2-11	Site 5 - Irwindale / Padilla	2-31
Figure 4.3-1	Southwestern Willow Flycatcher Critical Habitat.....	4.3-7
Figure 4.6-1	Geologic Map.....	4.6-5
Figure 4.8-1	Proposed General Plan Land Use Designations	4.8-13
Figure 4.8-2	Proposed Zoning Designations.....	4.8-14
Figure 4.9-1	Decibel Scale and Common Noise Sources	4.9-3
Figure 4.9-2	Noise Measurement Locations	4.9-14
Figure 4.9-3	Existing Roadway Noise Contours.....	4.9-16
Figure 4.9-4	Future Roadway Noise Contours.....	4.9-23
Figure 4.10-1	Unemployment Rate Trends, 2010-2021	4.10-4
Figure 4.11-1	Fire and Police Stations in the City	4.11-5
Figure 4.11-2	Schools, Parks, Libraries, and Open Space Facilities in the City	4.11-6

Tables

Table ES-1	Adequate Sites Analysis Summary	ES-5
Table ES-2	Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts	ES-12
Table 2-1	Existing Land Uses in Irwindale and Land Area	2-2
Table 2-2	6th Cycle Regional Housing Needs Allocation for Irwindale	2-13
Table 2-3	Proposed Housing Element Policies and Programs	2-15
Table 2-4	Proposed Housing Sites Inventory.....	2-24
Table 2-5	Adequate Sites Analysis Summary.....	2-33
Table 4.2-1	Ambient Air Quality Standards.....	4.2-3
Table 4.2-2	Air Pollutant Standards and Ambient Air Quality Data	4.2-10
Table 4.2-3	South Coast Air Basin Attainment Status (Los Angeles County)	4.2-14
Table 4.2-4	Estimated Maximum Regional Operational Emissions (pounds per day)	4.2-39
Table 4.2-5	Estimated Maximum Localized Operational Emissions (pounds per day)	4.2-44
Table 4.3-1	Land Cover Types of Five Identified Housing Sites	4.3-2
Table 4.3-2	Species Potential to Occur within the Identified Housing Sites	4.3-4
Table 4.3-3	Burrowing Owl Nesting Sites Recommended Buffers.....	4.3-18
Table 4.4-1	Previously Recorded Cultural Resources	4.4-14
Table 4.5-1	Electric Power Mix Delivered to Retail Customers in 2022	4.5-2
Table 4.5-2	Estimated Operational Energy Demand	4.5-18
Table 4.7-1	State of California Greenhouse Gas Emissions.....	4.7-5
Table 4.7-2	Major Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan	4.7-19
Table 4.7-3	Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan	4.7-24

Table 4.7-4	Unmitigated Net Change In Annual Greenhouse Gas Emissions	4.7-42
Table 4.7-5	Project Compliance with Applicable 2022 Scoping Plan Actions and Strategies	4.7-45
Table 4.7-6	Consistency with Applicable Connect SoCal 2024 Actions and Strategies.....	4.7-47
Table 4.8-1	Existing Land Use Designation and Zoning of Housing Inventory Sites	4.8-2
Table 4.9-1	HUD External Noise Exposure Standards for New Residential Construction	4.9-8
Table 4.9-2	Construction Vibration Damage Criteria	4.9-8
Table 4.9-3	Indoor Groundborne Vibration Impact Criteria for General Assessment.....	4.9-9
Table 4.9-4	Noise and Land Use Compatibility Matrix	4.9-10
Table 4.9-5	City of Irwindale Noise Ordinance Standards	4.9-11
Table 4.9-6	Summary of Short-Term Noise Measurements.....	4.9-13
Table 4.9-7	Existing Roadway Noise Levels.....	4.9-15
Table 4.9-8	Construction Equipment Noise Levels	4.9-20
Table 4.9-9	Future Roadway Noise Levels	4.9-22
Table 4.9-10	Distance within Vibration Damage Criteria	4.9-26
Table 4.9-11	Summary of Construction Equipment and Activity Vibration.....	4.9-27
Table 4.9-12	Cumulative Traffic Noise Impacts	4.9-31
Table 4.10-1	Population Growth 2010 - 2021	4.10-2
Table 4.10-2	Housing Growth, 2010 - 2021	4.10-2
Table 4.10-3	Average Household Size, 2010 and 2021	4.10-3
Table 4.10-4	Employed Residents by Industry, 2015 - 2019	4.10-3
Table 4.12-1	VMT Assessment Summary	4.12-9
Table 4.14-1	Projected Wastewater Generation	4.14-23
Table 4.14-2	Estimated Solid Waste Generation	4.14-24
Table 5-1	Summary of Alternative Impacts Compared to the Proposed Project.....	5-23
Table 5-2	Ability of Alternatives to Meet Project Objectives.....	5-24

ACRONYMS

µg/m ³	micrograms per cubic meter
2020–2045 RTP/SCS	2020–2045 Regional Transportation Plan/Sustainable Communities Strategy
AB	Assembly Bill
ACC	Advanced Clean Cars
ACHP	Advisory Council on Historic Preservation
ACT	Advanced Clean Trucks
ADA	Americans with Disabilities Act
ADU	accessory dwelling unit
AMI	County Median Family Income
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
ASHRAE	Society of Heating and Air-Conditioning Engineers
ATCM	Airborne Toxic Control Measure
ATP	Active Transportation Plan
BACT	Best Available Control Technology
BAU	business-as-usual
BTU	British thermal units
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
CalGEM	California Geologic Energy Management Division
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers Association
CAPP	Community Air Protection Program
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code

CCR	California Code of Regulations
CDF	California Division of Forest
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDR	carbon dioxide removal
CEC	California Energy Commission
CEHD	Community, Economic & Human Development
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGC	California Government Code
CH ₄	Methane
CHRIS	California Historical Resources Information System
City	City of Irwindale
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO Protocol	Carbon Monoxide Protocol
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COP26	UNFCCC's 26th Conference of Parties
CPUC	California Public Utilities Commission
CSDA	California Special Districts Association
CVP	Central Valley Project
CVUSD	Covina-Valley Unified School District
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibels
DNL	day-night average noise level
DOF	California Department of Finance
DPF	diesel particulate filter
DPM	diesel particulate matter
DWR	California Department of Water Resources
EISA	Independence and Security Act of 2007
EJ	Environmental Justice

ELI	extremely low income
EMS	emergency medical services
EPCA	Energy Policy and Conservation Act of 1975
ERC	Emission Reduction Credit
ESA	Environmental Science Associates
FAA	Federal Aviation Administration
FAR	floor area ratio
FESA	federal Endangered Species Act
FHA	Federal Housing Administration
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Maps
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GPAC	General Plan Advisory Committee
GVWR	gross vehicle weight rating
GWh	gigawatt-hours
GWP	global warming potential
HAP	hazardous air pollutant
HCD	Housing and Community Development
HFC	hydrofluorocarbon
HMP	Hazard Mitigation Plan
hp	horsepower
HPO	Historic Preservation Ordinance
HQTA	high quality transit area
HUD	Housing and Urban Development
I-	Interstate
IPCC	Intergovernmental Panel on Climate Change
IPD	Irwindale Police Department
IRP	Integrated Water Resources Plan
ITP	Incidental Take Permit
JOA	Joint Outfall Agreement
JOD	Joint Outfall District
JOS	Joint Outfall System
kWh	kilowatt-hour
LACFD	Los Angeles County Fire Department

LACM	History Museum of Los Angeles Count
LACPWD	Los Angeles County Department of Public Works
LDV	light-duty vehicles
LEV	Low-Emissions Vehicle
LID	low impact development
LORS	Laws, Ordinances, Regulations, and Standards
LST	localized significance threshold
MATES V	Multiple Air Toxics Exposure Study V
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MLD	Most Likely Descendant
MMcf	million cubic feet
MMRP	Mitigation Monitoring and Reporting Program
MMTCO _{2e}	million metric tons of carbon dioxide
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MS4	municipal separate storm sewer systems
MTA	Metropolitan Transportation Authority
MW	megawatts
MWh	megawatt-hours
MXD	mixed-use development
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutant
NF ₃	nitrogen trifluoride
NHMP	Natural Hazard Mitigation Plan
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOC	Notice of Completion
NOP	Notice of Preparation

NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NSR	New Source Review
O ₃	ozone
OAERP	Operational Area Emergency Response Plan
OEHHA	Office of Environmental Health Hazard Assessment
Omnibus Regulation	Heavy-Duty Engine and Vehicle Omnibus Regulation
OPR	Governor's Office of Planning and Research
Pb	lead
PCE	primary constituent elements
PDA	Priority Development Areas
PEIR	Program Environmental Impact Report
PFC	perfluorocarbon
PHEV	plug-in hybrid electric vehicle
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
POU	publicly owned utilities
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
PREPARE	President's Emergency Plan for Adaptation and Resilience
Project or General Plan Update	Housing Element and General Plan Update
RCNM	Roadway Construction Noise Model
RCP	Regional Comprehensive Plan
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROW	right-of-way
RPI	Rare Plant Inventory
RPS	Renewable Portfolio Standard
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SAR	Second Assessment Report
SB	Senate Bill

SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
sf	square feet
SF ₆	sulfur hexafluoride
SFHZ	Severe Fire Hazard Zone
SGVCOG	San Gabriel Valley Council of Governments
SHPO	State Historic Preservation Officer
SIP	state implementation plan
SLCP	short-lived climate pollutant
SLF	Sacred Lands File
SLM	sound-level meter
SO ₂	sulfur dioxide
SoCalGas	Southern California Gas Company
SR-	State Route
SRA	Source Receptor Area
SRO	single residence occupancy
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAC	technical advisory committee
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Loads
TNM	Traffic Noise Model
TSM	Transportation System Management
UBC	Uniform Building Code
UHII	Urban Heat Island Index
USACE	U.S. Army Corps of Engineers
USDOE	U.S. Department of Energy
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency

UWMP	Urban Water Management Plan
VdB	Vibration Level
VDECS	Verified Diesel Emission Control Strategies
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WSCP	Water Shortage Contingency Plan
WUI	Wildland Urban Interface
ZEV	zero-emissions vehicle

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EXECUTIVE SUMMARY

This document is a Program Environmental Impact Report (PEIR) analyzing the environmental effects of the City of Irwindale Housing Element and General Plan Update (proposed Project or Project). This section summarizes the characteristics of the proposed Project, alternatives to the proposed Project, and the environmental impacts and mitigation measures associated with the proposed Project.

ES.1 Project Synopsis

ES.1.1 Lead Agency Name, Address and Contact

City of Irwindale
Community Development Department
5050 N. Irwindale Avenue
Irwindale, CA 91706
(626) 430-2208

Contact: Marilyn Simpson, AICP
Community Development Director
msimpson@irwindaleca.gov

ES.1.2 Project Location

The study area considered in this PEIR includes the entire City of Irwindale (hereinafter referred to as “City” or “Irwindale”), which encompasses approximately 9.5 square miles.

ES.1.3 Project Description

This EIR has been prepared to examine the potential environmental effects of the proposed Project. The following is a summary of the full project description, which can be found in Chapter 2, *Project Description*.

The City encompasses approximately 9.5 square miles and is located roughly 20 miles east of downtown Los Angeles within the San Gabriel Valley area in the County of Los Angeles. State law requires every city and county in California to have an adopted comprehensive long-range general plan with specific contents in order to provide a vision for the jurisdiction’s future and informs local decisions about land use and development. The City’s current General Plan was adopted in June 2008 and consists of six elements: Community Development Element, Housing Element, Infrastructure Element, Resource Management Element, Public Safety Element (also known as Safety Element as part of the proposed Project), and Implementation Element.

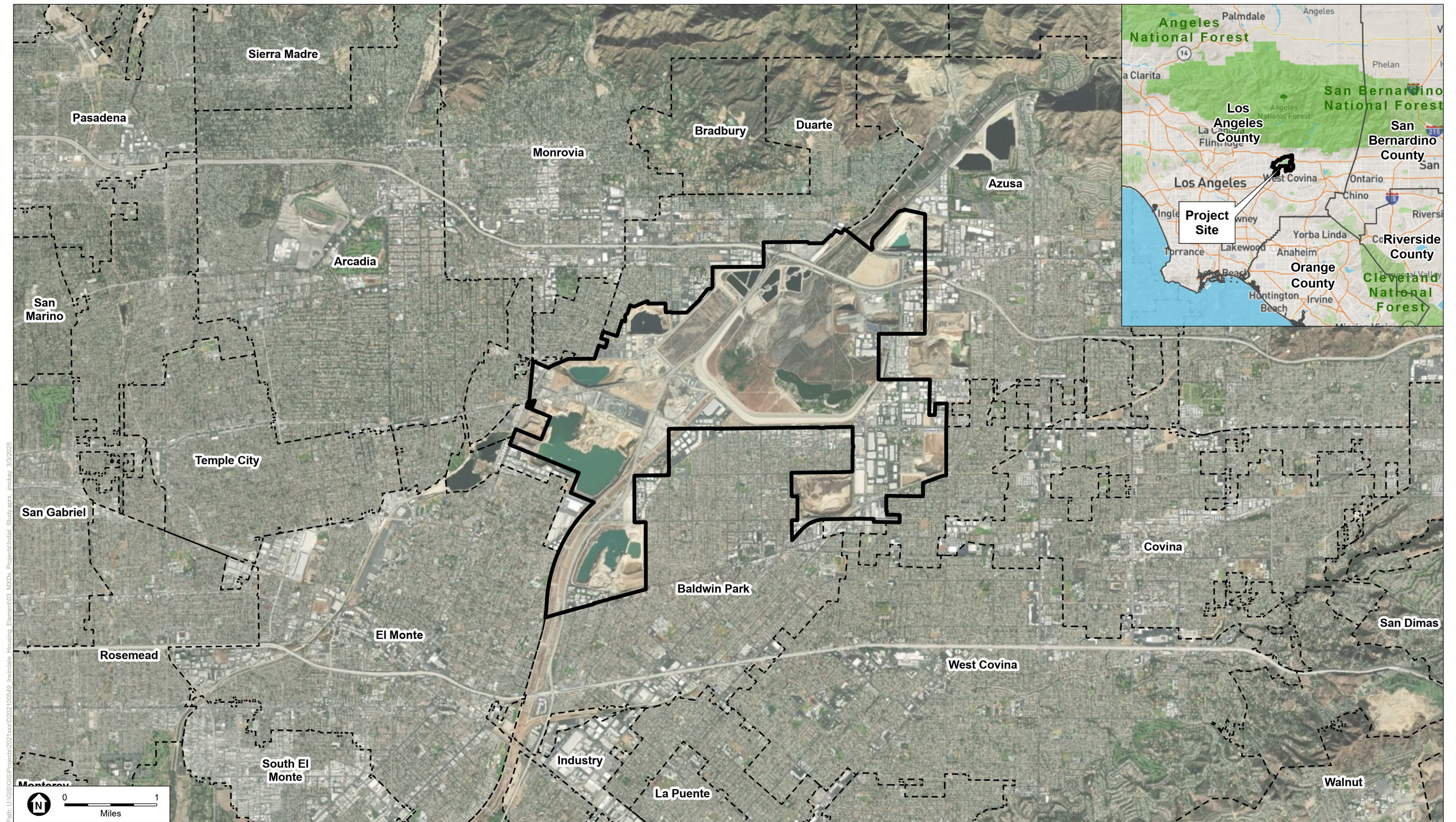
California Government Code Section 65302(c) mandates that each city within California includes a Housing Element in its General Plan. The timing for jurisdictions to update their Housing Elements is based

on the update schedule established for regional transportation plans (RTPs) prepared by federally designated metropolitan planning organizations. The Southern California Association of Governments (SCAG) is the federally designated metropolitan planning organization representing all jurisdictions in Los Angeles County, including Irwindale. Every 4 years, SCAG must update its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). As a result, all member jurisdictions need to update their Housing Elements every 8 years. The SCAG Regional Council adopted the Connect SoCal 2024 plan in April 2024. For SCAG member jurisdictions, the 6th Cycle Housing Element planning period extends from 2021 to 2029. As part of Connect SoCal, SCAG assigns a number of housing units that the County of Los Angeles (County) is required to plan for in the 8-year Housing Element cycle. That number of residential units is called the Regional Housing Needs Allocation (RHNA), and it is broken down by income category, ensuring that all economic groups are accommodated. The County then assigns residential unit amounts to its jurisdictions based on a regional housing production target set by the California Department of Housing and Community Development (HCD). This assignment of residential units is referred to as each jurisdiction's RHNA.

The overall purpose of the 2021–2029 Housing Element is to address the housing needs of all types of households and income levels for current and future Irwindale residents. State law requires that the City's 2021–2029 Housing Element contain specific contents, including an inventory or list of housing sites at sufficient densities to accommodate a specific number of units at various levels of affordability assigned to the City by the County and SCAG. The Housing Element is required to identify and analyze existing and projected housing needs within the City and include statements of the City's goals, policies, quantified objectives, and scheduled programs to preserve, improve, and develop housing. In adopting its Housing Element, each city must consider economic, environmental, and fiscal factors, as well as community goals as set forth in the General Plan, in compliance with California Government Code Section 65580 et seq. In compliance with Government Code Section 65580 et seq., the City is updating its Housing Element for the planning period of 2021–2029 (hereafter referred to as the 2021–2029 Housing Element or the updated Housing Element). The Revised Draft 2021–2029 Housing Element was provided for public review in November 2022 and has been revised in response to HCD's comments. The Revised Draft Housing Element (April 2025) is provided on the City's website at: <https://www.irwindaleca.gov/570/Housing-Element-General-Plan-Update>.

Consistent with Government Code Section 65302(c) and California Government Code Section 65580 et seq., the Draft 2021–2029 Housing Element provides a plan to accommodate the City's RHNA allocation. HCD consults with regional council of governments to allocate the RHNA across each region of the State. SCAG represents all jurisdictions in Los Angeles County, including Irwindale. **Figure ES-1, *Regional and Vicinity Map***, illustrates where Irwindale is located within Los Angeles County.

For the 2021–2029 housing cycle, Los Angeles County has been assigned a RHNA of 812,060 housing units, with Irwindale receiving an allocation of 119 units. **Table ES-1, *Adequate Sites Analysis Summary***, shows how the Irwindale 2021–2029 RHNA is allocated across four income levels (Very Low, Low, Moderate, and Above Moderate), the remaining unmet RHNA from the 5th planning cycle, the target capacity (6th Cycle RHNA plus a 25 percent buffer), and the capacity identified on candidate rezone sites.



SOURCE: Los Angeles County, 2024; ESA, 2025

Figure ES-1
Regional and Vicinity Map

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**TABLE ES-1
ADEQUATE SITES ANALYSIS SUMMARY**

	Very Low Income Units (0-50% AMI) and Low Income Units (51-80% AMI)	Moderate Income Units (81-120% AMI)	Above Moderate Income Units (>120% AMI)	Total New Units
6th Cycle RHNA	47	17	55	119
- Production since July 1, 2021 ^a	7	-	-	7
- Vacant Single-Family Lots ^b	-	-	8	8
- ADU Production ^c	3	1	1	5
Remaining Unmet RHNA	37	16	46	99
+25% Buffer ^d	9	4	12	25
Target Capacity	46	20	58	124
Capacity Identified on Candidate Housing Sites included in Housing Element	53	48	109	210

NOTES:

- a. The City issued certificates of occupancy in December 2021 for seven lower-income units in the Mayans development.
- b. Number of existing vacant single-family lots within the city.
- c. The City issued permits for two accessory dwelling units in the last three years. For RHNA purposes, the City assumes this pace of ADU development will continue throughout the planning period. For purposes of allocating units to income categories, City of Irwindale assumes affordability consistent with SCAG ADU survey.
- d. Buffer is calculated on remaining unmet 6th Cycle RHNA number.

SOURCES: Southern California Association of Governments (SCAG). 2021. SCAG 6th Cycle Final RHNA Allocation Plan. Approved by HCD on March 22, 2021. Modified July 1, 2021.

When updating the Housing Element, State law requires the City to document its capacity to accommodate its allocated RHNA for the 6th cycle (2021–2029) planning period. The City must demonstrate that the land inventory (also referred to as the Housing Sites inventory) is adequate to accommodate the City’s share of the region’s projected housing needs.¹ As shown in Table ES-1, a 25 percent buffer is necessary to ensure that if one or more of the five identified Housing Sites are developed at lower densities than projected, or with non-housing uses, there is remaining capacity elsewhere in the City to provide an ongoing supply of sites for housing during the eight-year planning period/cycle of the Housing Element. If there were no buffer and an identified housing site is developed with a non-housing project or developed at a density less than anticipated in the Housing Element, then the City could be obliged to identify new housing opportunity sites and amend the Housing Element prior to the end of the planning period/cycle.

The 2021–2029 Housing Element identifies City’s housing policies that would help to achieve the City’s 6th cycle RHNA allocation by promoting housing production, rehabilitation, and conversation as well as the programs that would implement the goals of the 2021–2029 Housing Element. **Figure ES-2, Proposed Housing Sites Inventory**, show the proposed five Housing Sites throughout the City that have been identified as candidate properties that could accommodate the City’s 6th cycle RHNA allocation. As shown in Table ES-1, the City would be able to meet its 6th cycle RHNA allocation through the housing production since the beginning of the RHNA projection period (July 1, 2021), available lots for single-family residential development, anticipated production of accessory dwelling units (ADUs), and capacity identified on the five Housing Sites for rezoning to accommodate future residential development. In addition, depending on market conditions, the City may potentially provide an overall buffer of 112 percent, with buffers by income-category ranging from 43 percent (lower-income) to 200 percent (moderate-income). Since the City would

¹ The purpose of the land inventory or housing sites inventory is to identify specific properties that are suitable for residential development in order for the City to meet its assigned RHNA.

not be able to fully accommodate its 6th cycle RHNA with the identified Housing Sites' existing zoning, the Housing Element also includes a program to redesignate and rezone the five Housing Sites for residential development via new residential development overlay zones.²

ES.1.4 Safety Element

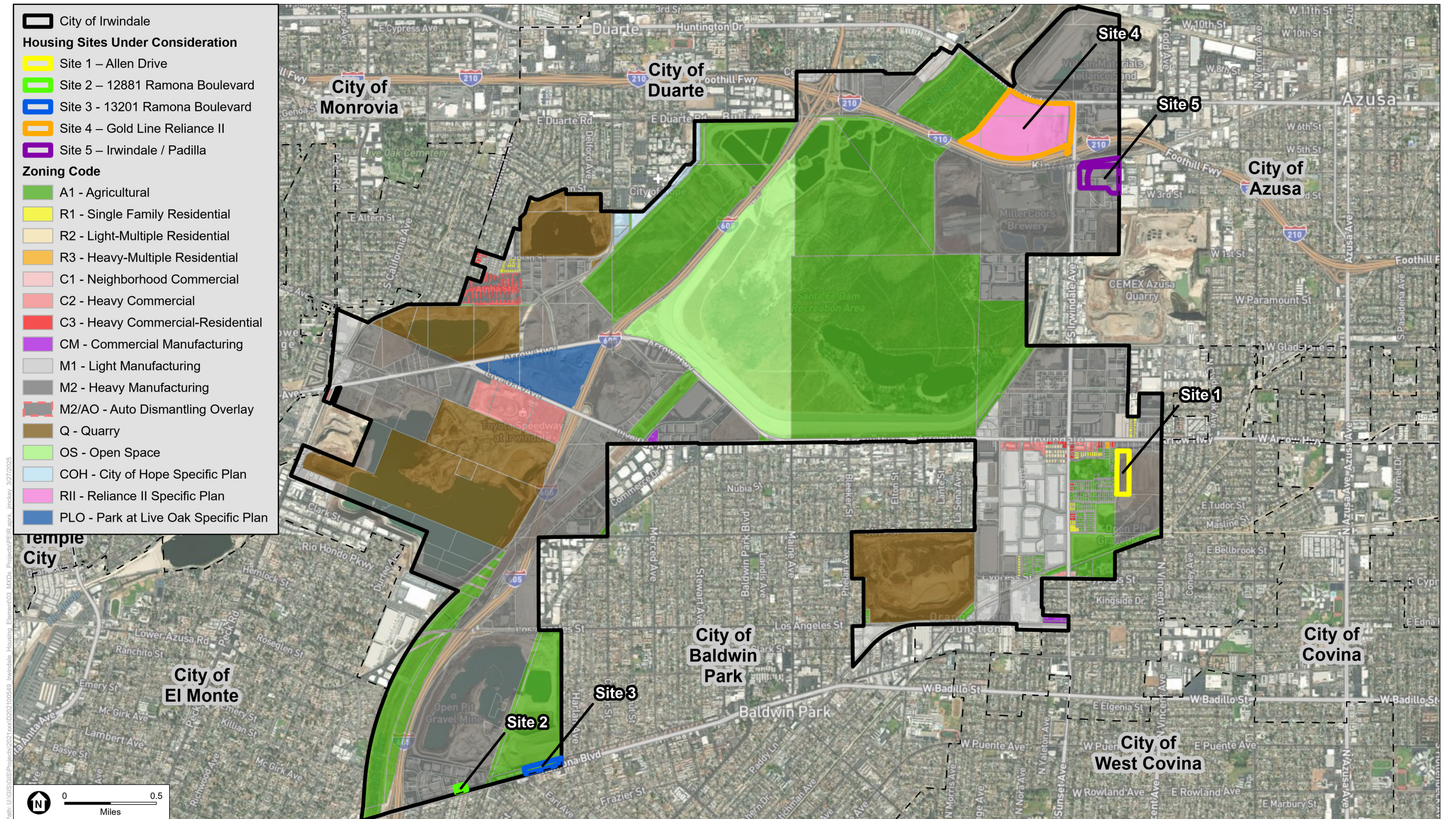
The Safety Element is a State-mandated component of a General Plan and State law requires that it be updated as needed to address fire risk and climate adaptation and resiliency strategies (Government Code Section 65302(g) and Section 65302.15). The updated Safety Element (previously named the Public Safety Element) identifies the potential risks to life and property resulting from naturally occurring hazards, such as earthquakes and floods, and man-made hazards, such as air pollution and contamination of water quality. In addition, the updated Safety Element identifies the appropriate public safety providers, such as law enforcement, emergency preparedness, and response teams necessary to handle the different types of safety hazards and risks.

Specifically, the updated Safety Element identifies locations within the City that may be inappropriate for certain land uses due to potential risks and hazards as well as areas where hazards are present but can be mitigated through special design and site planning measures. The updated Safety Element also considers the economic and social dislocation resulting from natural and human-made hazards, including long-term costs to the City, such as maintenance, liability exposure, and emergency services, where high hazards exist. To address these hazards and risks, the City has established goals, policies, and implementation actions to guide the City's planning and decision-making processes for future projects within the City to ensure that various health and safety hazards are considered in planning the location, design, intensity, density, and type of land uses in a given area.

ES.1.5 New Environmental Justice Element

California Government Code Section 65302(h) requires jurisdictions to adopt an Environmental Justice (EJ) Element if it contains a defined "disadvantaged community". The California Environmental Protection Agency (Cal EPA) defines a "disadvantaged community" as a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation (Section 39711 of the Health and Safety Code). Adoption of an EJ Element can occur at any time but is required when the jurisdiction is adopting or revising two or more General Plan elements concurrently. Since the City is in the process of updating its General Plan Housing Element and Safety Element, the City is also required to adopt an EJ Element at this time.

² The City is in the process of preparing a comprehensive update to its Zoning Code, where all zoning changes necessary to implement the Housing Element will be evaluated as part of this Project and will be incorporated by reference into the comprehensive Zoning Code update.



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure ES-2
Proposed Housing Sites Inventory

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The entire City of Irwindale meets the State-defined criteria for disadvantaged communities, where the EJ Element's purpose is to address the unique or compounded health risks throughout the City. The EJ Element includes policies, programs, and measures to reduce these health risks, such as improving air quality; promoting public facilities, food access, safe and sanitary homes; and physical activity. In addition, the EJ Element serves to promote civic engagement in the public decision-making process and prioritize improvements and programs that address the needs of these communities. The EJ Element will aid the City in the planning and decision-making process to ensure that the City is a safe and healthy place for everyone and focus on goals that improve communities and reduce inequities.

ES.2 Areas of Known Controversy

Section 15123 of the State CEQA Guidelines states that a PEIR shall identify areas of controversy known to the lead agency, including issues raised by the agency and the public during the scoping process. The City received four comment letters from public agencies during the public review period in response to the Notice of Preparation (NOP) of an Environmental Impact Report. The NOP comments are contained in Appendix A of this PEIR. Commenters included the California Governor's Office of Emergency Services, Department of Toxic Substances Control, Native American Heritage Commission, and South Coast Air Quality Management District. These NOP comments did not identify any potential environmental issues or concerns, but instead provided guidance on how the PEIR should be prepared and provided resources.

ES.3 Summary of Project Alternatives

CEQA Guidelines Section 15126.6(a) states that an EIR must describe and evaluate a reasonable range of alternatives to a project that would feasibly attain most of the project's basic objectives but avoid or substantially lessen any identified significant adverse environmental effects of the project. An EIR is not required to consider every conceivable alternative to a project or alternatives that are infeasible. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

Chapter 5, *Alternatives*, of this Draft PEIR presents the alternatives analysis as required by CEQA for the Project. The discussion includes the methodology used to select alternatives to the Project for detailed CEQA analysis, with the intent of developing potentially feasible alternatives that could avoid or substantially lessen the significant impacts identified while still meeting most of the Project's basic objectives. Based on the screening process, the following alternatives were selected for detailed analysis in this Draft PEIR:

- Alternative 1 – No Project Alternative
- Alternative 2 – Las Casitas Site Alternative
- Alternative 3 – Increased Area at Reliance II Site Alternative

Detailed descriptions of the alternatives are presented below. Their associated environmental impacts are discussed further in Chapter 5, *Alternatives*.

Alternative 1 – No Project Alternative

The No Project Alternative, as required by the State CEQA Guidelines, analyzes the effects of not adopting and implementing the Housing Element Update as well as the adoption of the Safety and EJ Elements. Future development under the No Project Alternative would continue to be guided by the existing General Plan, current land use and zoning designations as well as existing policies. The No Project Alternative would result in the continuation of existing conditions and planned development within the City as no land use or zoning overlays would be processed under this alternative.

Alternative 2 – Las Casitas Site Alternative

Under Alternative 2 the Las Casitas site, which is located on the southern side of Arrow Highway between Ayon Avenue and Allen Drive just east of the Las Casitas Senior Housing complex, would be added. The Las Casitas site has been vacant since 2021 and could accommodate 12 units. With 12 units being relocated to the Las Casitas Site, Alternative 2 would reduce the amount of future development planned for Housing Sites 1 and 3. Similar to the Project, Alternative 2 would include amendments to the City's General Plan and Zoning Code to implement the 2021–2029 Housing Element, would include updates to the Safety Element, and would include the creation of an EJ Element.

Alternative 3 – Increased Area at Reliance II Site Alternative

Under Alternative 3, Housing Site 4 (also called Gold Line Reliance II) would be expanded from one acre to a two-acre site that would be able to accommodate an additional 20 housing units. Alternative 3 would reduce the amount of future development planned for Housing Sites 1 and 3, while maintaining an estimated total capacity of 279 housing units. Similar to the Project, Alternative 3 would include amendments to the City's General Plan and Zoning Code to implement the 2021–2029 Housing Element, would include updates to the Safety Element, and would include the creation of an EJ Element.

ES.4 Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the environmental impacts of the proposed Project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **No Impact.** The proposed Project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.
- **Less than Significant.** A less than significant impact does not result in a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (see CEQA Guidelines Section 15382). Impacts determined to be less than significant do not require mitigation measures.

- **Significant Impact:** Public Resources Code (PRC) Section 21068 defines a significant impact as “a substantial, or potentially substantial, adverse change in the environment.” The environmental checklist included as Appendix G of the CEQA Guidelines provides additional guidance for determining which impacts would be regarded as significant. This EIR applies the thresholds contained within Appendix G and identified in each section’s “Thresholds of Significance,” and uses the CEQA definition of “significant impact.” Feasible mitigation measures or alternatives to the Project must be identified and adopted if they would avoid or substantially reduce the significant impact.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under CEQA Guidelines Section 15091.
- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a statement of overriding considerations to be issued if the project is approved per CEQA Guidelines Section 15093.

TABLE ES-2
SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Environmental Impacts	Mitigation Measures	Level of Significance
Aesthetics		
Impact AES-3: The Project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be less than significant.	None required.	Less than Significant.
Cumulative Impacts. As would occur for projects in Irwindale, future development in the surrounding jurisdictions would be required to undergo planning review in each jurisdiction, which would ensure consistency with applicable zoning regulations governing scenic quality. Therefore, future development, including growth as part of the Project, would have a less-than-significant cumulative impact with respect to zoning conflicts governing scenic quality.	None required.	Not Cumulatively Considerable.
Air Quality		
Impact AQ-1: The Project would result in a potentially significant impact related to a conflict with or obstructing implementation of the applicable air quality plan due to growth that could exceed demographic assumptions for the City of Irwindale. While implementation of mitigation measures would serve to reduce the severity of the effects, impacts would remain significant and unavoidable.	Refer to MM AQ-1 through MM AQ-5, under Threshold AQ-2.	Significant and Unavoidable.
Impact AQ-2: The Project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under applicable federal or State ambient air quality standards. This impact is significant and unavoidable.	<p><i>Construction</i></p> <p>MM AQ-1: Applicants for new development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds during construction for emissions of NOX, CO, PM10 and/or PM2.5 shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (USEPA) Tier 4 final emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to the City of Irwindale Department of Building and Safety that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.</p> <p>Prior to construction, the Project engineer shall ensure that all plans for construction phases (e.g., demolition, grading) that would exceed the SCAQMD significance thresholds clearly show the requirement for EPA Tier 4 final or higher emissions standards for construction equipment</p>	Significant and Unavoidable.

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the Department of Building and Safety. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.</p> <p>MM AQ-2: Applicants for new development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds during construction for emissions of volatile organic compounds (VOCs) as a result of VOC off-gassing emissions from architectural coatings and industrial maintenance coatings shall require the construction contractor to use SCAQMD Low-VOC and/or Super-Compliant VOC architectural coatings and industrial maintenance coatings such that daily volume of coatings applied would not result in emissions that exceed the SCAQMD significance threshold for VOC, unless it can be demonstrated to the Department of Building and Safety that such coatings for a required application are not available. During construction, the construction contractor shall maintain a list of all architectural coatings and industrial maintenance coatings in use on the construction site and the daily volumes of coatings applied for verification by the Department of Building and Safety.</p> <p><i>Operations</i></p> <p>MM AQ-3: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for the new development, show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the Department of Building and Safety prior to issuance of a certificate of occupancy.</p> <p>MM AQ-4: Applicants for new residential development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for new development projects within the proposed housing sites, indicate on the building plans that the feature below has been incorporated into the</p>	

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>design of the building(s). Proper installation of this feature shall be verified by the City Department of Building and Safety prior to issuance of a certificate of occupancy.</p> <ul style="list-style-type: none"> For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code (or its successor code). <p>MM AQ-5: Applicants for new non-residential development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for new development projects on the proposed housing sites, indicate on the building plans that the features below have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City Department of Building and Safety prior to issuance of a certificate of occupancy.</p> <ul style="list-style-type: none"> Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code). Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code). 	
<p>Impact AQ-3: The Project would result in a less than significant impact with respect to the exposure of sensitive receptors to substantial pollutant concentrations during operation. The Project would result in a potentially significant impact related to exposing sensitive receptors to substantial pollutant concentrations during construction. While implementation of mitigation measures would serve to reduce the severity of the effects, construction impacts would remain significant and unavoidable.</p>	<p>MM AQ-6: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing localized significance thresholds (LST) air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City shall require that applicants for new development projects incorporate MM AQ-1 through MM AQ-5 to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Division.</p>	Significant and Unavoidable.

Environmental Impacts	Mitigation Measures	Level of Significance
	MM AQ-7: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential health risk impacts to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing health risk impacts. If health risk impacts are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City shall require that applicants for new development projects incorporate MM AQ-1 through MM AQ-5 to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Division.	
Impact AQ-4: The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Therefore, impacts would be less than significant, and no mitigation measures are required.	None required.	Less than Significant.
Cumulative Impacts. The cumulative analysis of air quality impacts follows SCAQMD's guidance such that construction or operational Project emissions would be considered cumulatively considerable if Project-specific emissions exceed an applicable SCAQMD recommended significance threshold. Future development that may occur under the proposed Project may result in construction or operational emissions that could exceed the SCAQMD significance thresholds. Implementation of Mitigation Measure(s) MM AQ-1 through MM AQ-6 stated above would help to reduce the severity of the impacts. However, even with implementation of these measures, the cumulative impact would remain significant and unavoidable.	See MM AQ-1 through MM AQ-6.	Cumulatively Considerable.
Biological Resources		
Impact BIO-1: The Project could have a substantial adverse effect, either directly, indirectly, or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. However, with implementation of mitigation measures, impacts would be less than significant.	MM BIO-1: Special-Status Bees. Prior to approval of individual projects on Housing Sites #1 or #4 that are subject to CEQA review (i.e., non-exempt projects) and may impact potentially suitable habitat for Crotch's bumble bee and/or American bumble bee, the City shall require a habitat assessment to be completed by a qualified biologist(s) with demonstrated knowledge of the requirements of Crotch's bumble bee. If no suitable habitat for these species is identified within 300 feet of construction and/or maintenance activities, no further measures shall be required in association with the project.	Less than Significant with Mitigation Incorporated.

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>For individual projects on identified Housing Sites #1 or #4 where a qualified biologist has evaluated the property and found suitable foraging or nesting habitat for Crotch's bumble bee or American bumble bee within 300 feet of construction and/or maintenance activities, the project applicant shall retain a qualified entomologist with the appropriate take authorization to conduct surveys to determine presence/absence in accordance with the applicable protocols established by the USFWS and/or CDFW at the time of site development.</p> <p>Per the current CDFW requirements, set forth in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, surveys should be conducted within one year prior to vegetation removal and/or grading throughout the entire project site by a qualified entomologist familiar with the species' behavior and life history. A minimum of three surveys should be conducted during peak flying season when the species is most likely to be detected above ground, between April 1 to August 31 for Crotch's bumble bee and between June 1 to October 31 for American bumble bee. The qualified entomologist should utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation. During the surveys, the entomologist should flag inactive small mammal burrows and other potential nest sites to reduce the risk of take. Survey results, including negative findings, should be submitted to CDFW prior to obtaining appropriate permits. At minimum, a survey report should provide the following:</p> <ul style="list-style-type: none"> • Qualifications/resumes of surveyor(s) for qualified entomologist(s) and, if applicable, approved biologists for identification of photo vouchers. • A description of location and map of the survey area, focusing on areas that could provide suitable habitat for bee species. • Field survey conditions that should include name(s) of qualified entomologist(s); date and time of survey; temperature, wind speed. • Detailed habitat assessment including percent cover of floral resources and potential nesting and overwintering habitat. • Number of surveyors per acre, number of acres surveyed, amount of time of focused surveys. • List of bee species observed. • Foraging habitat surveys: host plant inventory list. • Nesting habitat surveys: type of nest/structure surveyed and if bees were found in them, number of nests found in project site, photo log of suitable habitat and plants. • Photo vouchers of bumble bees for identification and confirmation that photo vouchers were submitted and identified, if applicable. 	

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>If Crotch's bumble bee or American bumble bee is detected, the qualified entomologist should identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone should be established around any identified nest(s) to reduce the risk of disturbance or accidental take. A qualified entomologist should expand the buffer zone as necessary to prevent disturbance or take.</p> <p>If Crotch's bumble bee is detected and impacts to this species cannot be feasibly avoided, project applicants shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under the California Endangered Species Act (CESA) may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP.</p> <p>American bumble bee has declined by as much as 89 percent in terms of this species' relative abundance in the United States. Therefore, the Center for Biological Diversity and Bombus Pollinators Association of Law Students have submitted a Petition to List the American Bumble Bee <i>Bombus Pensylvanicus</i> as an Endangered Species Under the U.S. Endangered Species Act.³ If this petition is accepted, American bumble bee may become a Candidate for listing under the Federal Endangered Species Act (FESA). If American bumble bee is detected and the species is listed or identified as a candidate for listing under FESA, then project applicants would be required to consult with USFWS to obtain appropriate take authorization.</p> <p>Any floral resource associated with Crotch's bumble bee or American bumble bee that will be removed or damaged by individual projects should be replaced at no less than 1:1. Floral resources should be replaced as close to their original location as is feasible. If active bumble bee nests have been identified and floral resources cannot be replaced within 200 meters of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources should be maintained in perpetuity and should be replanted and managed as needed to ensure the habitat is preserved.</p>	

³ Center for Biological Diversity and Bombus Pollinators Association of Law Students. 2021. *Petition to list the American Bumble Bee Bombus Pensylvanicus as an Endangered Species Under the U.S. Endangered Species Act*. February 1, 2021.

Environmental Impacts	Mitigation Measures	Level of Significance																			
	<p>MM BIO-2: Burrowing Owl. Prior to approval of individual projects on Housing Sites #1 or #4 that are subject to CEQA review (i.e., non-exempt projects) and may impact potentially suitable habitat for burrowing owl, the City shall require a habitat assessment to be completed by a qualified biologist(s) with demonstrated knowledge of the requirements of burrowing owl. If no suitable habitat for these species is identified within 500 meters of construction and/or maintenance activities, no further measures shall be required in association with the project.</p> <p>For individual projects on identified Housing Sites #1 and #4 where a qualified biologist has evaluated the property and found suitable nesting habitat for burrowing owl within 500 meters of construction and/or maintenance activities, the project applicant shall retain a qualified biologist to conduct surveys to determine presence/absence. Surveys should be conducted within one year prior to commencement of construction activities, in accordance with the applicable protocols established by the USFWS and/or CDFW at the time of site development.</p> <p>Per the current CDFW requirements set forth in the Staff Report on Burrowing Owl Mitigation, a minimum of four focused surveys for burrowing owl in accordance with the Staff Report protocol shall be conducted in areas that contain suitable habitat for the species that would be directly impacted by construction of the Proposed Project.</p> <p>If burrowing owl is detected, the qualified biologist shall establish avoidance and minimization measures that shall be approved by CDFW prior to commencement of construction activities. Avoidance and minimization measures may include:</p> <ul style="list-style-type: none">• Avoiding construction during the nesting period (February 1 – August 31).• Establishing buffers around nesting sites in accordance with the recommended buffer distances included in the Staff Report on Burrowing Owl Mitigation, as shown below: <p style="text-align: center;">TABLE 4.3-3 BURROWING OWL NESTING SITES RECOMMENDED BUFFERS</p> <table><tr><th rowspan="2">Time of Year</th><th colspan="3">Level of Disturbance</th></tr><tr><th>Low</th><th>Medium</th><th>High</th></tr><tr><td>April 1–August 15</td><td>200 meter</td><td>500 meters</td><td>500 meters</td></tr><tr><td>August 16–October 15</td><td>200 meters</td><td>200 meters</td><td>500 meters</td></tr><tr><td>October 16–March 31</td><td>50 meters</td><td>100 meters</td><td>500 meters</td></tr></table>	Time of Year	Level of Disturbance			Low	Medium	High	April 1–August 15	200 meter	500 meters	500 meters	August 16–October 15	200 meters	200 meters	500 meters	October 16–March 31	50 meters	100 meters	500 meters	
Time of Year	Level of Disturbance																				
	Low	Medium	High																		
April 1–August 15	200 meter	500 meters	500 meters																		
August 16–October 15	200 meters	200 meters	500 meters																		
October 16–March 31	50 meters	100 meters	500 meters																		

Environmental Impacts	Mitigation Measures	Level of Significance
	<ul style="list-style-type: none"> • Ongoing monitoring to ensure that burrowing owls have not colonized/recolonized the site during construction. • If burrowing owls are detected during protocol surveys, preparation of a Burrow Exclusion Plan by a qualified biologist. The Burrow Exclusion Plan shall meet the requirements specified in Appendix E of the Staff Report on Burrowing Owl Mitigation and shall be approved by CDFW. • Conservation of mitigation lands to offset the impact to burrowing owl and its habitat. The conservation of mitigation lands shall be determined through consultation with CDFW depending on the ownership of the occupied land, which shall be established and approved prior to commencement of construction activities. • If burrowing owl is detected onsite and impacts to this species from future projects on Housing Site #1 and/or Housing Site #4 cannot be feasibly avoided, project applicants shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP. <p>MM BIO-3: Nesting Bird Surveys. Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act (MBTA) when in active use. This shall be accomplished by taking the following steps prior to demolition, site preparation (including clearing of vegetation), and construction work associated with future residential projects that occur as a result of the proposed Project.</p> <p>All vegetation clearing for construction and fuel modification for future projects on the five identified Housing Sites shall occur outside of the breeding season (February 1 through August 31), if feasible, to ensure that no active nests would be disturbed unless clearing and/or grading activities cannot be avoided during that time period.</p> <p>If construction is proposed during the nesting season (February 1 to August 31), a pre-construction survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal or construction to identify any active nests on the Project site and in the vicinity of proposed construction. Surveys shall be performed for the project area and vehicle and equipment staging areas, and suitable habitat within 150 feet of these areas, to locate any active passerine (e.g., songbird) nests and within 250 feet to locate any active raptor (e.g., bird of prey) nests.</p>	

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>If no active nests are identified during the survey period, or if construction activities are initiated during the non-breeding season (September 1 to January 31), construction may proceed with no restrictions.</p> <p>If active nests are detected, the area shall be flagged along with a 300-foot buffer for song birds and a 500-foot buffer for raptors (or otherwise appropriate buffer as determined by the surveying biologist), and shall be avoided until the nesting cycle is complete or it is determined by the surveying biologist that the nest is no longer active. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the development site.</p> <p>Any birds that begin nesting within the project area and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and no-disturbance zones shall not be established around active nests in these cases; however, should birds nesting within the project area and survey buffers amid construction activities begin to show disturbance associated with construction activities, no-disturbance buffers shall be established as determined by the qualified wildlife biologist.</p> <p>Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest's success, work within the no-disturbance buffer shall halt until the nest occupants have fledged.</p> <p>A pre-construction survey report of findings shall be prepared by the qualified biologist and submitted to the Director of Planning, Building and Code Enforcement, or the Director's designee for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season. The report shall either confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone and construction can proceed.</p>	
<p>Impact BIO-2: Implementation of the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>None required.</p>	<p>Less than Significant.</p>

Environmental Impacts	Mitigation Measures	Level of Significance
<p>Impact BIO-3: Implementation of the Project would not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	<p>MM BIO-4: Aquatic Resources. Prior to approval of individual projects on Housing Site #4), the City shall require a site assessment to be performed by a qualified biologist to determine whether potentially jurisdictional aquatic resources may be present onsite. The aquatic resources site assessment may be completed concurrently with habitat assessments for special-status bees and/or burrowing owl as required by MM BIO-1 and MM BIO-2.</p> <p>If potentially jurisdictional aquatic resources are identified onsite, an aquatic resource delineation shall be conducted by a qualified biologist or regulatory specialist to identify and map the extent of state and federally protected aquatic resources in project design, consistent with the provisions of Sections 404 and 401 of the CWA and Section 1600 of the Fish and Game Code, wherever practicable and feasible. Aquatic resources for avoidance shall be demarcated (e.g., using brightly colored flagging) and avoided during construction of future projects. The marked boundaries shall be maintained for the duration of the construction period and shall be clearly visible to personnel on foot as well as heavy equipment operators. If aquatic resources can be avoided, then no further mitigation shall be necessary.</p> <p>If aquatic resources cannot be avoided by construction on Site #4, then the appropriate regulatory permits shall be obtained (e.g., CWA Section 404 Nationwide Permit from the USACE, CWA Section 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirement permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Wildlife Code from the CDFW). The following measures shall be incorporated, at a minimum, into the permit, subject to approval by the regulatory agencies:</p> <ul style="list-style-type: none"> • On- and/or off-site creation, restoration, and/or enhancement of USACE/RWQCB jurisdictional wetlands, waters of the U.S., and/or waters of the State at a ratio no less than 2:1 for permanent impacts. Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. For temporary impacts, restore impact area to pre-Project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate). • On- and/or off-site creation, restoration, and/or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts. Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. For temporary impacts, restore impact area to pre-project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate). 	<p>Less than Significant with Mitigation Incorporated.</p>

Environmental Impacts	Mitigation Measures	Level of Significance
Impact BIO-4: Implementation of the Project would not 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.	See MM BIO-3.	Less than Significant with Mitigation Incorporated.
Impact BIO-5: Implementation of the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	None required.	No Impact.
Impact BIO-6: Implementation of the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	None required.	No Impact.
Cumulative Impacts. Future development of the five identified Housing Sites that could be constructed as a result of the Project could have direct and/or indirect effects to special-status species. However, since there are limited biological resources and habitats within the five identified Housing Sites, buildout of the Project would not significantly impact biological resources within the County, as the five Housing Sites and surrounding areas are heavily disturbed and developed. For these reasons, the Project's contribution to the potentially significant cumulative impact would be less than cumulatively considerable.	MM BIO-1 through MM BIO-4.	Not Cumulatively Considerable.
Cultural Resources		
Impact CUL-1: The Project would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Impacts to historic resources would be significant and unavoidable.	MM CUL-1: Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and within areas that contain properties more than 45 years old, the project proponent shall retain a qualified architectural historian and, defined as meeting the Secretary of the Interior's Professional Qualification Standards for architectural history, to conduct a historic resources assessment including: a records search at the South Central Coastal Information Center; a review of pertinent archives, databases, and sources; a pedestrian field survey; recordation of all identified historic resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the assessment. All identified historic resources will be assessed for the project's potential to result in direct and/or indirect effects on those resources and any historic resource that may be affected shall be evaluated for its potential significance under national and State criteria prior to the City's approval of project plans and publication of subsequent CEQA documents. The qualified architectural historian shall provide recommendations regarding additional work, treatment, or mitigation for affected historical resources to be implemented prior to their demolition or alteration. Impacts on	Significant and Unavoidable.

Environmental Impacts	Mitigation Measures	Level of Significance
	historical resources shall be analyzed using CEQA thresholds to determine if a project would result in a substantial adverse change in the significance of a historical resource. If a potentially significant impact would occur, the City shall require appropriate mitigation to lessen the impact to the degree feasible.	
Impact CUL-2: The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. Impacts would be less than significant.	MM CUL-2: Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and involve ground disturbance, the project proponent shall retain a qualified archaeologist, defined as meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, to conduct an archaeological resources assessment including: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the Native American Heritage Commission; a pedestrian field survey; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; an assessment of the project area's archaeological sensitivity and the potential to encounter subsurface archaeological resources and human remains; subsurface investigation to define the horizontal and vertical extents of any identified archaeological resources; and preparation of a technical report documenting the methods and results of the study. All identified archaeological resources shall be assessed for the project's potential to result in direct and/or indirect effects on those resources and any archaeological resource that cannot be avoided shall be evaluated for its potential significance prior to the City's approval of project plans. The qualified archaeologist shall provide recommendations regarding protection of avoided resources and/or recommendations for additional work, treatment, or mitigation of significant resources that will be affected by the project.	Less than Significant with Mitigation Incorporated.
Impact CUL-3: The Project would not disturb any human remains, including those interred outside of formal cemeteries. Project impacts would be less than significant.	None required.	Less than Significant.
Cumulative Impacts. Historical Resources: There is the possibility that growth anticipated as a result of the Project could adversely affect historical resources. The City cannot be sure that all impacts on historical resources can be mitigated to less than significant levels. Even with implementation of General Plan policies, as well as applicable laws and MM CUL-1, the Project's contribution to this potentially significant cumulative impact would be cumulatively considerable.	See MM CUL-1, MM CUL-2.	Cumulatively Considerable Impact.

Environmental Impacts	Mitigation Measures	Level of Significance
<p><i>Archaeological Resources:</i> While the Project may have the potential to contribute to cumulative impacts on archaeological resources, with implementation of General Plan policies, as well as applicable laws and MM CUL-2, the Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.</p> <p><i>Human Remains:</i> All future development would be required to comply with State laws pertaining to the discovery of human remains (e.g., California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98). For these reasons, the Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.</p>		
Energy		
Impact ENG-1: The Project would result in a less than significant impact related to the wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation.	None required.	Less than Significant.
Impact ENG-2: The Project would result in a less than significant impact related to conflicting or obstructing a State or local plan for renewable energy or energy efficiency during construction and/or operation.	None required.	Less than Significant.
Cumulative Impacts. All development projects anticipated by the Project would be required to comply with the CALGreen Code and Title 24 energy efficiency requirements and other applicable regulations to reduce energy consumption. The Project prioritizes infill developments that would support development of compact communities in existing urban areas and reuse developed land served by high quality transit consistent with the guidance provided in the Connect SoCal 2024. Therefore, the impact on the implementation of a State or local plan for renewable energy or energy efficiency would be less than cumulatively considerable.	None required.	Not Cumulatively Considerable.
Geology and Soils		
Impact GEO-6: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature and impacts would be significant. However, with implementation of mitigation measures, impacts would be less than significant.	MM GEO-1: Paleontological Resources Assessment and Monitoring. For projects that involve ground disturbance, the project proponent shall retain a paleontologist who meets the Society of Vertebrate Paleontology's definition for qualified professional paleontologist (Qualified Paleontologist) to prepare a paleontological resources assessment report prior to the start of construction activities. The report shall include methods and results of the paleontological resources assessment, monitoring requirements (including depths, frequency, and reporting), and maps that outline where monitoring is required. Monitoring shall follow SVP Guidelines: no monitoring of ground-disturbing activities within units of Low Sensitivity or No Potential;	Less than Significant with Mitigation Incorporated.

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>monitoring of all ground-disturbing activities (with depths specified) in units of Low to High Significance; and at all depths within units of High Significance unless the Qualified Paleontologist's report identifies previous disturbances or the use of construction methods which do not warrant monitoring; and monitoring at the initiation of excavation in units of Undetermined Significance. The report also shall stipulate whether screen washing is necessary to recover small specimens following SVP Guidelines and determine whether unique geologic features are present onsite. If monitoring is conducted, then the Qualified Paleontologist shall prepare a final report summarizing monitoring results and submit it to the project proponent and the City.</p> <p>MM GEO-2: Paleontological Resources Sensitivity Training. Prior to the start of ground-disturbing activities for projects facilitated by the City with potentially significant impacts on paleontological resources, the Qualified Paleontologist or its designee shall conduct construction worker paleontological resources sensitivity training (or may be provided via digital recording) for all construction workers. Construction workers shall be informed on how to identify the types of paleontological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The project proponent shall ensure that construction workers are made available for and attend the training. The project proponent shall retain documentation demonstrating attendance and provide it to the City.</p> <p>MM GEO-3: Paleontological Discoveries. If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area determined by the paleontological monitor shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading/excavation contractor shall assist, where feasible, in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP. Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, nonprofit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. Accompanying notes, maps, and photographs shall also be filed at the repository. If no institution accepts the fossil collection, it may be donated to a local school or other interested organization in the area for educational purposes.</p>	

Environmental Impacts	Mitigation Measures	Level of Significance
	<p>If construction workers discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.</p> <p>Any salvage reports resulting from implementation of this measure shall be filed with the Natural History Museum of Los Angeles County.</p>	
<p>Cumulative Impacts. Future development could include subsurface development that could potentially result in the possibility that cumulative development would result in the demolition or destruction of significant paleontological resources. The potential loss of resources is considered a significant cumulative impact. While the Project could contribute to this impact, potential impacts to paleontological resources would be less than significant level with incorporation of MMs GEO-1 through GEO-3. Therefore, the project's contribution to cumulative geology and soils impacts would be less than cumulatively considerable.</p>	None required.	Not Cumulatively Considerable.
Greenhouse Gas Emissions		
<p>Impact GHG-1: Development that would occur under the Project would not generate GHG emissions from construction and operation, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts would be less than significant.</p>	None required.	Less than Significant.
<p>Impact GHG-2: The Project would result in a less than significant impact related to conflicts with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.</p>	None required.	Less than Significant.
<p>Cumulative Impacts. Currently, there are no adopted CARB, SCAQMD, or City significance thresholds or specific numeric reduction targets applicable to the Project, and no approved policy or guidance to assist in determining significance at the cumulative level. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Consistent with CEQA Guidelines Section 15064h(3), the City, as lead agency, has determined that the Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions. Given that the Project would not conflict with applicable GHG reduction plans, policies, and regulations,</p>	None required.	Not Cumulatively Considerable.

Environmental Impacts	Mitigation Measures	Level of Significance
emissions associated with future development that could occur under the proposed Project would be less than significant on a cumulative basis.		
Land Use and Planning		
Impact LU-2: The Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.	None required.	Less than Significant.
Cumulative Impacts. Future development in the area, including growth anticipated under the proposed Project, would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, as future development in each jurisdiction would be required to be consistent with each jurisdiction's general plan and zoning code. In addition, future development in the San Gabriel Valley region of eastern Los Angeles County would be required to be consistent with regional plans such as Connect SoCal. For these reasons, future development in the San Gabriel Valley region of eastern Los Angeles County, including growth anticipated under the proposed Project, would have a less-than-significant cumulative impact with respect to land use and planning.	None required.	Not Cumulatively Considerable.
Noise		
Impact NOI-1: The Project would result in the generation of a substantial temporary noise increase above ambient in excess of standards established in the local general plan or noise ordinance while construction would occur and impacts would be significant and unavoidable. The Project would not result in a permanent increase in ambient noise levels through Project operations 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 and impacts would be less than significant.	MM NOI-1: Construction Noise. Applicants for new development projects facilitated by the Project that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that are located within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools) shall submit a noise study to the City Planning Division for review and approval prior to issuance of a grading or building permit. The study shall include noise-reduction measures, if necessary, to ensure project construction noise will be in compliance with the City's Noise Ordinance standards as applicable to construction (i.e., Irwindale Municipal Code Chapter 9.28). All noise-reduction measures approved by City Planning Department shall be incorporated into appropriate construction-related plans (e.g., demolition plans, grading plans and building plans) and implemented during construction activities. Potential noise-reduction measures may include, but are not limited to, one or more of the following, as applicable to the project: <ul style="list-style-type: none"> • Install temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive receptors. • Equip construction equipment with effective mufflers, sound-insulating hoods or enclosures, vibration dampers, and other Best Available Control Technology (BACT). 	Significant and Unavoidable (Construction); Less than Significant (Operation).

Environmental Impacts	Mitigation Measures	Level of Significance
	<ul style="list-style-type: none"> Limit non-essential idling of construction equipment to no more than five minutes per hour. 	
<p>Impact NOI-2: The Project would generate excessive groundborne vibration or groundborne noise during construction and would be significant and unavoidable. However, the Project would not result in permanent excessive groundborne vibration or noise during operation and impacts would be less than significant without mitigation.</p>	<p>MM NOI-2: Construction Vibration. Applicants for new development projects facilitated by the Project that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that are located within 300 feet of groundborne vibration receptors and that utilize vibration-intensive construction equipment (e.g., pile drivers, jack hammers, large dozer, or vibratory rollers) shall submit a vibration impact evaluation to the City Planning Division for review and approval prior to issuance of a grading or building permit. The evaluation shall include a list of project construction equipment and the associated vibration levels and a predictive analysis of potential project vibration impacts. If construction-related vibration is determined to exceed applicable standards, project-specific measures shall be required to ensure project compliance with vibration standards. All project-specific measures approved by the City Planning Division shall be incorporated into appropriate construction-related plans (e.g., demolition plans, grading plans and building plans) and implemented during project construction.</p> <p>Examples of equipment vibration source-to-receptor distances at which impact evaluation should occur vary with equipment type (based on FTA reference vibration information) and are as follows:</p> <ul style="list-style-type: none"> Jackhammer: 23 feet. Dozer, hoe-ram, drill rig, front-end loader, tractor, or backhoe: 43 feet. Roller (for site ground compaction or paving): 75 feet. Impact pile-driving: 280 feet. 	Significant and Unavoidable (Construction); Less than Significant (Operation).
<p>Impact NOI-3: The Project would not expose people residing or working in the project area to excessive noise levels generated by aircraft. Therefore, impacts would be less than significant.</p>	None required.	Less than Significant.
<p>Cumulative Impacts. Noise: Noise is a localized phenomenon, and because the City is predominately developed with urban uses, it is possible that multiple construction projects could occur simultaneously and in close enough proximity to each other to create a significant combined noise impact. Therefore, the contribution of the Project to any potential cumulative construction noise impact would be cumulatively considerable.</p> <p>Cumulative traffic-generated noise impacts have been assessed based on the contribution of the Project to the future cumulative base traffic volumes in the project vicinity. Existing sensitive receptors located near roadway segments would experience cumulative noise level increases less than 3.0 dBA CNEL for all roadway segments. The segments analyzed would be located in an area already classified as Normally Unacceptable or Clearly</p>	See MM NOI-1 and MM NOI-2.	Cumulatively Considerable.

Environmental Impacts	Mitigation Measures	Level of Significance
<p>Unacceptable (refer to Table 4.9-4, above) under existing conditions. Therefore, the increase in traffic noise from implementation of the Project in conjunction with ambient growth and other development within the vicinity would result in a significant cumulative impact. However, the project would contribute less than a 1 dB increase over existing conditions, which is considered barely perceptible to the human ear. Therefore, the contribution of the Project to this cumulative traffic noise impact would not be cumulatively considerable.</p> <p><i>Vibration:</i> Vibration is a localized phenomenon. Since the City is predominately an urban landscape and primarily built out, future development would be periodic infill development in various areas of the City. It is possible that multiple construction projects would occur simultaneously and in close enough proximity to each other to create a significant combined vibration impact. Therefore, the contribution of the Project to potential cumulative construction vibration impact would be cumulatively considerable.</p> <p>Vibration from vehicles is temporary and intermittent and generates up to 61 Vdb or 0.005 in/sec PPV. As a result, vibration levels from traffic generated by growth anticipated by the Project would be well below the thresholds for human annoyance and structural damage. Therefore, the contribution of the Project to any potential cumulative operational (traffic) vibration impact would not be cumulatively considerable.</p>		
Population and Housing		
Impact POP-1: The Project would accommodate regional growth in an orderly manner for the next 8 years and would result in a less than significant impact related to inducing unplanned population growth.	None required.	Less than Significant.
Impact POP-2: The Project would not displace people or require construction of new housing as a result of displacing substantial numbers of existing people or housing and no impacts would occur.	None required.	Less than Significant.
Cumulative Impacts. Future development would not induce substantial unplanned population growth in the area as future development would have to be consistent with the general plans and zoning codes of local jurisdictions in the area, and therefore would not be unplanned. In addition, future development in the San Gabriel Valley region of Los Angeles County, including growth anticipated under the Project, would not result in the displacement of substantial numbers of existing people or housing as future development would be required to follow existing State law governing relocation of residents and the five Housing Sites identified in the Housing Element are currently vacant and	None required.	Not Cumulatively Considerable.

Environmental Impacts	Mitigation Measures	Level of Significance
underutilized. Other housing elements must also prepare for the population growth projected for the region and the associated need for new housing to accommodate that growth. Therefore, the Project would not contribute to cumulative impacts related to population and housing, and cumulative impacts would be less than significant.		
Public Services		
Impact PS-1: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project could increase demand for fire services, the growth would occur within areas already served by LACFD. Compliance with applicable requirements, including review by LACFD, would ensure that the Project would result in less than significant impacts related to the provision of new or physically altered government facilities such as fire protection services.	None required.	Less than Significant.
Impact PS-2: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for police services, the growth would occur within areas already served by IPD. Compliance with applicable requirements would ensure that the Project would result in less than significant impacts related the provision of new or physically altered government facilities such as police protection services.	None required.	Less than Significant.
Impact PS-3: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. However, schools have existing capacity. In addition, payment of school impact fees that are deemed to fully mitigate the impacts of development on school facilities for purposes of CEQA would ensure that impacts to schools would be less than significant.	None required.	Less than Significant.
Impact PS-4: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for parks, the growth would occur within areas already served by the City. Compliance with applicable requirements would ensure that the Project would result in less than significant impacts related the provision of new or physically altered government facilities such as parks.	None required.	Less than Significant.

Environmental Impacts	Mitigation Measures	Level of Significance
Impact PS-5: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for libraries, compliance with applicable requirements would ensure that the Project would result in less than significant impacts.	None required.	Less than Significant.
Cumulative Impacts. Future development in the City, including growth anticipated under the Project, would not impact public services, as future development would be consistent with the City's General Plan goals and policies. Therefore, the Project would not contribute to cumulative impacts related to new or expanded public services, and cumulative impacts would be less than significant.	None required	Not Cumulatively Considerable.
Transportation		
Impact TRA-1: The Project would not cause significant environmental impacts due to conflicts with any program, plan, ordinance, or policy addressing the circulation system. Therefore, impacts would be less than significant.	None required.	Less than Significant.
Impact TRA-2: The Project could have a significant VMT impact and could be in conflict or inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Therefore, Project impacts could be significant. However, after implementation of the mitigation measure, the VMT for Housing Sites 1, 3, and 5 would be less than significant.	MM TRA-1: Prior to approval of individual projects on Housing Sites 1, 3, and 5 that are located within Transit Priority Areas, the Project Applicant shall demonstrate compliance with additional screening criteria identified within the City's Guidelines. Each Project Applicant for projects within Housing Sites 1, 3, and 5 shall provide written evidence to the City of Irwindale Planning Division that none of the following criteria would be met. <ul style="list-style-type: none"> • Has a floor area ratio of less than 0.75 • Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction • Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the Lead Agency with input from the Metropolitan Planning Organization) • Replaces affordable residential units with a smaller number of moderate- or high-income residential units 	Less than Significant with Mitigation Incorporated.
Impact TRA-3: The Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Therefore, impacts would be less than significant.	None required.	Less than Significant.
Impact TRA-4: Implementation of the Project would not result in inadequate emergency access to individual sites within the City. Therefore, impacts would be less than significant.	None required.	Less than Significant.

Environmental Impacts	Mitigation Measures	Level of Significance
Cumulative Impacts. Based on the Project-related VMT analysis, Housing Sites 2 and 4 falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS. Housing Sites 1, 3, and 5 meet the Transit Priority Area screening criterion; however, because the City's Guidelines require additional screening criteria for projects within Transit Priority Areas and there are no specific development projects proposed for consideration at this time, the additional screening criteria will need to be assessed at the time of formal review and approval. With the implementation of MM TRA-1, the contribution of the Project, including Housing Sites 1, 3, and 5, to VMT impacts would be less than cumulatively considerable.	None required.	Not Cumulatively Considerable.
Tribal Cultural Resources		
Impact TCR-1: The Project could cause a substantial adverse change in the significance of a tribal cultural resource. However, with implementation of MM CUL-2, impacts to a tribal cultural resource would be reduced to less than significant.	See MM CUL-2.	Less than Significant with Mitigation Incorporated.
Cumulative Impacts. Future development would be required to comply with SB 18 and AB 52 consultation, which would ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. Therefore, the Project would not contribute to a significant cumulative impact.	None required.	Not Cumulatively Considerable.
Utilities and Service Systems		
Impact UTL-1: Implementation of the Project would not result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, Project impacts would be less than significant.	None required.	Less than Significant.
Impact UTL-2: The water providers serving the Housing Sites would have sufficient water supplies available to serve the developments and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, impacts would be less than significant.	None required.	Less than Significant.
Impact UTL-3: The Project would result in an increase in wastewater generated thereby increasing the demand for treatment. However, sufficient wastewater treatment capacity exists to serve the projected demand in addition to the provider's existing commitments. Therefore, impacts would be less than significant.	None required.	Less than Significant.

Environmental Impacts	Mitigation Measures	Level of Significance
Impact UTL-4: The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, Project impacts would be less than significant.	None required.	Less than Significant.
Impact UTL-5: The Project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.	None required.	Less than Significant.
Cumulative Impacts. Similar to the future projects that could be constructed under the Project, cumulative development would be subject to capacity fees and applicable regulations that contribute to long-term utilities and capacity planning improvements. Therefore, when considered in the cumulative context, the Project impacts to utilities and service systems would not be cumulatively considerable and the cumulative impact of the Project would be less than significant.	None required.	Not Cumulatively Considerable .

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CHAPTER 1

Introduction

The City of Irwindale (City), as lead agency pursuant to the California Environmental Quality Act (CEQA), has prepared this Draft Program Environmental Impact Report (PEIR) for the proposed City’s 2021–2029 Housing Element and General Plan Update (proposed Project or Project). The Project would amend the City’s General Plan and Zoning Code to implement the City’s 6th cycle 2021–2029 Housing Element (Housing Element), update the Safety Element, and create a new Environmental Justice (EJ) Element. This chapter outlines the purpose and overall approach to the preparation of the Draft PEIR.

1.1 Purpose of the Draft Program EIR

The primary intent of CEQA is to ensure that public agency decision-makers document and consider the environmental implications of their actions in order to avoid or minimize environmental damage that could result from the implementation of a project wherever feasible, and to balance environmental, economic, and social objectives. In accordance with CEQA Guidelines Section 15121, the purpose of an EIR is to serve as an informational document that:

“... will inform public agency decisionmakers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

The purpose of this Draft PEIR is to inform decision-makers and the general public of the potential programmatic environmental impacts resulting from the Project. The City is the lead agency under CEQA and is responsible for preparing this Draft PEIR. This Draft PEIR has been prepared in conformance with CEQA (California Public Resources Code [PRC] Section 21000 et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) and the City’s procedures for implementing CEQA. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Contents of an EIR), and Section 15168 (Program EIR). This Draft PEIR serves the following purposes:

- To satisfy CEQA requirements for analysis of environmental impacts by including a complete and comprehensive programmatic evaluation of the physical impacts of adopting and implementing the Project;
- To recommend a set of measures to mitigate any significant adverse impacts;
- To analyze a range of reasonable alternatives to the Project;
- To inform decision-makers and the public of the potential environmental impacts of the Project prior to taking action on the Project, and to assist City officials in reviewing and adopting the 2021-2029 Housing Element, Safety Element, EJ Element and Zoning Code Update; and

- To provide a basis for the review of subsequent development projects and public improvements proposed within the City. Subsequent environmental documents may be tiered from the PEIR.

The Project consists of policies, diagrams, and standards to guide land use and development decisions for the City, as described in greater detail in Chapter 2, *Project Description*. Chapter 4, *Environmental Impact Analysis*, of this Draft PEIR contains analysis of all potential environmental impacts expected to result from implementation of the policies and programs provided in the Elements, including those policies that serve to avoid or minimize potentially adverse environmental impacts. In accordance with CEQA requirements, the Draft PEIR also identifies and evaluates mitigation measures in an effort to mitigate potentially significant impacts where feasible. Chapter 5, *Alternatives*, of this Draft PEIR contains an analysis of alternatives to the Project, including an analysis of the No Project Alternative, which represents the continued implementation of the current General Plan. An environmentally superior alternative has also been identified as part of the alternatives analysis.

1.2 Type of EIR

A program EIR is defined in CEQA Guidelines Section 15168 as “An EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) As logical parts in the chain of contemplated actions; (3) In connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental impacts which can be mitigated in similar ways”.

Program EIRs can be used as the basic, general environmental assessment for an overall program of future projects, policies, and related implementation actions, such as the Project, intended to be developed or implemented over a planning horizon. A program EIR has several advantages. First, it provides a basic reference document to avoid unnecessary repetition of facts or analysis in subsequent project-specific assessments. Second, it allows the lead agency to look at the broad, regional impacts of a program of actions before its adoption and eliminates the redundant or contradictory approaches to the consideration of regional and cumulative effects.

As a programmatic document, this Draft PEIR presents an assessment of the potential impacts of the Project across the City, which includes implementation of the Housing Element and General Plan Update through the year 2029. It does not evaluate project-specific impacts of potential future developments that may be proposed by either the City or other entities consistent with the vision of the Project, all of which would be required to comply with CEQA and/or National Environmental Policy Act (NEPA), as applicable.

The preparation of this program-level document does not relieve the sponsors of future development from the responsibility of complying with the requirements of CEQA (and/or NEPA for projects requiring federal funding or approvals). As noted, individual discretionary projects are required to prepare a more precise, project-level analysis to fulfill CEQA and/or NEPA requirements as applicable. The lead agency responsible for reviewing these projects shall determine the level of review needed, and the scope of that analysis will depend on the specifics of the particular project. Pursuant to CEQA Guidelines Section 15152 (Tiering), these projects may, however, use the discussion of impacts in this PEIR as a basis for their assessment of these regional, citywide, or cumulative impacts, provided that the projects are consistent with the General Plan Update and the data and assumptions used in this PEIR remain current and valid.

In accordance with CEQA Guidelines Section 15121, this Draft PEIR provides information regarding the potential environmental effects associated with the implementation of the Project and ways to minimize any significant environmental effects through mitigation measures or reasonable alternatives to the Project. For some effects, significant environmental impacts cannot be mitigated to a level considered less than significant; in such cases, impacts are considered significant and unavoidable. In accordance with CEQA Guidelines Section 15093, if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts where impacts cannot be mitigated to less than significant levels), the agency must state in writing the specific reasons for approving the Project, based on the Final PEIR and any other information in the public record for the project. This is known as a “statement of overriding considerations.”

This document analyzes the environmental effects of the Project to the degree of specificity appropriate to the Project, as required under CEQA Guidelines Section 15146. The analyses focus on the secondary effects that can be expected to follow adoption of the Project, but will not be as detailed as the analysis required for future specific development projects that may follow. This Draft PEIR discusses both the direct and indirect impacts of this Project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

1.3 Intended Uses of the PEIR

CEQA Guidelines Section 15124(d) require EIRs to identify the agencies that are expected to use the EIR in their decision-making, and the approvals for which the EIR will be used. This PEIR will inform the City, in addition to other responsible agencies, persons, and the general public, of the potential environmental effects of the Project and the identified alternatives. The City will use the PEIR as part of its review and approval of the proposed Project. The City would review subsequent discretionary implementation projects for consistency with the PEIR and prepare appropriate environmental documentation pursuant to CEQA provisions for PEIRs and subsequent projects. Subsequent projects under the PEIR may include the following implementation activities: Specific Plans; Development Plans including tentative maps, variances, conditional use permits, and other land use permits; Facility and Service Master Plans; Funding of Public Improvement Projects; Development Agreements; and other permits and approvals necessary for implementation of the Project or other public and private development projects.

This program-level EIR does not evaluate the project-specific impacts of individual developments that may be allowed under the Project. Pursuant to CEQA Guidelines Section 15152, subsequent projects that are consistent with the Project may “tier” from this PEIR, relying on the environmental analysis and mitigation measures it contains in order to streamline environmental review or to focus on project-specific environmental effects not considered in this Program EIR, if any. Additionally, subsequent projects that satisfy the requirements of CEQA Guidelines Section 15182 or 15183 may be eligible for streamlined environmental review.

This PEIR is intended to be the primary reference document in the formulation and implementation of a Mitigation Monitoring and Reporting Program (MMRP) for the Project. This PEIR is also intended to assist other responsible agencies in granting approvals that may be required for implementation of the Project. Federal, State, regional, and local government agencies that may have jurisdiction over development proposals in the Planning Area include the City, U.S. Fish and Wildlife Service, U.S. Army Corps of

Engineers, California Department of Fish and Wildlife, California Department of Conservation, California Department of Housing and Community Development, California Department of Transportation, State Lands Commission, State Water Resources Control Board, Southern California Association of Governments, South Coast Air Quality Management District, Metropolitan Water District of Southern California, Sanitation Districts of Los Angeles County, County of Los Angeles, Los Angeles Metropolitan Transit Authority, Covina-Valley Unified School District, and the Los Angeles Department of Water and Power.

1.4 Scoping Process

The City initiated the Housing Element and General Plan Update process with a series of community outreach events. The community engagement aimed to facilitate inclusive dialogue and solicit feedback from residents, employees, and stakeholders at each milestone in the planning process. The process was key in highlighting community needs and priorities as part of the General Plan Update. Information is available on the Project website.

With regard to CEQA and in compliance with the CEQA Guidelines, the City issued a Notice of Preparation (NOP) to State, regional, and local agencies, and members of the public for a 30-day period commencing December 14, 2023, and concluding on January 13, 2024. The purpose of the NOP was to formally convey that the City was preparing a Draft PEIR for the Project, to present the environmental topics preliminarily identified by the City for evaluation in the Draft PEIR, and to solicit input regarding the scope and content of the information to be included in the Draft PEIR. The City posted the NOP on the City Planning website along with information regarding the process for providing comments. In addition, the NOP was submitted to the State Clearinghouse and filed at the Los Angeles County Clerk's office. The NOP, Initial Study, and comments received during the scoping process are included in Appendix A of this Draft PEIR (as Appendices A-1, A-2, and A-3, respectively).

Comments on the scope and content of the Draft PEIR were received in writing during the 30-day circulation period for the NOP. Four written comment letters were submitted to the City and copies of the comment letters are provided in Appendix A of this PEIR and are summarized in the Executive Summary, in the subsection entitled Areas of Controversy.

1.5 Scope of the PEIR

For analytic purposes in this Draft PEIR, the baseline year established for existing conditions is 2023 unless otherwise noted and the horizon year representing future conditions is 2029. In cases where current data is not available, the most recent known data is used to depict baseline conditions. The horizon year of 2029 represents the target year of the Project when projects and programs identified in the Project are anticipated to be implemented.

This Draft PEIR assesses the potential environmental impacts that could occur with implementation of the Project. CEQA Guidelines Section 15064 states that in evaluating the significance of the environmental effect of a project, the lead agency shall consider direct physical changes in the environment which may be caused by the Project and reasonably foreseeable indirect physical changes in the environment which may be caused by the Project.

The scope of the Draft PEIR includes evaluation of potentially significant environmental issues raised in response to the NOP and during scoping discussions. As noted above, the NOP and all comment letters received during the comment period are included in Appendix A. Based on the scoping process, the following environmental issue areas are addressed in detail in this Draft PEIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (paleontological resources)
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

CEQA Guidelines Section 15128 requires a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the Draft PEIR. Pursuant to CEQA Guidelines Section 15128 (Effects Not Found to Be Significant) environmental impacts related to Agricultural and Forestry Resources, Geology and Soils (all except for paleontological resources), Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Recreation, and Wildfire were not considered significant and therefore, are not fully discussed in the Draft PEIR. (See Chapter 6, *Other CEQA Considerations*, for a brief summary). In addition, Chapter 6 addresses environmental topics required by CEQA that are not covered within the other chapters of this Draft PEIR, including (1) significant unavoidable impacts, (2) irreversible environmental changes, (3) growth inducing impacts, and (4) potential secondary effects.

Consistent with CEQA Guidelines (Section 15126.6[d]), this Draft PEIR includes the assessment of a reasonable range of alternatives to the Project that could feasibly attain most of the Project objectives while avoiding or substantially lessening the environmental effects of the Project. The alternatives analysis is included in Chapter 5, *Alternatives*.

1.6 Format of the Draft PEIR

The Draft PEIR includes an executive summary, seven chapters, and appendices, which are organized as follows:

- **ES, Executive Summary**, provides an overview of the entire document in a concise, summarized format. It briefly describes the Project (location and Planning Area), the CEQA review process and focus, identifies effects found to be significant and unavoidable, identifies areas of controversy, provides a brief summary of the alternatives (descriptions and conclusions regarding comparative impacts), and provides a summary of Project impacts, and mitigation measures, and the level of impact significance following implementation of mitigation measures.
- **Chapter 1, Introduction**, describes the purpose and use of the PEIR, provides a brief overview of the Project and the environmental review process, and outlines the organization of the PEIR.
- **Chapter 2, Project Description**, describes the location and Planning Area, objectives, buildout, and the goals, programs, and policies for implementation of the Project.
- **Chapter 3, Environmental Setting**, provides a generalized overview of the existing physical environmental setting in which the Planning Area is located. This overview of the existing physical environment generally serves as the environmental baseline for the analysis of potential environmental impacts under CEQA. This section also includes a discussion of the methodology for analyzing potential cumulative impacts.
- **Chapter 4, Environmental Impact Analysis**, contains the environmental setting, Project and cumulative impact analyses, mitigation measures, and conclusions regarding the level of significance after mitigation for each of the environmental topic areas indicated above.
- **Chapter 5, Alternatives**, evaluates the environmental effects of feasible project alternatives, including the No Project Alternative. This section also identifies the environmentally superior alternative.
- **Chapter 6, Other CEQA Considerations**, includes a discussion of environmental topic areas required by CEQA that are not covered in other chapters. This includes significant unavoidable impacts, impacts found not to be significant, irreversible environmental changes, potential secondary effects caused by the implementation of the mitigation measures for the Project, and growth inducing impacts.
- **Chapter 7, Report Preparation**, identifies those who participated in the preparation of the Draft PEIR, including City staff and consultants.
- **Chapter 8, References**, identifies the references and sources used in the preparation of this PEIR.

The environmental analyses in this PEIR are supported by the following appendices:

- Appendix A: Notice of Preparation, Initial Study, and Scoping Comments
 - A-1 NOP
 - A-2 Initial Study
 - A-3 Scoping Comments
- Appendix B: Air Quality/GHG Model Outputs, Calculations, and Emissions Summary
- Appendix C: Biological Resources Plant and Wildlife Potential to Occur
- Appendix D: Energy Calculations
- Appendix E: Noise Assumptions and Modeling

- Appendix F: Transportation Assessment Report
- Appendix G: Native American Consultation Documentation

1.7 Public Review of the Draft PEIR

The Draft PEIR is subject to a 45-day review period in which the document is made available to responsible and trustee agencies and interested parties. In compliance with the provision of CEQA Guidelines Sections 15085(a) and 15087(a)(1), the City, serving as the lead agency:

- (1) Published a Notice of Availability (NOA) of a Draft EIR which indicated that the Draft PEIR was available for review at: the City's Community Development Department Planning Division at 16102 Arrow Highway; Irwindale City Hall at 5050 Irwindale Avenue; and Irwindale Public Library at 16053 Calle De Paseo, Irwindale, CA 91706;
- (2) Posted the NOA and Draft PEIR on the City's website at:
<https://www.irwindaleca.gov/570/Housing-Element-General-Plan-Update>;
- (3) Published the NOA in the San Gabriel Tribune;
- (4) Prepared and transmitted a Notice of Completion (NOC) to the State Clearinghouse;
- (5) Sent the NOA to the last known name and address of all organizations and individuals who previously requested such notice in writing. Proof of publication is available at the City. The public comment period begins on **April 4, 2025**, and will end on **May 19, 2025**.

As indicated above, hardcopies of the Draft PEIR are available for review at City Hall, as well as Irwindale Public Library located at 16053 Calle De Paseo, Irwindale, CA 91706, during normal business hours.

Any public agency or members of the public desiring to comment on the Draft PEIR must submit their comments in writing or send them via email to the following address prior to the end of the public review period:

Mail: Marilyn Simpson, AICP, Community Development Director

City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

Email: msimpson@irwindaleca.gov

Upon the close of the Draft PEIR public review period, the City will evaluate and prepare responses to all written comments related to environmental issues and the adequacy of the Draft PEIR received during the public review period. A Final PEIR will then be prepared. The Final PEIR will consist of the Draft PEIR, any necessary revisions to the Draft PEIR, written comments received during the public circulation period for the Draft PEIR, and City responses to those comments.

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CHAPTER 2

Project Description

2.1 Introduction

The City's Housing Element and General Plan Update Project (proposed Project or Project) would amend the City's General Plan and Zoning Code to implement the City's 6th cycle 2021–2029 Housing Element (Housing Element). The Housing Element includes goals, policies, and implementation programs identified to help the City meet its 6th Cycle Regional Housing Needs Allocation (RHNA). The Project also includes updates to the City's Safety Element (previously named the Public Safety Element) to implement the Housing Element and reflect recent changes in State law as well as the creation of an Environmental Justice (EJ) Element.

Consistent with CEQA Guidelines Section 15168, this Draft PEIR provides a programmatic analysis of the environmental impacts associated with implementation of the goals and policies of the Housing, Safety, and EJ Elements, the projected buildout of the Housing Element, and the land use and zoning amendments that are necessary to implement the Project.

This chapter introduces the purpose and objectives of the Project and summarizes specific information describing the Project. This includes a description of the existing regional and local project setting, major Project characteristics, including the City's RHNA and housing site inventory, and key policy directions. These aspects of the Project provide the basis for the environmental analysis provided in Chapter 4, *Environmental Impact Analysis*.

2.2 Regional Location and Existing Setting

2.2.1 Regional and Local Location

The City is located within the San Gabriel Valley in the easterly portion of Los Angeles County, approximately 21 miles east of downtown Los Angeles, as shown in **Figure 2-1, Regional and Local Location**. The City is centrally located within the San Gabriel Valley and is bisected by the San Gabriel River into an eastern section and a western section. The San Gabriel River delineates the northerly boundary of the City with the foothills of the nearby San Gabriel Mountains located further north. The City is generally bounded on the north and west by Duarte, on the east by Azusa, on the south by Baldwin Park, and on the west by the cities of Monrovia, and Arcadia. The City is traversed by two major interstate freeways: the Foothill Freeway (I-210) to the north, and the San Gabriel River Freeway (I-605), which bisects the City.

2.2.2 Existing Setting and Land Uses

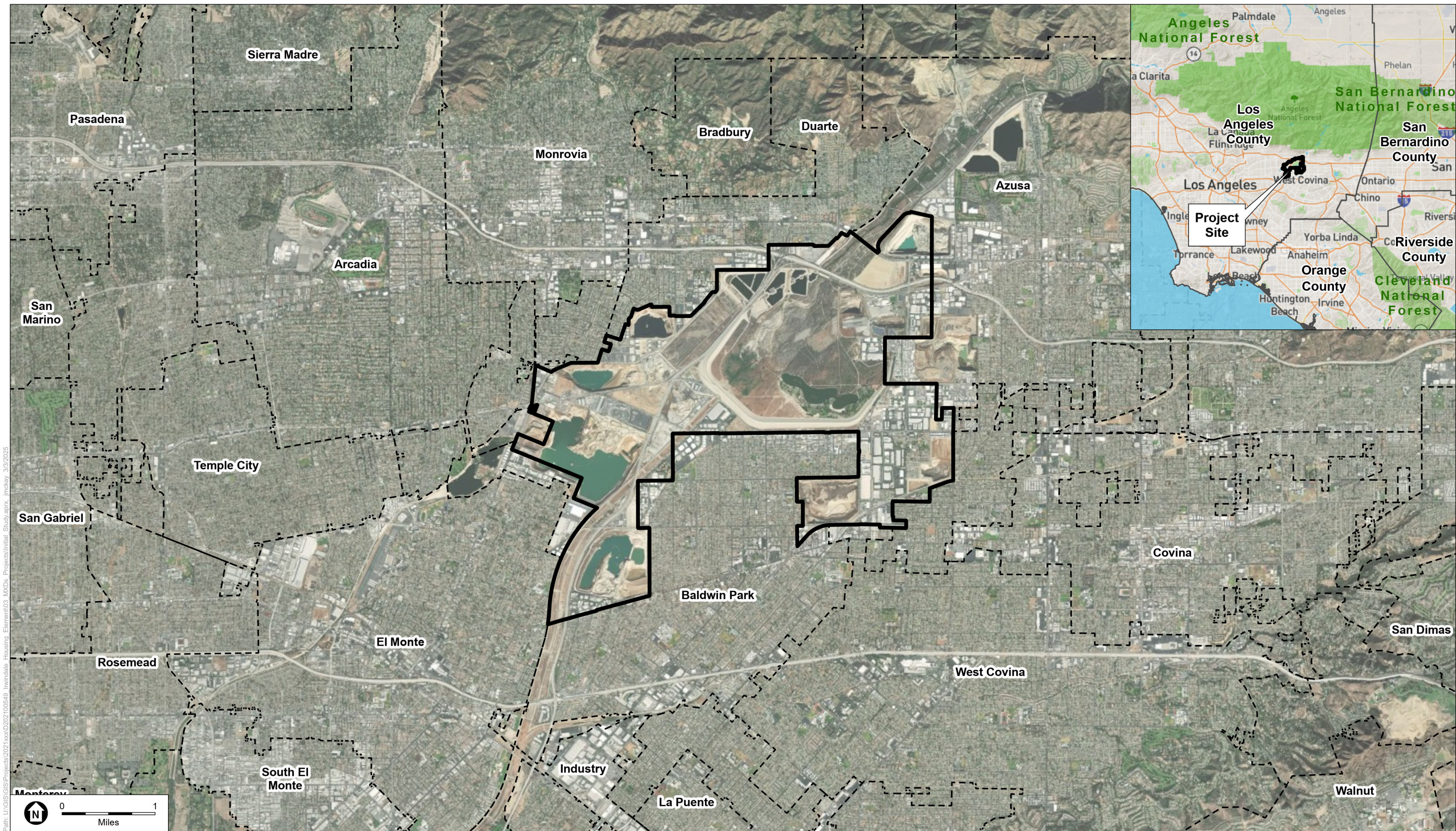
The City encompasses approximately 9.5 square miles (6,080 acres) and is the fourth smallest city by population within the six-county region represented by the Southern California Association of Governments (SCAG). The City's current General Plan was adopted in June 2008, and most recently updated in 2020 with the exception of the Housing Element, which was last updated in 2013. The City's current General Plan consists of six elements: Community Development Element, Housing Element, Infrastructure Element, Resource Management Element, Public Safety Element, and the Implementation Element. The City's General Plan provides the current goals and policies, including land use designations, that govern the City.

The City is divided into four planning areas: the Northeast Planning Area, Southeast Planning Area, Southwest Planning Area, and the Northwest Planning Area, as shown in **Figure 2-2, Citywide/Planning Area Map**. **Table 2-1, Existing Land Uses in Irwindale and Land Area**, lists the existing developed land uses in the City including the Santa Fe Dam (31.58 percent); active and inactive quarries and plants (26.82 percent); truck/equipment storage yards (5.67 percent); industrial uses (7.6 percent); commercial uses (1.27 percent); office and business park uses (1.35 percent); residential uses (0.98 percent); and civic, institutional, and other public uses (15.15 percent). Vacant parcels account for approximately 5.38 percent of the City's total land area. The existing General Plan Land Use Map is shown in **Figure 2-3, Existing General Plan Land Use Map**.

TABLE 2-1
EXISTING LAND USES IN IRWINDALE AND LAND AREA

Land Use Category	Southeast	Northeast	Southwest	Northwest	Area (acres)	Percent of City's Total Land Area
Residential	50.81	2.70	—	6.16	59.67	0.98
Office	5.76	3.37	39.55	—	48.68	0.80
Convenience Commercial	3.51	—	—	—	3.51	0.06
Community Commercial	1.24	7.64	0.50	1.20	10.58	0.17
Commercial Recreation	—	—	63.30	—	63.30	1.04
Business Park	—	24.00	9.85	—	33.85	0.55
Industrial Park	6.95	67.31	28.53	9.52	112.31	1.85
Light Industry	21.20	108.56	37.28	19.16	186.20	3.06
Heavy Industry	34.94	112.96	11.33	4.70	163.93	2.69
Yards	45.52	107.40	105.80	86.21	344.93	5.67
Quarry – Active	—	124.87	424.23	211.82	760.92	12.51
Quarry - Plant site	—	—	140.11	68.61	208.72	3.43
Quarry – Inactive	271.52	85.93	304.15	—	661.60	10.88
Landfill	—	82.50	100.06	—	182.56	3.00
Utilities	10.52	42.36	126.97	—	179.85	2.96
Public	72.01	1.66	150.07	28.59	252.33	4.15
Institutional	8.74	2.51	—	—	11.25	0.18
Santa Fe Dam	—	1,602.25	25.54	292.47	1,920.26	31.58
Vacant	143.40	95.39	55.65	32.81	327.25	5.38
Railroad	11.81	43.28	3.43	—	58.52	0.96
School	9.97	—	—	—	9.97	0.16
<i>Subtotal</i>					479.81	7.89
Roads	NA	NA	NA	NA	479.81	7.89
Total Land Use	697.90	2,514.69	1,626.35	761.25	6,080	100.00

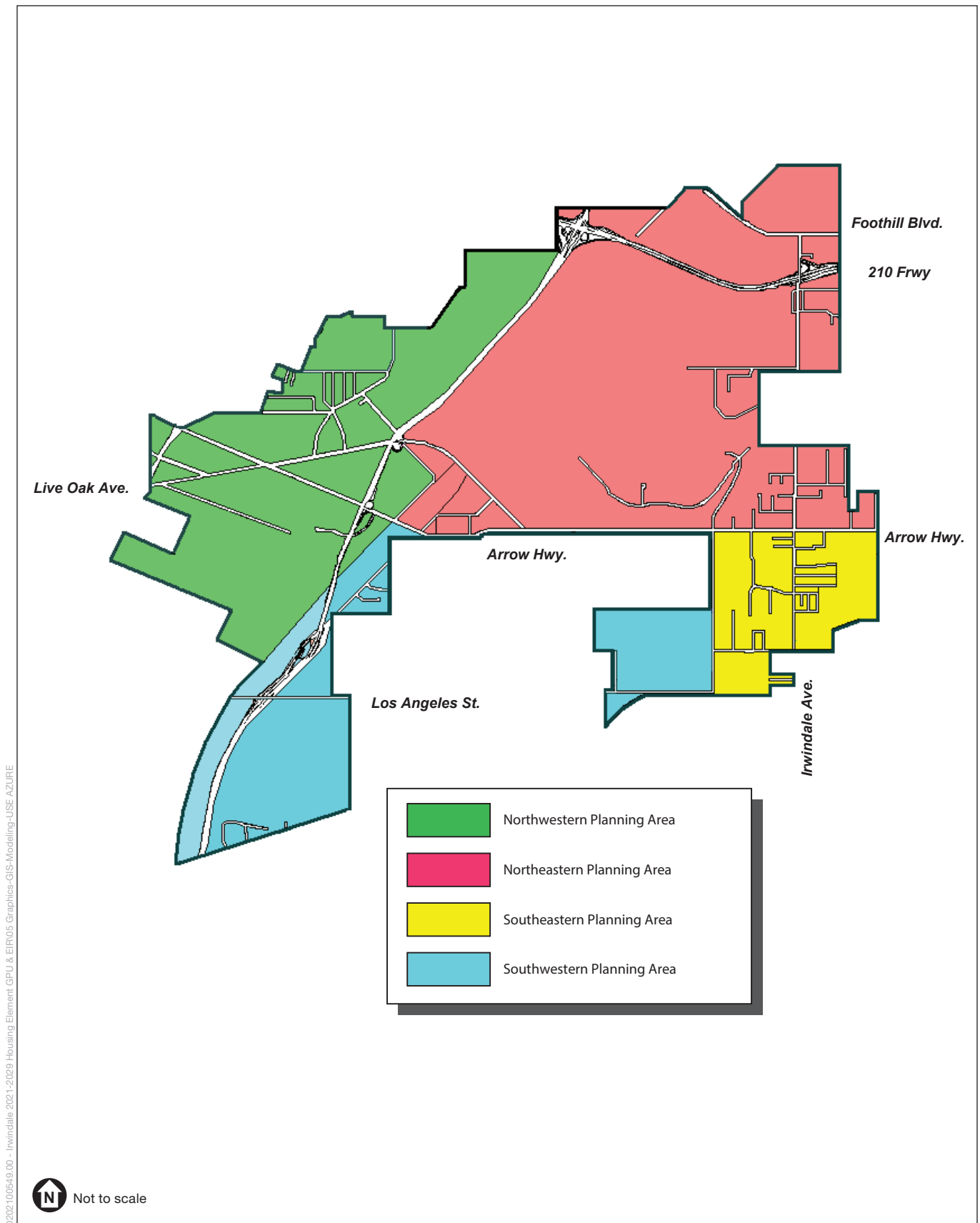
SOURCE: City of Irwindale Community Development Element, Table 2-2, 2020.



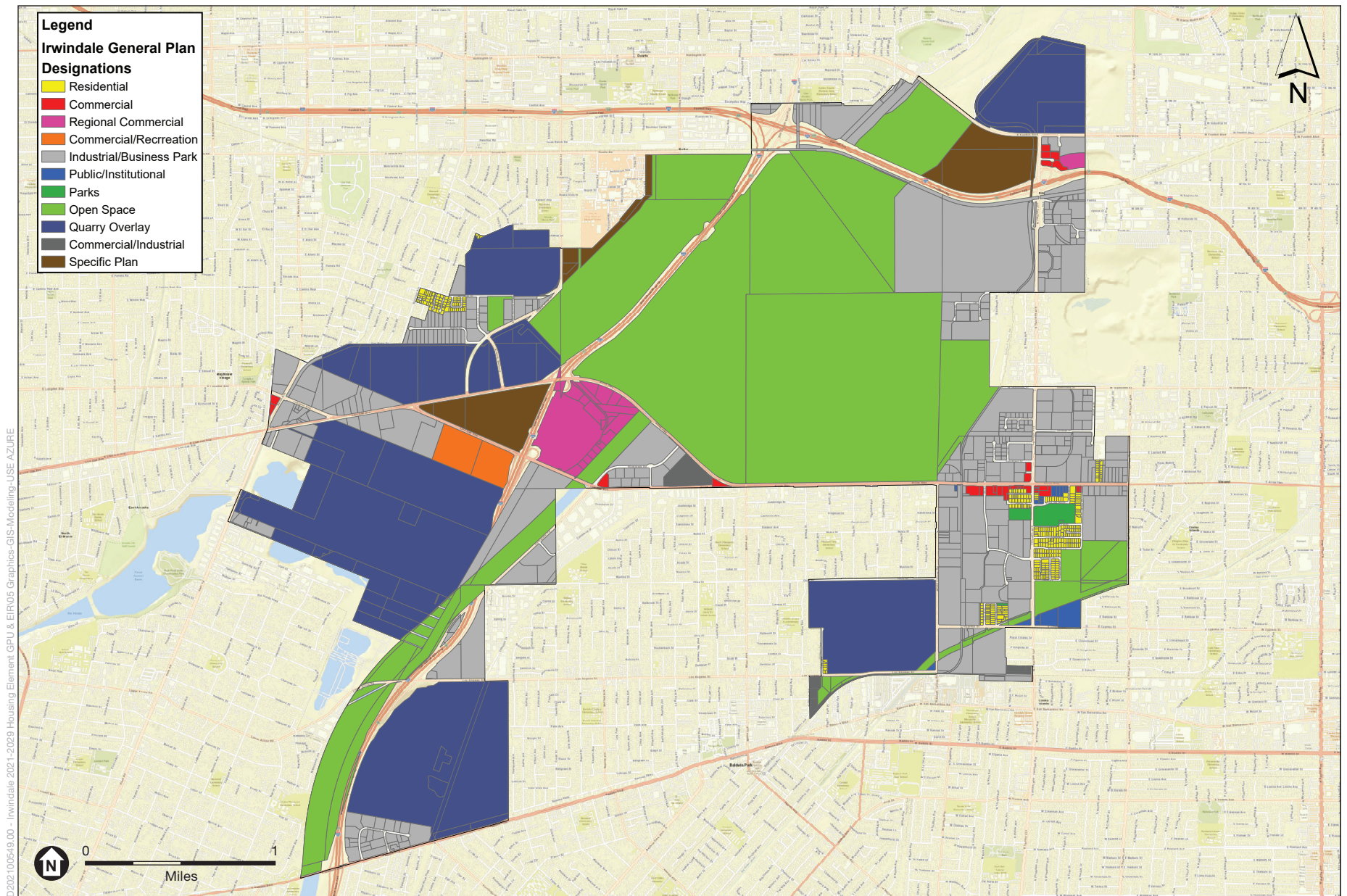
SOURCE: Los Angeles County, 2024; ESA, 2025

Figure 2-1
Regional and Local Location

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SOURCE: City of Irwindale General Plan Update, 2008



SOURCE: City of Irwindale General Plan Map, 2022

Figure 2-3
 Existing General Plan Land Use Map

As shown in Table 2-1, residential land uses account for just under 1 percent (0.98 percent) of the City's total land area, consisting of approximately 60 acres in the City. Residential uses in the City are zoned as Single-Family Residential (R-1), Light/Multiple Residential (R-2), and Heavy/Multiple Residential (R-3) and residential uses are also permitted in areas zoned as Agriculture (A-1) and Heavy Commercial Residential (C-3). The City's Zoning Map is shown in **Figure 2-4**, *Existing Zoning Map*.

The majority of residential units are located in the Town Center Neighborhood in the Southeast Planning Area, as shown in **Figure 2-5**, *Existing Residential Neighborhoods in Irwindale*. The majority of the City's residential land is designated for single-family residential uses. As of 2021, the California Department of Finance estimated that of the 414 housing units in the City, 373 units (90 percent) are single-family detached houses. An additional 10 homes are single-family attached units; multifamily units in structures of five or more units make up 21 units, and the 10 remaining units are in smaller multifamily buildings (e.g., duplexes) or are mobile homes.

2.3 Background

2.3.1 State Regional Housing Needs Allocation

California Government Code (CGC) Section 65584 recognizes local governments play a vital role in developing housing affordable to all income levels. In 1969, the State mandated that all California cities, towns, and counties must plan for the housing needs of residents, regardless of income. The RHNA is a State of California Housing Law requirement that is part of the periodic process of updating local general plan housing elements. The process determines existing and projected housing need (i.e., RHNA allocation) for all jurisdictions in the State (including cities and unincorporated county areas) with the intent to provide opportunities for a mix of unit types, tenure, and affordability, and to help achieve greenhouse gas (GHG) emission reductions from cars and light trucks. The RHNA allocates housing need based on estimates of future housing unit growth need over the RHNA planning period (2021–2029). As part of the RHNA, the California Department of Housing and Community Development (HCD) determines the total number of new homes California needs to plan for, and their affordability levels to meet the housing needs of people at all income levels. The state-wide RHNA is then broken down into regional allocations, which are then assigned to the local jurisdictions.

2.3.2 6th Cycle Housing Element Update

CGC Section 65302(c) mandates that each city within California includes a Housing Element in its General Plan. A Housing Element's components, as required by CGC Section 65583, include:

- Detailed analysis of the City's demographic, economic, and housing characteristics;
- Comprehensive analysis of the barriers to producing and preserving housing;
- Review of the City's progress in implementing its adopted housing policies and programs;
- Identification of goals, objectives, and policies, in addition to a full list of programs that will help the City to carry out the plan's vision; and
- List of sites that could accommodate new housing, demonstrating the City's ability to meet its target number of new homes established in the RHNA.

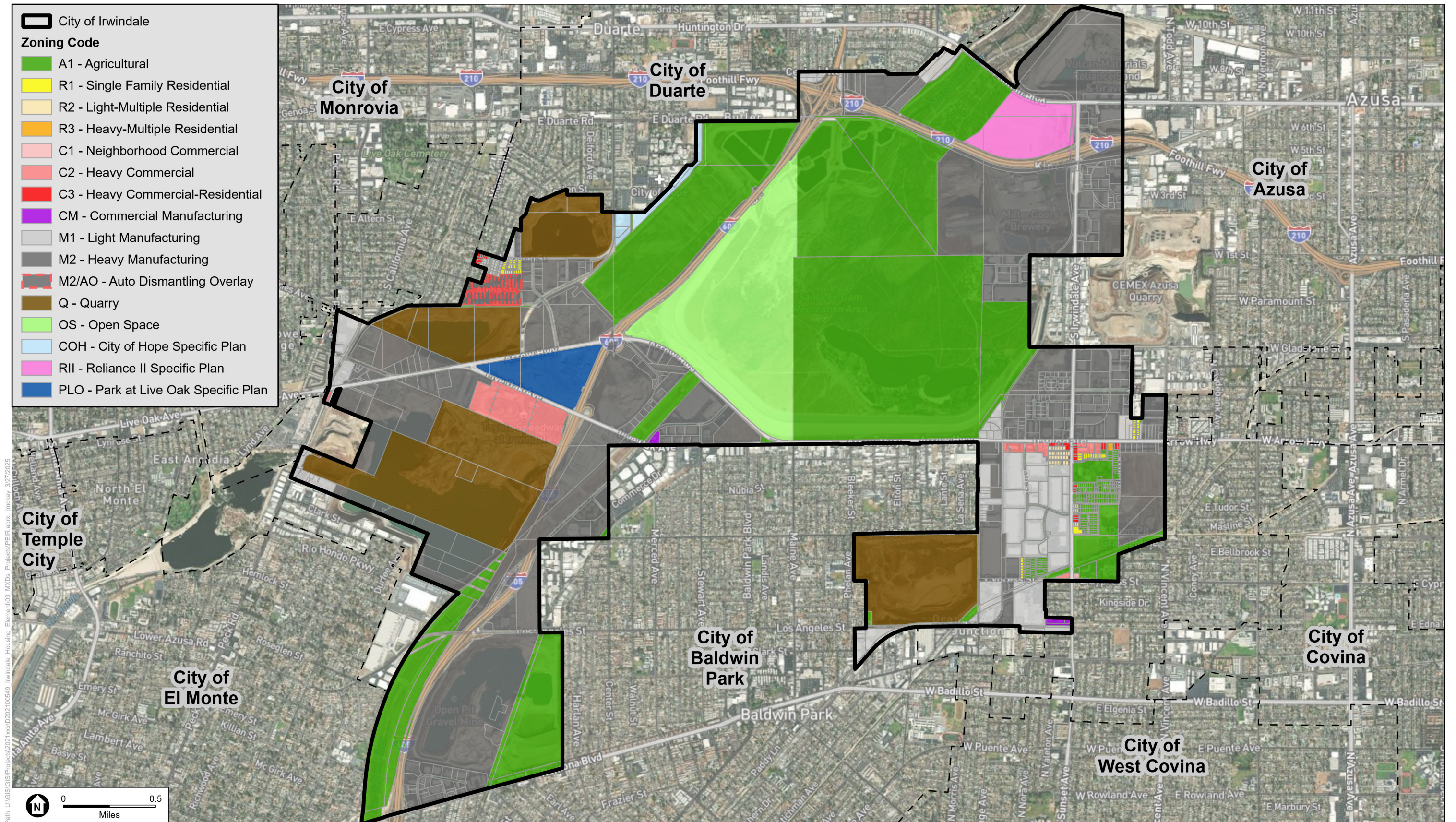
The timing for jurisdictions to update their Housing Elements is based on the update schedule established for regional transportation plans (RTPs) prepared by federally designated metropolitan planning organizations. The SCAG is the federally designated metropolitan planning organization representing all jurisdictions in Los Angeles County, including Irwindale. SCAG is required to update its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) every 4 years, which puts all member jurisdictions on a schedule to update their Housing Elements every 8 years. The SCAG Regional Council adopted the Connect SoCal 2024 plan in April 2024.

For SCAG member jurisdictions, the 6th Cycle Housing Element planning period extends from 2021 to 2029. As part of Connect SoCal, SCAG assigns a number of housing units that the County of Los Angeles (County) is required to plan for in the 8-year Housing Element cycle, otherwise referred to as the County's RHNA allocation. The County then assigns residential unit amounts to its jurisdictions based on a regional housing production target set by HCD. This assignment of residential units is referred to as each jurisdiction's RHNA.

Each jurisdiction's RHNA is divided into four income categories of housing affordability (i.e., very low, low, moderate, and above moderate). Cities and counties must prepare housing elements showing how they plan to accommodate their RHNA on available land that is appropriately zoned for residential development affordable to all income categories. While cities and counties are obligated to ensure adequate land is zoned for housing, they are not obligated to build any of the units or finance their construction.

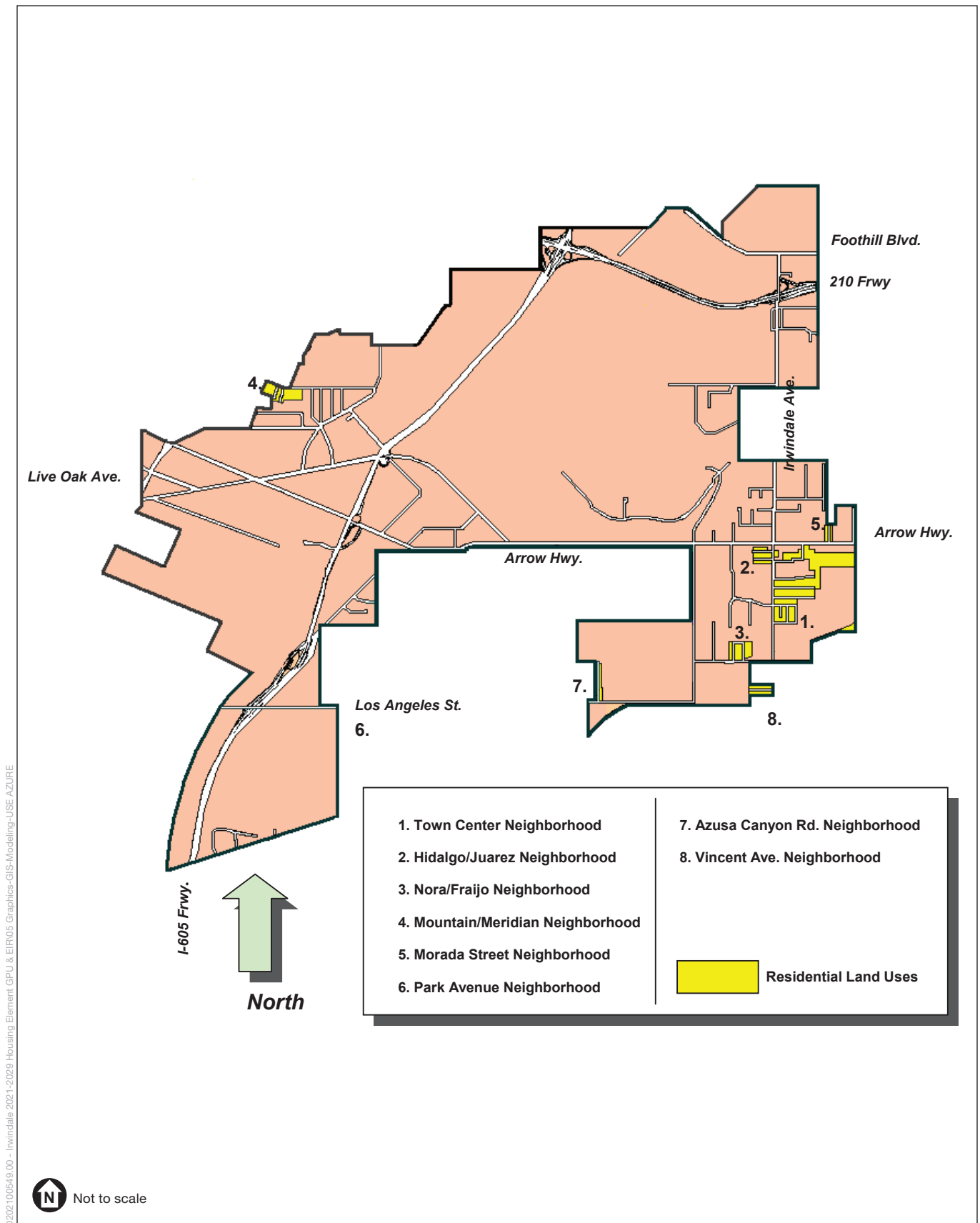
2.4 Purpose and Objectives of the Project

This section provides a description of the Project's purpose and objectives as required under CEQA Guidelines Section 15124(b). The purpose of the Project is to implement the policies and programs included in the 2021–2029 Housing Element, Safety Element, and EJ Element. The Project would replace the existing Housing and Safety Elements of the current General Plan and would add an EJ Element to the General Plan. The Zoning Code provides the mechanism to implement the City's General Plan. The Project would also amend the zoning of the identified properties and the Municipal Code to allow the densities identified in the Housing Element Site Inventory.



SOURCE: City of Irwindale, 2022; ESA, 2025

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SOURCE: City of Irwindale General Plan Update, 2008

Figure 2-5
Existing Residential Neighborhoods in Irwindale

The Project includes the following goals and objectives:

1. Facilitate new housing opportunities throughout the City in response to the State's need for more affordable and market rate housing as well as develop housing solutions to meet the City's 6th Cycle RHNA.
2. Meet the City's housing needs by encouraging a variety of housing development affordable at all income levels, especially for extremely low- and very-low income households, including construction of Accessory Dwelling Units (ADUs), subdivision/lot split opportunity sites, and other housing choices on identified opportunity sites.
3. Reduce, remove, and/or streamline potential governmental constraints and barriers to housing development and promote equal housing opportunities for all people; incorporate best practices related to land use, racial equity, mobility, housing affordability, safety, environmental justice, community services, and healthy neighborhoods.
4. Affirmatively further fair housing to address special housing needs, primarily for seniors and people living with disabilities, promote fair housing choice, eliminate disparities in housing opportunities, and foster inclusive communities free from discrimination.
5. Embrace technology and innovative practices to create sustainable, energy efficient, and healthy communities and adaptable infrastructure systems.
6. Develop a Safety Element that meets all the requirements under Government Code Section 65302(g)(1) through (g)(9), and which reflects State and local regulations for specific hazards, with the intent of protecting people and key infrastructure from damage resulting from an environmental hazard.
7. Develop an Environmental Justice Element that meets all requirements under Government Code Sections 65302(h)(1) through 65302(h)(2), and which reflects State, and local regulations for evaluating environmental hazards, pollution, health risks and social challenges in disadvantaged communities.

2.5 Project Description

The Project consists of updates to the Irwindale General Plan and amendments to the City's Zoning Code in order to implement the goals, policies, and programs of the proposed Housing, Safety, and EJ Elements. Each component is discussed in greater detail below.

Housing Element

The overall purpose of the 2021–2029 Housing Element is to address the housing needs of all types of households and income levels for current and future Irwindale residents. State law requires that the City's 2021–2029 Housing Element contain specific contents, including an inventory or list of housing sites at sufficient densities to accommodate a specific number of units at various levels of affordability assigned to the City by the County and SCAG. The Housing Element is required to identify and analyze existing and projected housing needs within the City and include statements of the City's goals, policies, quantified objectives, and scheduled programs to preserve, improve, and develop housing. In adopting its Housing Element, each city must consider economic, environmental, and fiscal factors, as well as community goals as set forth in the General Plan, in compliance with CGC Section 65580 et seq.

In compliance with Government Code Section 65580 et seq., the City is updating its Housing Element for the planning period of 2021–2029 (hereafter referred to as the Housing Element). The Draft 2021–2029 Housing Element was provided for public review in November 2022 and has been revised in response to

HCD's comments. The Revised Draft Housing Element (April 2025) is provided on the City's website at <https://www.irwindaleca.gov/570/Housing-Element-General-Plan-Update>.

City of Irwindale's Regional Housing Needs Allocation

Table 2-2, 6th Cycle Regional Housing Needs Allocation for Irwindale, shows the City's 6th Cycle RHNA allocation of 119 units for the 2021–2029 planning period. As indicated in Table 2-2, the City's RHNA is further divided into 36 very low-income units, 11 low-income units, 17 moderate income units, and 55 above moderate units. Irwindale's 6th Cycle RHNA represents approximately 29 percent of the existing housing units within the City, which was estimated to be 414 units in 2021.

**TABLE 2-2
6TH CYCLE REGIONAL HOUSING NEEDS ALLOCATION FOR IRWINDALE**

Income Level	% of County Median Family Income (AMI)	RHNA Units	Percentage of Units
Very-Low Income	0%–50% AMI	36	30%
Low Income	50%–80% of AMI	11	10%
Moderate Income	81%–120% of AMI	17	14%
Above Moderate Income	120% + of AMI	55	46%
Total		119	100%

NOTE: For the housing element update, local jurisdictions will have to consider extremely low income (ELI) households as well. ELI housing needs may be calculated either by using Census data or simply assuming that 50 percent of the very low-income households qualify as extremely low-income households.

SOURCE: Southern California Association of Governments (SCAG). 2021. SCAG 6th Cycle Final RHNA Allocation Plan. Approved by HCD on March 22, 2021, modified on July 1, 2021.

Proposed Housing Element Policies and Programs

The Housing Element includes various housing policies and programs to guide the City in planning and decision-making in order to achieve its 6th Cycle RHNA. The housing policies are organized around six key themes and are ordered around a progression that first seeks to maintain the existing housing stock; then sets the stage for the private market to develop housing; generates resources for the City to partner with developers to make housing affordable; positions the City to affirmatively further fair housing and address special housing needs; and promote long-term sustainability, energy efficiency, and a healthy community. The 2021–2029 Housing Element housing policies are identified as the following:

Policy 1 – Maintain Existing Housing Quality and Affordability: Maintain the quality of existing housing stock to provide residents with safe, sound, and affordable housing. (Housing Programs 1 and 2)

Policy 2 – Remove Governmental Constraints: Remove governmental constraints to the production and maintenance of housing in Irwindale. (Housing Programs 3 through 7)

Policy 3 – Provide Adequate Housing Sites: Ensure that the City maintains a supply of land, appropriately zoned, that is sufficient to accommodate the City's Regional Housing Need Allocation for the 6th Cycle. (Housing Programs 8 through 12)

Policy 4 – Provide New Affordable Housing: Utilize existing resources, develop new resources, and leverage the resources of other agencies to provide new housing in Irwindale that addresses needs of households across the socio-economic spectrum. (Housing Programs 13 through 18)

Policy 5 – Affirmatively Further Fair Housing and Address Special Housing Needs: Dedicate specific resources and take active steps to ensure housing opportunities for the community’s most vulnerable populations, including traditionally under-represented minority populations and other populations with special housing needs. (Housing Programs 19 and 27)

Policy 6 – Promote Sustainability, Energy Efficiency, and a Healthy Community: Promote sustainability and energy efficiency in new housing development through community design and building design and provide residential program support for a healthy community. (Housing Programs 28 through 31)

To implement these six housing policies, the Housing Element includes 31 housing programs that describe specific actions that the City must undertake to achieve the six housing policies. **Table 2-3, *Proposed Housing Element Policies and Programs***, list out each housing program as well as includes the program goal, objectives for the 2021–2029 planning period, and identification of potential funding source(s), the agency responsible for implementation, and the anticipated timeframe for implementation. In addition, Table 2-3 also identifies whether a housing program is a new 6th Cycle housing program or if the program has been incorporated and updated from the 5th Cycle Housing Element.

Proposed Housing Sites Inventory

When updating the Housing Element, State law requires the City to document its capacity to accommodate its allocated RHNA for the 6th Cycle (2021–2029) planning period. The City must demonstrate that the land inventory (also referred to as the housing sites inventory) is adequate to accommodate the City’s share of the region’s projected housing needs.¹ To determine its housing sites inventory, the City undertook its site selection process through a multi-step process, beginning with a search of the housing sites database prepared by SCAG to screen for sites meeting basic criteria for housing development suitability, including parcel sizes between 0.5 and 10 acres. City staff provided refinements to the Housing Sites Inventory based on the following criteria: availability of utilities to serve new housing development, developer/property owner interest, physical underutilization, and vacant parcels. These criteria emphasize sites that may be considered for future redevelopment into housing. The parcels selected have experienced long periods of underutilization wherein the building(s) were either empty or not used in their full capacity. Additionally, close proximity to community infrastructure, such as schools, grocery stores, and public transportation, were considered when identifying candidate housing sites. Refer to the Housing Element (Section 10, *Housing Sites Analysis*) for a detailed description of the housing sites inventory selection process, including the environmental constraints analysis.

¹ The purpose of the land inventory or housing sites inventory is to identify specific properties that are suitable for residential development in order for the City to meet its assigned RHNA.

TABLE 2-3
PROPOSED HOUSING ELEMENT POLICIES AND PROGRAMS

Housing Program	Program Goal	2021–2029 Objective	Funding	Housing Program	Program Goal
Policy 1: Maintain Existing Housing Quality and Affordability					
1. Proactive residential Code Enforcement (New)	Maintain the housing stock in sound condition and eliminate residential blight through a pro-active program that works with property owners to bring housing into compliance with basic health and safety standards.	Modify the IMC to provide minimal standards for residential health and safety via regular upkeep. Monitor housing conditions; respond to complaints. Provide referrals to available rehabilitation programs through the County and State.	General Fund; CDBG Small Cities Program for rehab funds	Community Development Department, Public Works Engineering/ Building & Safety	Modify IMC by December 2024; ongoing 2021–2029.
2. Create a local housing rehabilitation loan fund to assist lower- and moderate-income households. (Incorporates Program 1)	Improve deteriorated housing and preserve the existing stock of affordable housing. Prioritize use of rehabilitation funds for repairs to housing units housing very low- and extremely low -income households.	Monitor availability of funds as State NOFAs are released for rehabilitation project funding. Refer lower- and moderate- income property owners to housing rehab programs for assistance in bringing their units into compliance. Assist six lower-income households with rehabilitating their units, citywide.	Linkage fee, General Fund, CDBG Funds	Community Development Department	Monitor NOFAs annually and apply for funding whenever Irwindale is eligible; work with eligible households on an ongoing basis.
Policy 2. Remove Governmental Constraints					
3. CEQA Exemptions for Infill Projects (New)	Utilize allowable CEQA exemptions for qualified urban infill and other qualifying residential projects.	Continue to utilize categorical CEQA exemptions where appropriate, on a case-by-case basis.	General Fund	Community Development Department	On-going
4. Facilitate adaptive reuse of commercial and industrial properties within 1/2 mile of transit to residential. (New; incorporates 5th Cycle Program 7)	Focus on promoting new law and consider approving conversions even if beyond ½ mile. Create GIS maps to show transit stations (with specific criteria), amenities etc. Notify owners proactively. Allow buildings that have been vacant for more than 1 year and previously occupied by nonconforming uses or uses incompatible with their surrounding neighborhoods to convert to residential.	Promote adaptive reuse to property owners and interested developers at least one time during the Planning Period. Remove potential constraints for adaptive reuses such as streamline review /approval process and reducing parking standards for sites within ½ mile of high-quality transit, with a goal of developing at least six new residential units through adaptive reuse during the planning period.	General Fund; State grants	Community Development Department	Amend IMC by December, 2024 and conduct outreach to non-residential property owners by December, 2025.
5. Efficient Project review – permit streamlining program (New)	Minimize the required time for project approvals for qualifying residential projects.	Modify IMC to enable more by right/ministerial approvals and thus remove governmental restraints to housing production.	General Fund	Community Development Department	Amend IMC by December, 2024.
6. Zoning Code Amendments. Complete Zoning Code Amendments to address governmental constraints identified in the Housing Needs Assessment (New): (a) The Density Bonus regulations have not been updated to comply with AB 2345, which went into effect in 2021, which requires that local jurisdictions allow for density bonuses of up to 50 percent for affordable housing projects and relaxes standards for granting additional concessions and incentives to facilitate affordable housing projects. Review and align the City's density bonus provisions with State law. (b) The Zoning Code does not include provisions for transitional housing, supportive housing, group homes, and single residence occupancy (SRO) units. Update code to comply with state law, including appropriate development standards and permitting procedures to encourage these uses. (c) Amend the Zoning Code to comply with all provisions of Government Code 65661: include a definition for low barrier navigation centers and identify a zone or zones where they will be allowed by right (including in all zones permitting multifamily development, without discretionary approval), consistent with AB 101, and include Emergency Shelters in the listing of permitted uses in IMC Section 17.52.010. (d) Review and revise the City's design standards to ensure compliance with the requirements of SB 330	Modify the IMC to accommodate new State legislation regarding housing.	(a) Review and align the City's density bonus provisions with State law. (b) Amend the zoning code to conform to these requirements, including providing permit streamlining for permanent supportive housing consistent with GC Section 65650 et seq. Group homes will be permitted in all residential zones regardless of size and licensing and no special requirements will be imposed on group homes that are not imposed on similar single-family or multifamily housing structures in the same zone. Transitional and supportive housing will be permitted as a residential use in all zones allowing residential uses and only subject to requirements of other residential uses of the same type (e.g., single-family and multifamily). (c) Amend the IMC to include a section for low barrier navigation centers and identify a zone(s). (d) Create objective design standards and written procedures. (e) Update City website to provide accessible links on Housing. (f) Amend the IMC parking requirements to facilitate emergency shelters. (g) Amend the IMC zoning regulations to permit employee housing in conformance with State law. (h) Amend the IMC parking requirements to facilitate construction of smaller housing units.	General Fund; SB2 and other State/regional grants	Community Development Department	Amend IMC to remedy governmental constraints by December, 2024.

Housing Program	Program Goal	2021–2029 Objective	Funding	Housing Program	Program Goal
and SB 35 and prepare written procedures to follow in compliance with SB 330 and SB 35. (e) Provide all information required by GC Section 65940.1 (a)(1)(A)-(E) (f) Modify parking requirements for emergency shelters to eliminate the component requiring 1 space for every six occupants. No additional parking required per occupancy or bed, etc. in compliance with State law. (g) Amend the Zoning Code to comply with California Health and Safety Code, § 17000 et seq.), specifically, sections 17021.5 and 17021.6. Section 17021.5 requires employee housing for six or fewer employees to be treated as a single-family structure and permitted in the same manner as other dwellings of the same type in the same zone. Section 17021.6 requires employee housing consisting of no more than 12 units or 36 beds to be permitted in the same manner as other agricultural uses in the same zone. (h) Modify residential parking standards to require only one parking space per housing unit that has less than one full bedroom (e.g., studio units) and to allow satisfaction of parking requirements for multifamily housing with covered or uncovered surface parking as opposed to garage spaces. (i) Modify residential building height limit in the R-3 and C-3 zones to allow at least 48 feet.		(i) Amend the IMC development standards to facilitate construction of higher density multifamily housing.			
7. Mixed-Use Development. Create new standards and add to IMC, providing for ministerial approval. (Affirmatively Furthering Fair Housing) (New)	Provide zoning and development standards to facilitate residential mixed-use housing opportunities.	Revise IMC to include objective design standards that allow for ministerial approvals for mixed-use residential projects and development standards that will facilitate achieving specified maximum densities allowed in the mixed-use zone.	General Fund; State grant funds	Community Development Department	Adopt mixed-use zoning with objective design standards by December, 2024.
Policy 3. Provide Adequate Housing Sites					
8. Rezone Targeted Housing Sites. Apply an affordable housing overlay on sites identified in the Housing Sites Inventory and provide for by-right approval for projects with at least 20% affordable units. (Affirmatively Furthering Fair Housing) (Incorporates 5th Cycle Programs 6, 14, and 18).	Minimize the required time for project approvals for qualifying residential projects.	Modify IMC to make more by right/ministerial approvals and remove governmental restraints to housing production. Ensure adequate sites to accommodate 6th Cycle RHNA with at least a 25% overall buffer, including sites to accommodate at least 46 lower-income units, 20 moderate-income units, and 58 above moderate-income units, not including existing sites that could be developed with ADUs and existing vacant single-family lots. Required rezonings will address all by right requirements of Government Code Section 65583.2, subdivisions (h) and (i) and will include minimum and maximum residential densities and appropriate development standards to facilitate achieving maximum densities.	General Fund; grants	Community Development Department	Adopt affordable housing overlay zoning to fully accommodate the 6th Cycle RHNA by December, 2024.
9. Monitor Housing Sites for No Net Loss (New)	To comply with SB330.	On an ongoing basis, monitor development of housing element sites to support meeting the RHNA. Performance evaluation to fully accommodate the RHNA. If deficit, then initiate program to provide for additional sites to fully accommodate the remaining RHNA within six months.	General Fund	Community Development Department	Ongoing
10. Arrow Hwy Commercial Corridor Specific Plan. Adopt new Specific Plan with potential mixed-use and/or housing development. (New)	Provide new sites for multi-family residential and mixed-use housing development.	Create a Specific Plan to include 20% affordable housing units.	General Fund; grants	Community Development Department	Complete Specific Plan by July, 2028.
11. General Plan Consistency (Incorporates 5th Cycle Program 13)	To achieve consistency between General Plan designations and zoning designations.	Amend zoning and general plan designations to be consistent with each other, decrease non-conformity, and allow residents to take advantage of housing legislation to increase housing stock in the City.	General Fund; grants	Community Development	Complete General Plan Amendments by July 2025; On-going.

Housing Program	Program Goal	2021–2029 Objective	Funding	Housing Program	Program Goal
12. Facilitate housing development on large sites. (New)	To assist the development of housing for lower income households on Housing Sites Inventory sites larger than ten acres, the City will provide technical assistance and strive to streamline the approval process for land divisions, lot line adjustments, and/or specific plan amendments resulting in a parcel size that facilitates affordable housing development. To further incentivize development, the City will grant fee deferrals for projects that include at least 50 percent of the units affordable to lower income households and provide priority to affordable housing projects on large sites for use of funds from proposed new jobs-housing linkage fee.	Engage the owner of the Reliance II site in discussions about the best location within the site for a residential overlay and work with the owner to process a subdivision or lot-line adjustment to establish a parcel smaller than ten acres in size that will facilitate affordable housing development. Encourage the owner to pursue affordable housing development by facilitating conversations with potential affordable housing developers.	General Fund	Community Development Department	Engage owner within six months of Housing Element Certification; process subdivision or lot line adjustment to create site smaller than 10 acres by December, 2025; facilitate entitlements and encourage housing development by December 2027. Reach out to property owner annually to gauge interest if they are not actively engaged with processing a subdivision application.
Policy 4. Provide New Affordable Housing					
13. Leverage Allen Drive Site for Affordable Housing Resources	Generate resources from development of Allen Drive Site to support affordable housing elsewhere in City. Continue to comply with all aspects of State Surplus Lands Act in the disposition of the site for housing development.	Secure a development partner for Allen Drive site and direct disposition proceeds to Affordable Housing Fund. Produce at least 51 housing units on-site, including 36 moderate-income units and 15 above moderate-income units. If the City does not achieve either of the above milestones by the stated dates, the City will immediately proceed to identify an alternate site for housing development to replace the units (by income levels) targeted for the Allen Drive site and complete any necessary rezonings within six months of missing the target date, if necessary for the City to fully accommodate its 6 th Cycle RHNA.	Disposition of Allen Drive Site	Housing Authority	Issue RFP for developer by January, 2025; execute development and disposition agreement and final entitlements by December, 2026; issue building permits by June, 2027.
14. Create an affordable housing linkage fee program to generate local funds to support affordable housing, including, but not limited to down payment assistance (New)	Create an Affordable Housing fund.	Provide an assistance fund for qualified affordable housing participants; Affordable Housing Fund monies to assist at least one affordable housing project with at least eight units affordable to lower-income households during the Planning Period. Provide priority for use of funds on projects that would house very low - and extremely low -income households and/or Special Housing Needs populations.	Fee collected for new commercial or industrial development	Community Development Department, Finance Department	Adopted commercial linkage fee program November 2023; collect linkage fees on an ongoing basis; issue NOFAs for use of linkage fee money bi-annually.
15. Outreach for Tenant-based Rental Assistance Programs for Extremely Low-Income Households. Include SFR and ADUs with vouchers and Technical Assistance for ELI and Special Needs Housing Development. (Affirmatively Furthering Fair Housing) (Incorporates 5th Cycle Program 15)	Facilitate access to housing for Extremely Low-Income and Special Needs households.	Create outreach information to provide to owners regarding renting to Section 8 recipients. Include explanation on what Section 8 is. Create interest list. Create waiting list for Section 8 vouchers. Provide technical assistance to affordable housing developers and Special Needs housing providers, including assistance with locating suitable sites, assistance with developing and processing project applications. Proactively reach out to developers of housing affordable to lower-income households, including extremely low-income and special needs households to offer technical assistance, with a goal of developing at least one new housing development that includes units set aside for ELI and/or Special Needs households during the planning period, citywide.	General Fund	Community Development Department	Conduct outreach to residential property owners by Jun2, 2025 and establish owner interest list and prospective tenant interest lists by June 2025; maintain up-to-date lists on an ongoing basis. Conduct outreach to affordable housing developers annually. Provide technical assistance on an as-requested basis.
16. Affordable ADU Incentive Program (Affirmatively Furthering Fair Housing) (Incorporates 5th Cycle Program 8)	Provide opportunities for very low- or low-income ADUs.	Utilize Affordable Housing Fund monies to create reduced fee program to incentivize creation of at least four ADUs affordable to very low- or low-income households, citywide. Link back to Program 15. Amend ADU ordinance to incorporate affordable ADU program and comply with all requirements of State law.	General Fund; grants	Community Development Department; Public Works/Building & Safety	Amend ADU Ordinance within 6 months of Housing Element Adoption.
17. Create ADU Templates and Track and Monitor Accessory Dwelling Units (Affirmatively Furthering Fair Housing) (New)	Increase housing availability by expediting ADU developments.	Streamline and facilitate the development of ADUs by creating preapproved templates for ADU plans. Community outreach once template and application streamline are in place.	General Fund; grants	Community Development Department; Building and Safety Division	Adopt pre-approved ADU templates by December, 2025; ongoing review and monitoring of ADUs; conduct outreach to Irwindale homeowners to inform them of the program by July, 2026.

Housing Program	Program Goal	2021–2029 Objective	Funding	Housing Program	Program Goal
18. State Action Ordinances (New)	Create rapid response to new State legislation regarding housing and affordability regulations.	Create new IMC chapter that references and incorporates future updates to State requirements, to streamline Municipal Code modifications.	General Fund	Community Development Department	Adopt new IMC chapter by June, 2025.
Policy 5. Affirmatively Further Fair Housing and Address Special Housing Needs					
19. Senior Housing opportunities (New)	Provide a range of housing options to address the diverse needs of the senior population with a priority on studio and one-bedroom rental units. Track the number of senior households receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.	Actively pursue senior housing opportunities to create at least six new housing units for lower- income seniors, including developer partnership to provide funding for a senior housing.	Former RDA Housing Asset Fund; other sources	Community Development Department	Create one new senior housing project by the end of the Planning Period.
20. Housing Opportunities for Persons Living with Disabilities. Ensure equitable housing in the community (Affirmatively Further Fair Housing) (New 6th Cycle Housing Element Program)	Support a range of housing options for persons with disabilities. Track the number of households with members with disabilities receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.	Coordinate with relevant organizations to publicize information on resources. Pursue Private/County/State funds for supportive housing in affordable housing projects. Amend the Code regarding reasonable accommodations.	Low Income Housing Tax Credits; other State funds.	Community Development Department	Coordinate with relevant organizations by December 2024; amend Code by December 2024; pursue funds annually or as NOFAs are released.
21. Fair Housing Program/Outreach (Affirmatively Furthering Fair Housing) (Incorporates 5th Cycle Program 16)	Promote fair housing practices and prevent housing discrimination through active outreach to typically disadvantaged persons/households; e.g., multi-lingual approach, pro-active outreach to make sure these populations are aware of their rights and know how to access available assistance, etc.	Conduct outreach campaigns two times during the Planning Period by mailing multi-lingual flyers to all Irwindale residential addresses and in conjunction with business license renewals, encourage businesses to distribute flyers to employees. For local affordable housing programs, require no more than 36 months of continuous residency to qualify for a local resident preference and otherwise comply with all fair housing laws, as applicable.	General Fund	Community Development Department, Public Works Engineering/Building & Safety	Conduct outreach campaigns in 2024 and 2027.
22. Provide a variety of housing types per SB 330 and SB 35 for streamlined ministerial approval process. (New)	Provide opportunities for a variety of housing price, style, and size, and accommodate a diverse income mix. Track the characteristics of households receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.	Establish objective development standards and a preliminary application process for qualifying affordable housing projects.	General Fund	Community Development Department	Establish objective development standards by December, 2024.
23. Workforce Housing Development (New)	Create housing opportunities for the many people employed throughout the City. Define Workforce housing, income level, and inclusionary requirement.	Create a definition for Workforce Housing and income level. Through Government bonds, acquire at least eight market-rate apartments to convert to affordable units for middle income households earning 80% to 120% AMI, citywide. Join CSDA.	California Special Districts Association (CSDA); General Fund; Linkage fee	Community Development Department	Update IMC to define workforce housing by December 2025; apply deed restrictions to one multifamily property by end of planning period.
24. Affordable Housing Development Assistance and Implementation Guide (New)	Outreach for Affordable Housing Development Assistance.	Create a pamphlet and webpage including resources available and general information about affordable housing assistance and its implementation.	General Fund; grants	Community Development Department	Create pamphlet and webpage by December 2024; update on an ongoing basis.
25. Provide housing and reasonable accommodations for seniors and persons with disabilities (Affirmatively Furthering Fair Housing) (Incorporates 5th Cycle Program 16a)	Provide new senior housing and retain existing senior housing (Las Casitas); Prioritize the projects that want to accommodate special needs (low-income seniors, disabled etc.) Provide reasonable accommodations for persons with disabilities. Publicize available assistance and reasonable accommodations through the Senior Center.	Subsidize at least eight units of senior housing during the Planning Period. Update four units for ADA compliance. Provide reasonable accommodations on an ongoing basis.	General Fund, grants, linkage fee, Irwindale Housing Authority	Community Development Department	On-going; apply for grants annually or as NOFAs become available.
26. Homeless Service Strategy (New)	Continue to partner with Azusa and Duarte to assist the homeless and persons at-risk of homelessness in obtaining shelter and services.	Implement City’s Homeless Plan. Coordinate with the SGVCOG and LAHSA. Assist at least four persons during the Housing Element Planning Period with either assistance for persons that are homeless or assistance for households that are at-risk.	General Fund; other County and State funds.	Community Development Department; City Administration (City Manager’s office)	On-going
27. Mixed-Use Zoning for By-Right Emergency Shelters	Encourage mixed-use development and provide opportunities to developed emergency shelters by-right in a zoning district that also allows residential development.	Incorporate mixed-use zoning in new Arrow Highway Specific Plan (see Program #10) to accommodate both residential uses and emergency shelters.	General Fund; other State funds if available.	Community Development Department	Complete specific Plan by July, 2028.

Housing Program	Program Goal	2021–2029 Objective	Funding	Housing Program	Program Goal
28. Place-Based Strategies for Neighborhood Improvement	Address environmental justice concerns throughout the community by prioritizing the City's capital improvement program to make quality of life improvements to residential areas, focusing on mitigating or remediating issues identifies in the Environmental Justice Element.	Implement various place-based actions for community health and well-being, as detailed in the Environmental Justice Element, such as EJ1.C (grant funding to implement air pollution mitigation in residential areas), EJ4.D (install “no idling” signs in residential areas), EJ5.A (regional coordination data-driven investments to promote safe and sanitary housing), EJ5.E (information on funding and assistance for home efficiency), EJ5.G (renter home maintenance and improvement assistance), EJ5.H (rental housing inspection), EJ5.I (home weatherproofing grants), EJ5.K (residential mold abatement), EJ5.M (anti-displacement), EJ5.N (neighborhood quality of life infrastructure), EJ6.O (pedestrian-friendly infrastructure), and EJ6.U (expand tree canopy). Undertake at least four capital improvement projects in residential areas citywide that implement place-based improvement strategies, citywide during the planning period.	General Fund, grants.	Community Development Department	Ongoing with implementation of the Environmental Justice Element. Apply for grant funding to bolster City funds for place-based improvement projects at least once during the planning period.
Policy 6. Promote Sustainability, Energy Efficiency, and a Healthy Community					
29. Grants for Green appliances, solar, sustainability/ Energy Conservation (Incorporates 5th Cycle Programs 9 and 10)	Encourage retrofit of existing homes with energy efficient appliances.	Assist 5 lower-income households.	General Fund and Utility Companies	Community Development Department	Establish grant program by December 2025; On-going.
30. Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles (New)	Encourage new development that is organized around compact, walkable, mixed-use neighborhoods and districts to conserve open space resources, minimize infrastructure costs, and reduce reliance on the automobile.	Provide City's adopted Active Transportation Plan to developers and require new developments to provide for the use of alternative modes of transit. 100 percent of new developments will comply with provisions of Active Transportation Plan.	General Fund	Community Development Department	On-going
31. Bi-annual trash and hazardous item pick-up (motor oil, paint, cleaners with acid/lye, household batteries) (New)	Remove household hazards/hazardous material.	Coordinate with local trash purveyor/LA County Sanitation District for bi-annual pickup.	General Fund; grants	Public Works Services	By December, 2025.
32. Priority Water and Sewer Connections for Affordable Housing Development (Incorporates 5th Cycle Program 5)	Ensure that water and sewer providers understand their obligation to provide priority to affordable housing developments if water or sewer connection capacity is limited.	Upon certification, provide a copy of the Housing Element to local water and sewer providers with a cover letter explaining the State requirement to provide priority to affordable housing developments.	General Fund	Community Development Department	Within 14 business days of receipt of Housing Element certification.
SOURCES: City of Irwindale, Revised Draft 2021–2029 Housing Element, April, 2025.					

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In addition, since the Housing Element must plan for or have policies in place to accommodate the RHNA for the given planning period, jurisdictions typically plan for a slightly higher number of housing units than the actual RHNA, which is considered a “buffer”. This allows for some market variation and demand. In addition, as HCD completes their review of the Housing Element, some of the identified candidate sites in the housing sites inventory may be removed, where planning for a buffer still allows the Housing Element to achieve the RHNA.

The City included a 25 percent buffer in addition to the RHNA to ensure that if one or more of the identified housing sites are developed at lower densities than projected or with non-housing uses, there is remaining capacity elsewhere in the City to provide an ongoing supply of sites for housing during the eight-year planning cycle. If there were no buffer and an identified housing site is developed with a non-housing project or developed at a density less than anticipated in the Housing Element, then the City could be obliged to identify new housing opportunity sites and amend the Housing Element prior to the end of the planning cycle.

The proposed housing sites inventory includes five sites within the City, as shown in **Figure 2-6, *Proposed Housing Sites Inventory***. The five sites include Site 1 – Allen Drive; Site 2 – 12881 Ramona Boulevard; Site 3 – 13201 Ramona Boulevard; Site 4 – Gold Line Reliance II; and Site 5 – Irwindale/Padilla. **Table 2-4, *Proposed Housing Site Inventory***, summarizes the proposed housing site inventory of the Housing Element and the City’s approach to achieving its RHNA.

This Draft PEIR evaluates the realistic buildout of the five sites identified for residential development in the Housing Element. Table 2-4 shows the existing and proposed allowable densities, existing land use, proposed zoning changes (including the proposed minimum and maximum densities), and the realistic buildout scenario. However, since the City would not be able to fully accommodate its 6th Cycle RHNA with the existing zoning of the identified housing sites, the Housing Element includes a program to redesignate and rezone the five housing sites identified for the housing site inventory for residential development via new residential development overlay zones. For a detailed discussion on the land use and zoning amendments necessary to implement the Housing Element, please refer to the *Amendments to the General Plan and Municipal Code to Implement the Project* section below.

Each of the five housing sites are described in greater detail; refer to Figure 2-6 for the location of each housing site within the City:

Site 1 – Allen Drive

Site 1, located along Allen Drive, as shown in **Figure 2-7, *Site 1 – Allen Drive*** is a vacant 10-acre site within a former mining pit; the mining pit was remediated, and filling was completed in 2019. The site is currently owned by the City of Irwindale Housing Authority within the southeast portion of the City. The former mining pit has already undergone remediation. Site 1 is located within the Southeast Planning Area and partially within the Town Center Neighborhood where adjacent land uses include City Hall and other City offices, City Recreation Center/Aquatics Center, City Senior Center, Police Department, City parks, postal office, City library, local produce market, and other commercial services. Utilities are available nearby to serve future residential uses onsite. While the General Plan designates Site 1 for residential use, it is currently zoned Heavy Manufacturing (M-2).

To facilitate development of future residential uses on Site 1, the Project proposes to rezone the entire ten acres of the site that permits 8 to 14 dwelling units per acre of townhome (R-2) development. As shown in Table 2-4, Site 1 is assumed to be developed to yield 12 dwelling units per acre for a total of 84 moderate-income units and 36 above moderate-income units.²

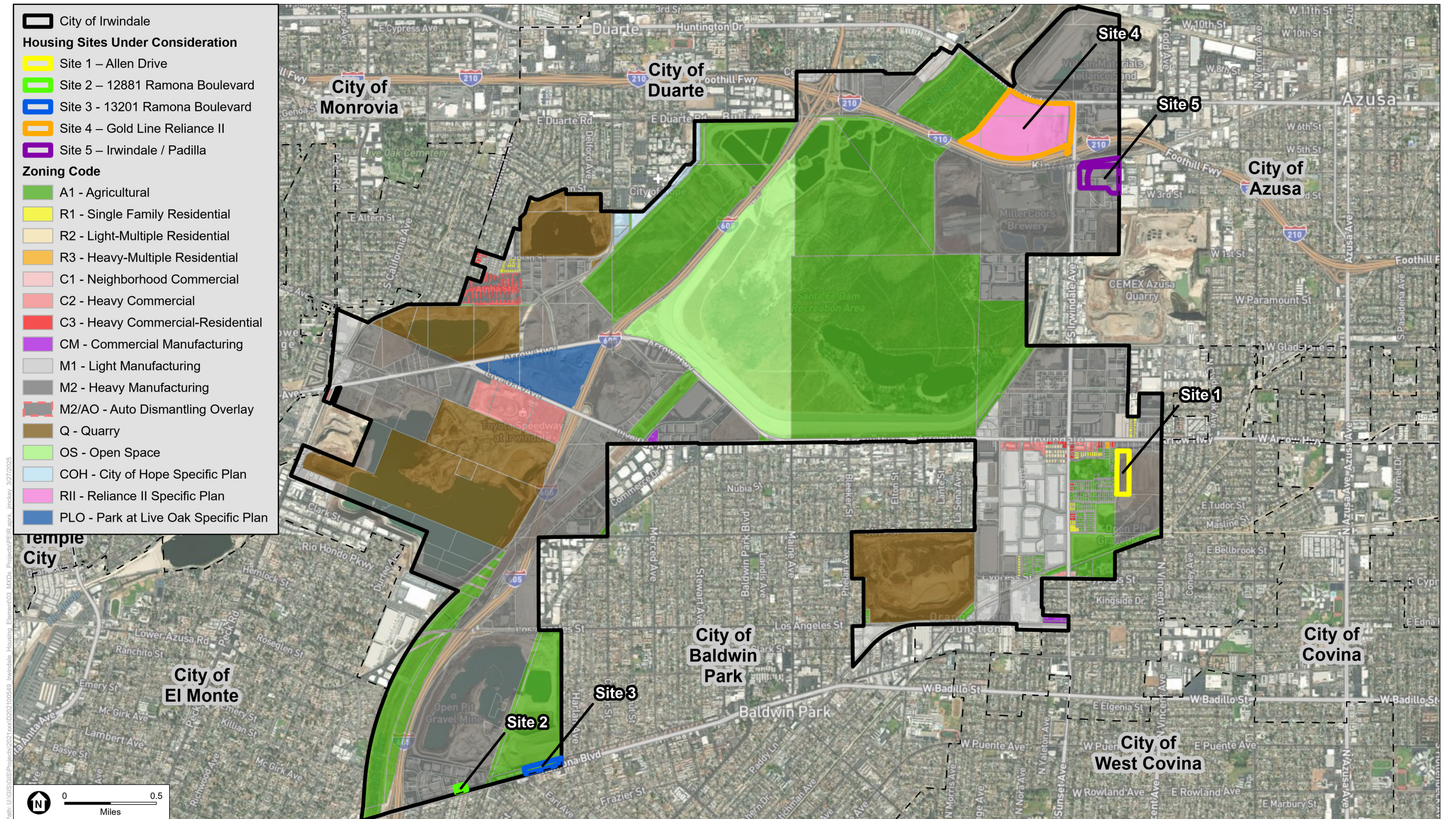
Program 13 of the Housing Element calls for the City to solicit a developer for the site, execute a development and disposition agreement with the developer, and have the developer produce housing on the site consistent with the housing sites inventory. The City shall comply with the requirements of the Surplus Lands Act in this process. If the City is able to sell the property to a residential developer, then the proceeds from the property sale could be utilized to assist first-time moderate-income homebuyers and/or to assist with housing development on other sites that would be affordable to lower- or moderate-income households.

Site 2 – 12881 Ramona Boulevard

Site 2, located at 12881 Ramona Boulevard, as shown in **Figure 2-8, Site 2 – 12881 Ramona Boulevard.**, is a privately-owned, non-vacant 1.18-acre parcel within the Southwestern Planning Area of the City and is not located within a General Plan designated neighborhood, Site 2 is developed with an existing two-story, 19,700 square-foot (sf) commercial building that is currently vacant and has had long periods of vacancy since it was built in 1994. Site 2 has experienced weathering of the landscaping and parking lot since the building was last occupied in 2021. The existing building was also developed prior to the approval of the Irwindale Commercial and Industrial Design Guidelines and therefore, is currently inconsistent with such guidelines. The General Plan designates Site 2 for Industrial /Business Park uses and is currently zoned Heavy Manufacturing (M-2). Surrounding uses include a new Kaiser health facility, Premier College, and industrial and residential uses. Site 2 has nearby access to transit, schools, a grocery store, and other services. Existing utilities currently serve the site.

To facilitate development of future residential uses on Site 2, the Project proposes to apply a residential overlay to the entire site to allow for higher-density multifamily development (RO R-3), consisting of 21 to 30 dwelling units per acre. As shown in Table 2-4, the housing sites inventory assumed that Site 2 would be developed to yield 21 dwelling units per acre for 21 housing units targeted for lower-income households. The Housing Element contains various programs for the City to establish a jobs-housing linkage fee for non-residential development and to seek funding from outside sources to provide funds to assist in the development of affordable housing.

² The EIR evaluates the entire property (10 acres) would be developed at the assumed R2 density of 12 units/acre, which exceeds the Housing Element assumption of 6 acres developed at a range of densities (from 5 to 12 units/acre for a total of 51 units) with 4 acres for community-serving uses.



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 2-6
Proposed Housing Sites Inventory

TABLE 2-4
PROPOSED HOUSING SITES INVENTORY

Site #	APN	Site Size (Ac.)	Existing GP	Existing Zoning	Proposed Acres	Proposed GP	Proposed Zoning	Targeted Housing Type	Minimum Density Proposed	Max. Density Proposed	Assumed Density	Estimated Units			Estimated Total Capacity	Vacant/ Non-Vacant	Infrastructure Availability
												VL/L	Mod.	Above Mod.			
Site 1 - Allen Dr.	8417-034-912	10.0	Industrial/Business Park	M2	10.0	Residential	R-2	Townhouses/ Single Family	8	14	12		84	36	120**	Vacant	Roads to and from the site
Site 2 - 12881 Ramona	8546-031-082	1.0	Industrial/Business Park	M2	1.0	Res. Overlay	RO R-3	Apts./Condos	21	30	21	21			21	Non. Vac.	Existing Building, utilities, roads to and from the site
Site 3 - 13201 Ramona	8546-002-088	4.0	Quarry Overlay	A1	4.0	Res. Overlay	RO C-3	Apts./Condos	21	30	21			84	84	Non-Vac.	Existing Building, utilities, roads to and from the site
Site 4 - Gold Line Reliance II		90.0	Specific Plan	RII	1.0	Res. Overlay	RO C-3	Apts./Condos	21	30	21	21			21		
	*8604-019-001	4.3	Specific Plan	RII												Vacant	Roads to and from the site
	*8604-019-003	62.4	Specific Plan	RII												Vacant	Roads to and from the site
	*8604-019-010	22.9	Specific Plan	RII												Vacant	Roads to and from the site
Site 5 - Irwindale/Padilla		20.0	Industrial/Business Park	M2	1.0	Res. Overlay	RO C-3	Apts./Condos	21	30	21	11		10			
			Industrial/Business Park	M2	1.0	Res. Overlay	RO R-2	Townhouses	8	14	12		12		33		
	8615-001-072	0.67	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-001-047	0.59	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-001-063	0.52	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-001-049	0.57	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-001-050	0.81	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-005	0.72	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-012	0.59	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-006	0.7	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-007	0.71	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-008	0.64	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-017	3.41	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-018	4.53	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-013	1.23	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-011	1.85	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
	8615-021-015	2.27	Industrial/Business Park	M2												Non-Vac.	Existing Building, utilities, roads to and from the site
Total Potential Units												53	96	130	279		

NOTES:

* Parcels and parcel numbers as identified by Los Angeles County Assessor's Office as of November 7, 2022.

** Assumes the entire property (10 acres) is developed at the assumed R2 density (12 units/acre), which exceeds the Housing Element assumption of 6 acres developed at a range of densities (from 5 to 12 units/acre for a total of 51 units) with 4 acres for community-serving uses.

RO = Residential Overlay

SOURCE: City of Irwindale, Revised Draft. 2021–2029 Housing Element, April 2025.



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 2-8
Site 2 - 12881 Ramona Boulevard

Site 3 – 13201 Ramona Boulevard

Site 3, located at 13201 Ramona Boulevard, as shown in **Figure 2-9, Site 3 – 13201 Ramona Boulevard** is a privately-owned, developed 4.3-acre parcel within the Southwestern Planning Area of the City. Site 3 is located in the Park Avenue designated neighborhood. Site 3 is an existing self-storage facility built in 1988 and includes 52,230 sf of office and storage facilities. The self-storage facility was developed prior to the approval of the Irwindale Commercial and Industrial Design Guidelines and therefore, is currently inconsistent with such guidelines. The General Plan designates Site 3 for Quarry Overlay and is currently zoned Agriculture (A-1). Surrounding uses include a new Kaiser health facility, Premier College, and residential uses. Site 3 has nearby access to transit, schools, a grocery store, and other services. Existing utilities currently serve the site. The property owner has expressed interest in redeveloping the site for high-density housing.

To facilitate development of future residential uses on Site 3, the Project proposes to apply a residential overlay to the entire site to permit mixed-use development (RO C-3), consisting of 21 to 30 dwelling units per acre. As shown in Table 2-4, the housing sites inventory assumed that Site 3 would be developed to yield 21 dwelling units per acre for 84 high-density multifamily units targeted for above moderate-income households.

Site 4 – Gold Line Reliance II

Site 4, located to the west of the intersection of Irwindale Avenue and Interstate 210 (I-210) in proximity to the Irwindale A Line (formerly known as the Gold Line) Metro Station, is a vacant, privately-owned area comprised of three parcels encompassing approximately 90 acres. **Figure 2-10, Site 4 – Gold Line Reliance II**, shows the location of Site 4 within the City. Site 4 is located in the Northeastern Planning Area and is not within a General Plan designated residential neighborhood. Site 4 has a Specific Plan designation in the General Plan and is zoned as the Reliance II Specific Plan, which permits e-commerce fulfillment centers and other commercial activity within close proximity to the Irwindale A Line Metro Station. Surrounding uses include industrial/manufacturing and commercial uses, active mining operations, and access to regional transit and freeways. While no existing utilities are onsite, Site 4 is currently undergoing infrastructure development as part of implementation of the larger Reliance II Specific Plan area.

To facilitate development of future residential uses on Site 4, the Project proposes to apply a residential overlay to allow one acre of the site to develop with mixed-use residential development (RO C-3) at 21 to 30 dwelling units per acre. As two of the three parcels are larger than ten acres in size, the Housing Element contains a program for the City to work with the property owner to subdivide one of the larger parcels to carve off a parcel smaller than ten acres that would incorporate the residential overlay. As shown in Table 2-4, the housing sites inventory assumed that Site 4 would be developed to yield 21 dwelling units per acre for 21 mixed-use residential targeted for very low- and low-income households.

Site 5 – Irwindale/Padilla

Site 5, located to the southeast of the intersection of Irwindale Avenue and I-210, as shown in **Figure 2-11, Site 5 – Irwindale/Padilla** is a developed area comprised of 15 adjacent parcels encompassing approximately 20 acres in total. The site is developed with business park uses totaling roughly 550,224 sf. All the existing onsite buildings were developed prior to the approval of the Irwindale Commercial and Industrial Design Guidelines and therefore, are currently inconsistent with such guidelines. Some of the onsite buildings are vacant and have been for at least a year. The General Plan designates Site 5 for

Industrial/Business Park use and all of the included parcels are currently zoned Heavy Manufacturing (M-2). Surrounding uses include the Irwindale A Line Metro Station, a Metro Police substation, and commercial uses. Existing utilities are available to serve future housing development on these parcels.

To facilitate development of future residential uses on Site 5, the Project proposes to apply a residential overlay that would allow one acre within the area to be developed with mixed-use residential development (RO C-3) at densities up to 30 dwelling units per acre and one acre within the area to be developed with medium-density Townhouse (RO R-2) development at 14 to 21 dwelling units per acre. As shown in Table 2-4, the housing sites inventory assumed the portion of Site 5 developed under the residential overlay provisions would be developed to yield 21 dwelling units per acre, with 11 units targeted for lower-income households and ten units targeted for above-moderate income households. In addition, the housing sites inventory assumed the portion of Site 5 developed under the R-2 overlay would complement the RO C-3 development with 12 Townhouse units targeted for moderate-income households, creating a mixed-income area within the larger Irwindale/Padilla site.

The Housing Element contains Program 14, which calls for the City to establish a jobs-housing linkage fee for non-residential development and to seek funding from outside sources to provide funds to assist in the development of affordable housing. Such funds could help to support development of housing affordable to lower- and moderate-income households in this area.

Housing Sites Inventory Capacity Analysis

Table 2-5, *Summary of Irwindale's 6th Cycle Housing Sites Inventory Capacity Analysis*, summarizes the capacity analysis of the housing sites inventory from the Housing Element, which includes the City's 6th Cycle RHNA, housing production since 2021 that contributes to meeting the 6th Cycle RHNA, the City's 25 percent buffer, and the capacity of the housing sites inventory. As shown in Table 2-5, a total of 20 housing units have been built in the City since 2021, which have been subtracted from the City's total 6th Cycle RHNA to determine the remaining unmet housing units, which equates to 99 units. The City has also included a 25 percent buffer, which consists of 25 units, for a total target capacity of 124 units.

However, as shown in Table 2-4, using the estimated buildout, the housing sites inventory would be able to accommodate 279 units within the City, which is 155 units more than the City's 6th Cycle target capacity (including the 25 percent buffer).³ The City would be able to meet its 6th Cycle RHNA allocation based on the housing production from the beginning of the RHNA projection period (July 1, 2021), which resulted in seven units in combination with future development facilitated by the Housing Element on the five housing sites identified for rezoning, development of single-family residential development on available parcels, and anticipated production of ADUs on select parcels. Assuming 3.61 persons per household,⁴ the 279 residential units projected by maximum buildout of the Housing Element would accommodate 1,008 individuals at full occupancy of all units.

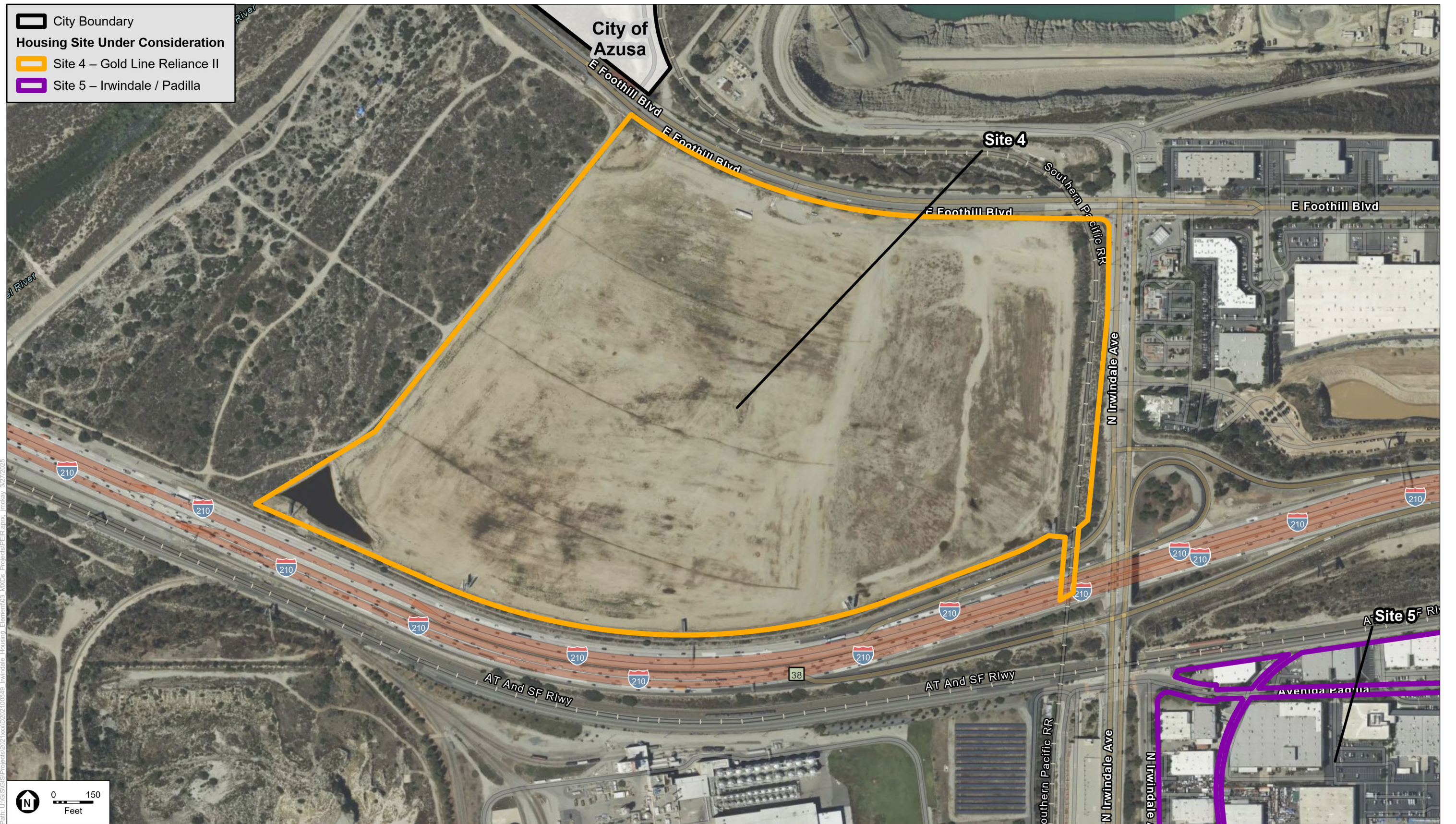
³ This Draft PEIR evaluates the buildout of 279 units identified in Table 2-4. This buildout assumes Site 1 (10 acres) is developed at the assumed R2 density (12 units/acre), which exceeds the Housing Element assumption of 6 acres developed at a range of densities (from 5 to 12 units/acre for a total of 51 units) with 4 acres for community-serving uses.

⁴ Based on the household average size in the City of Irwindale. Revised Draft 2021–2029 Housing Element, April 2025, page 30.



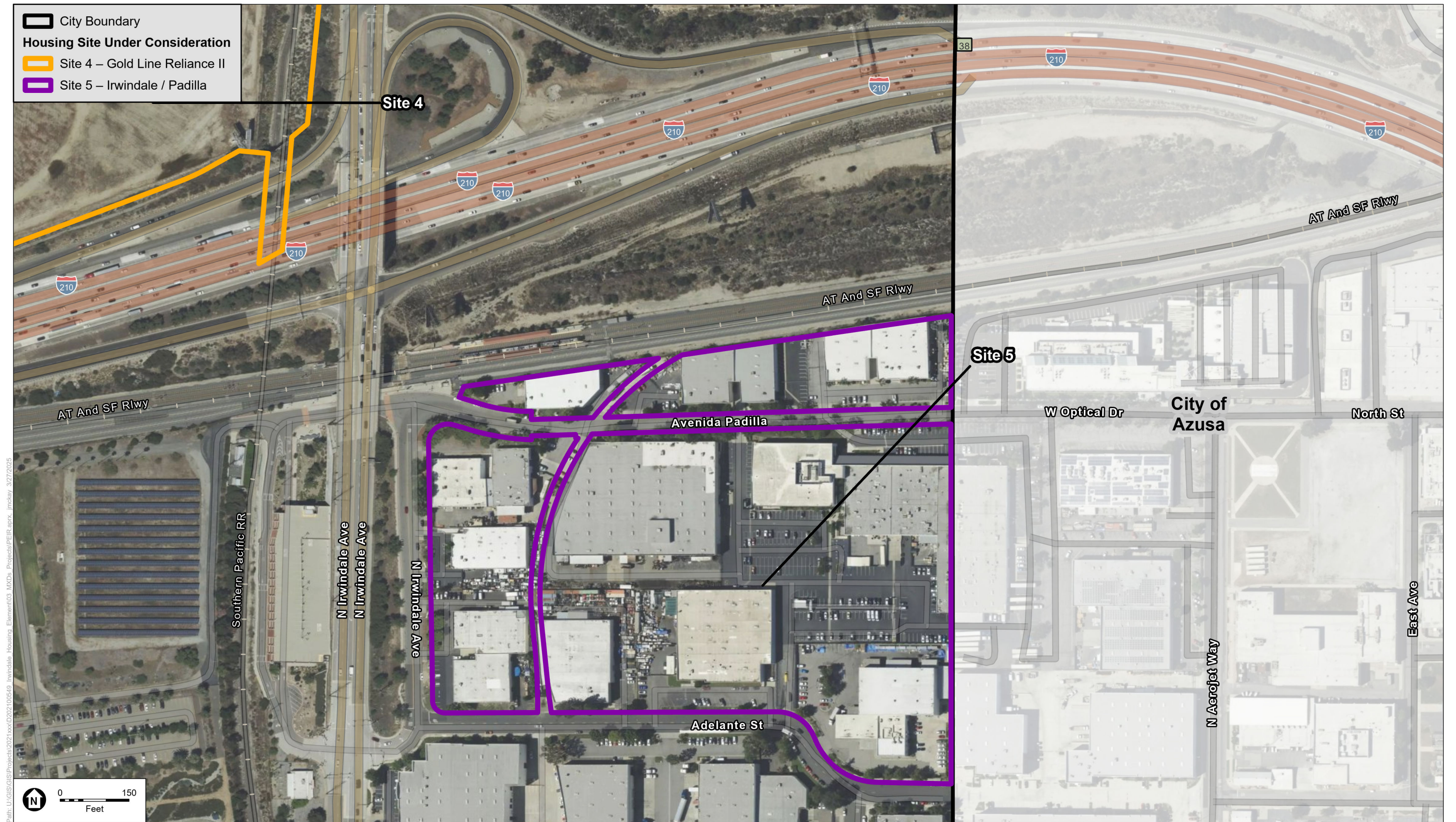
SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 2-9
Site 3 - 13201 Ramona Boulevard



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 2-10
Site 4 - Gold Line Reliance II



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 2-11
Site 5 - Irwindale / Padilla

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**TABLE 2-5
ADEQUATE SITES ANALYSIS SUMMARY**

	Very Low Income Units (0-50% AMI) and Low Income Units (51-80% AMI)	Moderate Income Units (81-120% AMI)	Above Moderate Income Units (>120% AMI)	Total New Units
6th Cycle RHNA	47	17	55	119
• Production since July 1, 2021 ^a	7	—	—	7
• Vacant Single-Family Lots ^b	—	—	8	8
• ADU Production ^c	3	1	1	5
Remaining Unmet 6th Cycle RHNA	37	16	46	99
+25% Buffer ^d	9	4	12	25
Target Capacity	46	20	58	124
Capacity Identified on Candidate Housing Sites included in Housing Element	53	48	109	210
% Buffer ^e	43%	200%	137%	112%

NOTES:

- The City issued certificates of occupancy in December 2021 for seven lower-income units in the Mayans development. The affordability of the units is protected by 45-year deed restrictions that are attached to the properties.
- Number of existing vacant single-family lots within the City.
- The City issued permits for two accessory dwelling units in the last three years. For RHNA purposes, the City assumes this pace of ADU development will continue throughout the planning period. For purposes of allocating units to income categories, City of Irwindale assumes affordability consistent with SCAG ADU survey.
- Buffer is calculated on remaining 6th Cycle RHNA number.

SOURCES: 2021–2029 Housing Element. Revised Draft. September 12, 2024.

Safety Element Update

The Safety Element is a State-mandated component of a General Plan and California Government Code Section 65302(g)(6) requires that it be updated every time the Housing Element or local hazard mitigation plan is updated. In addition, State law requires that the Safety Element address fire risk and climate adaptation and resiliency strategies (Government Code Section 65302(g) and Section 65302.15). The updated Safety Element (previously named the Public Safety Element) identifies the potential risks to life and property resulting from naturally occurring hazards, such as earthquakes and floods, and human-made hazards, such as air pollution and contamination of water quality. In addition, the updated Safety Element identifies the appropriate public safety providers, such as law enforcement, emergency preparedness, and response teams necessary to handle the different types of safety hazards and risks.

Specifically, the updated Safety Element identifies locations within the City that may be inappropriate for certain land uses due to potential risks and hazards as well as areas where hazards are present but can be mitigated through special design and site planning measures. The updated Safety Element also considers the economic and social dislocation resulting from natural and human-made hazards, including long-term costs to the City, such as maintenance, liability exposure, and emergency services, where high hazards exist. The updated Safety Element identifies potential environmental hazards that may be exacerbated by implementation of the Housing Element and provides goals and policies to address those hazards such as seismic hazards, geologic hazards, flooding, wildfire, climate change, hazardous materials, aging buildings, and critical facilities.

As evaluated in the Initial Study, adoption and implementation of the Safety Element was determined to have no impact on the environment due to the updated Safety Element being a policy document that does not include any physical development. For this reason, this Draft PEIR does not evaluate the environmental impacts related to the adoption and implementation of the updated Safety Element but does include the goals and policies of the updated Safety Element as relevant to the analysis of the Housing Element. For the detailed analysis of the updated Safety Element, refer to Appendix A, *Notice of Preparation, Initial Study, and Scoping Comments*, of this Draft PEIR.

Environmental Justice Element

California Government Code Section 65302(h) requires jurisdictions to adopt an EJ Element if it contains a defined “disadvantaged community” or “environmental justice community”. The California Environmental Protection Agency (CalEPA) defines a “disadvantaged community” or an “environmental justice community” as a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation (Section 39711 of the Health and Safety Code). This element also addresses the requirements of Senate Bill (SB) 1000, which requires local jurisdictions to address environmental justice, and to identify “SB 1000 Priority Neighborhoods,” which are defined as those communities that are disproportionately burdened by multiple sources of pollution and that face disproportionate impacts of climate change. Adoption of an EJ Element can occur at any time but is required when the jurisdiction is adopting or revising two or more General Plan elements concurrently. Since the City is in the process of updating the Housing and Safety Elements of its General Plan, the City is also required to adopt an EJ Element at this time.

The entire City meets the State-defined criteria for disadvantaged communities, where the EJ Element’s purpose is to address the unique or compounded health risks throughout the City. The EJ Element includes policies, programs, and actions to reduce these health risks, such as improving air quality; promoting public facilities, food access, and safe and sanitary homes; and physical activity. In addition, the EJ Element serves to promote civic engagement in the public decision-making process and prioritize improvements and programs that address the needs of these communities. The EJ Element will aid the City in the planning and decision-making process to ensure that the City is a safe and healthy place for everyone and focus on goals that improve communities and reduce inequities.

As evaluated in the Initial Study, adoption and implementation of the EJ Element was determined to have no impact on the environment due to the EJ Element being a policy document that does not include any physical development. For this reason, this Draft PEIR does not evaluate the environmental impacts related to the adoption and implementation of the EJ Element but does include the goals and policies of the EJ Element as relevant to the analysis of the Housing Element. For the detailed analysis of the updated Safety Element, refer to Appendix A, *Notice of Preparation, Initial Study, and Scoping Comments*, of this Draft PEIR.

Amendments to the General Plan and Municipal Code to Implement the Project

The Project is a long-range planning program to guide the growth and development of residential housing within the City’s boundaries as well as to incorporate the updated Safety Element and an EJ Element into the existing General Plan. Amendments to the Community Development Element and Land Use Map are

needed so that the sites are clearly identified to allow residential uses consistent with the 2021–2029 Housing Element. The proposed Safety Element was reviewed by the California Department of Forestry and Fire Protection (CalFire), and the Department of Conservation.

The Project communicates the City’s vision for the future and establishes a policy framework to govern decision making concerning the physical development (focused on housing) of the community and the protection of the public from environmental hazards. While the Project will allow for an overall increase in housing development within the City, the Project would not, by itself, authorize any specific development project or other form of land use approval of any kind, public facilities, or capital facilities expenditures or improvements.

The amendments to Title 17 of the Irwindale Municipal Code are necessary to implement the Project as these amendments provide the mechanisms to ensure the goals and policies of the Project are implemented through the development that will occur throughout the City over time. California Government Code Section 65860(a) requires that a jurisdiction’s zoning ordinance be consistent with its General Plan or any updates to its General Plan. Amendments to Title 17 and the Zoning Map are proposed to comply with CGC Section 65300 et seq. that require zoning to be consistent with the General Plan. In addition, the Project includes amendments to the General Plan to incorporate the updated Safety Element and an EJ Element as well as the associated zoning amendments necessary to implement the goals and policies of the Housing Element.

2.6 Project Implementation

2.6.1 Required Approvals

The Project will require a recommendation from the Planning Commission to the City Council regarding certification of this PEIR and adoption of the Housing Element, Safety Element, EJ Element, and Zoning Code amendments. The City Council will take the final actions on the Project. Future, subsequent development under the Project may require approval of other State or responsible or trustee agencies that may rely on this PEIR for decisions in their areas of expertise. More specifically, the necessary approvals include:

- Certification of the PEIR pursuant to the California Environmental Quality Act (CEQA);
- Adoption of a resolution amending the General Plan to update the Housing Element, the Safety Element, the Community Development Element, and General Plan Land Use Designations map, and adoption of an EJ Element; and
- Adoption of an ordinance amending the City’s Zoning Ordinance (Irwindale Municipal Code Title 17) and the City’s zoning map.

As indicated, the actions would require review and recommendation by the Planning Commission, followed by consideration and action by the City Council.

The Project will be implemented through a variety of methods, including government programs initiated by the City, review of independent development proposals, and decisions made by the various City commissions, departments, and the City Council. Additional project specific environmental documents may be needed to evaluate site-specific environmental impacts in coordination with State and CEQA law.

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CHAPTER 3

Environmental Setting

3.1 Overview of the Environmental Setting

State CEQA Guidelines Section 15125 requires that an EIR include a description of the physical environmental conditions in the vicinity of the Project, as they exist at the time the NOP is published, or if no NOP is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. This chapter provides a general overview of the environmental setting for the Project. However, detailed information on existing conditions is provided for each environmental topic evaluated in Chapter 4, *Environmental Introduction and Impact Analysis*. This chapter also provides an overview of past, pending, and future probable projects that are considered in evaluating cumulative impacts.

As described in Chapter 1, *Introduction*, the NOP for the Project was published on December 14, 2024. Due to the long-term planning nature of a comprehensive General Plan Update, the environmental analysis commenced in 2021 and the information presented in the NOP and supporting Initial Study was based on existing conditions reports prepared in 2021. Therefore, for analytic purposes in this Draft PEIR, the baseline year established for existing conditions is 2021, depending on the section. The horizon year representing future conditions is 2029. In cases where current data is not available, the most recent known data is used to depict baseline conditions.

3.1.1 Existing Conditions

The City encompasses approximately 9.5 miles (6,080 acres) and is located roughly 20 miles east of downtown Los Angeles. Regional access to the City is provided by the Foothill Freeway (Interstate 210) which crosses the northerly portion of the City in an east/west orientation, and the San Gabriel River Freeway (Interstate 605) that parallels the San Gabriel River. The regional location of Irwindale is shown in Figure 2-1 in Chapter 2, *Project Description*. The City's population and development is located east of the San Gabriel River. Land uses found in the western portion of the City are dominated by large-scale quarry operations with limited areas of more traditional urban development. The City is located approximately 27 miles north of the Pacific Ocean and is relatively flat with areas of rolling hills. Elevation within the City ranges from approximately 625-feet above mean sea level (amsl) in the northern part of the City to approximately 310-feet amsl in the southern part of the City.

3.1.2 Surrounding Uses

The City is located within the easterly portion of Los Angeles County at the periphery of the greater Los Angeles Metropolitan area. The City is bounded by the San Gabriel River to the north with the foothills of the nearby San Gabriel Mountains located further north. The City is also located within the San Gabriel Valley and is bisected by the San Gabriel River into an eastern section and a western section. Nearby cities include Duarte to the north and west, Azusa to the east, Baldwin Park to the south, and Monrovia, and Arcadia to the west.

3.2 Cumulative Projects

Section 15130(a) of the State CEQA Guidelines states that an EIR shall “discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” The CEQA Guidelines define cumulative impacts as “two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts.” Section 15355 of the CEQA Guidelines further states that the individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects.

Section 15130 of the State CEQA Guidelines allows for the use of two different methods to determine the scope of projects for the cumulative impact analysis:

- **List Method** – 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.
- **Projections Method** – 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.

The cumulative analysis provided in this Draft PEIR is based on the Projections Method. The Project consists of the Housing Element and General Plan Update. Consistent with Section 15130(b)(1)(B) of the State CEQA Guidelines, this Draft PEIR analyzes the environmental impacts of development in accordance with the proposed Draft Land Use Plan (see Figure 2-3, *Existing General Plan Land Use Map*). As a result, this Draft PEIR addresses the cumulative impacts taking into account growth from the Housing Element and General Plan Update, in combination with impacts from projected growth throughout the whole of Los Angeles County and the surrounding San Gabriel Valley region, as forecasted in the adopted SCAG regional projections.

The cumulative analyses for each environmental issue are provided in their applicable sections in Chapter 4, *Environmental Impact Analysis*, of this Draft PEIR.

CHAPTER 4

Environmental Impact Analysis

4.0 Introduction

The focus of this chapter is on the potential impacts that could occur as a result of the Project. The sections included are those that have the potential to result in significant adverse impacts to the physical environment. The following chapters are included:

- Aesthetics (Chapter 4.1)
- Air Quality (Chapter 4.2)
- Biological Resources (Chapter 4.3)
- Cultural Resources (Chapter 4.4)
- Energy (Chapter 4.5)
- Geology & Soils (Chapter 4.6)
- Greenhouse Gas Emissions (Chapter 4.7)
- Land Use and Planning (Chapter 4.8)
- Noise (Chapter 4.9)
- Population and Housing (Chapter 4.10)
- Public Services (Chapter 4.11)
- Transportation (Chapter 4.12)
- Tribal Cultural Resources (Chapter 4.13)
- Utilities and Service Systems (Chapter 4.14)

Based on the Initial Study, which is contained in Appendix A of this Draft PEIR and public comments received during the NOP circulation period, it was determined that multiple issue areas, Agriculture and Forestry Resources, Geology and Soils (all except for paleontological resources), Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Recreation, and Wildfire would not be subject to potentially significant impacts due to implementation of the Project. Please see Chapter 6, *Other CEQA Considerations*, of this Draft PEIR for a discussion of the issue areas for which a detailed analysis is not included and the basis for that determination.

4.0.1 Format of the Environmental Impact Analysis

Each section in this chapter addresses a specific environmental issue area as listed above and includes the following components:

- **Environmental Setting:** This subsection describes the physical characteristics and existing environmental conditions within and in the vicinity of the Planning Area.
- **Regulatory Framework:** This subsection presents information on the laws, regulations, plans, and policies that relate to the issue area being discussed. Regulations originating from federal, State, regional, and local levels are discussed as appropriate.
- **Thresholds of Significance:** This subsection presents the criteria established by the lead agency to identify at what level an impact would be considered significant thereby requiring implementation of mitigation measures.
- **Methodology:** This subsection provides a description of the methodology used for the analysis of the environmental issue addressed in the section.
- **Project Impact Analysis:** This subsection provides an analysis of the nature and extent of potential Project impacts. These analyses address direct (or primary) effects of the Project as well as the indirect (or secondary) impacts, as necessary. This subsection also provides applicable proposed General Plan Goals and Policies that may reduce or eliminate Project impacts.
- **Mitigation Measures:** This subsection provides mitigation measures, if necessary, to reduce or eliminate significant impacts identified in the analysis of Project impacts.
- **Significance after Mitigation:** A discussion of the significance of each impact after mitigation is provided.
- **Cumulative Impacts:** A discussion of the effects of the Project when combined with the effects of cumulative projects, which include the cumulative projections for the region. The approach to addressing cumulative impacts, using the projections approach, is described in Chapter 3, *Environmental Setting*, of this Draft PEIR.

4.0.2 Terminology Used in this PEIR

In evaluating the impacts of the Project, the impact is determined by applying the evaluation criteria, or threshold of significance, presented for each resource area. The following terms are used to describe the effect:

- **Threshold of Significance:** A threshold of significance is a criterion applied by the lead agency to identify significant adverse environmental impacts. A threshold is defined by a lead agency based on guidance found in CEQA or the CEQA Guidelines, scientific and factual data relative to the lead agency jurisdiction, views of the public in affected areas, the policy/regulatory environment of affected jurisdictions, and other factors.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.
- **Less than Significant Impact:** A less than significant impact does not result in a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or

aesthetic significance (see CEQA Guidelines Section 15382). Impacts determined to be less than significant do not require mitigation measures.

- **Significant Impact:** Public Resources Code (PRC) Section 21068 defines a significant impact as “a substantial, or potentially substantial, adverse change in the environment.” The environmental checklist included as Appendix G of the CEQA Guidelines provides additional guidance for determining which impacts would be regarded as significant. This EIR applies the thresholds contained within Appendix G and identified in each section’s “Thresholds of Significance,” and uses the CEQA definition of “significant impact.” Feasible mitigation measures or alternatives to the Project must be identified and adopted if they would avoid or substantially reduce the significant impact.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under CEQA Guidelines Section 15091.
- **Significant and Unavoidable Impact:** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a statement of overriding considerations to be issued if the Project is approved per CEQA Guidelines Section 15093.

Mitigation measures are measures identified to avoid or reduce a significant impact that has been identified through environmental analysis. Mitigation measures generally include the following provisions:

- Avoiding the impact by not taking a certain action or parts of an action;
- Minimizing the impact by limiting the degree or 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 effect by replacing or providing substitute resources or environments.

If mitigation measures are necessary, the mitigation measures will be included in a Mitigation Monitoring and Reporting Program (MMRP). The MMRP will be adopted by the City to ensure that the implementation of the mitigation measures can be tracked by the City to ensure compliance.

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4.1 Aesthetics

4.1.1 Introduction

This section provides an analysis of potential impacts on aesthetics from future development allowed under the implementation of the City of Irwindale's (City's) Housing Element and General Plan Update (proposed Project or Project). Proposed future development under the Project would allow development of 279 new dwelling units on five properties (Housing Sites 1 through 5) within the City. Two of these five sites are vacant while the other three development sites are non-vacant with active industrial/business park uses.

4.1.2 Environmental Setting

The City of Irwindale (City or Irwindale) encompasses approximately 9.5 square miles (6,080 acres) and is located approximately 20 miles east of downtown Los Angeles. The San Gabriel River is the major topographic feature found in the City, traversing the City in a north-to-south orientation.

Visual Character

The majority of the City's population and development is located in the portion of the City located east of the San Gabriel River. Land uses found in the western portion of the City are dominated by large-scale quarry operations with limited areas of more traditional urban development.

As detailed within the City's existing General Plan, of the City's 9.5 square-mile land area, Irwindale has less land devoted to typical urban land uses (residential, commercial, and industrial development) when compared to its neighboring communities. The greatest proportion of the City's land area is devoted to flood control improvements within the flood plain of the San Gabriel River. The Santa Fe Dam and Recreation Area is the most significant of the flood control improvements. In addition, an almost equal proportion of the City's land area is devoted to sand and gravel extraction operations, including six active aggregate mining operations. As detailed in Chapter 2, *Project Description*, existing land uses in the City include the Santa Fe Dam (31.58 percent); active and inactive quarries and plants (26.82 percent); truck/equipment storage yards (5.67 percent); industrial uses (7.6 percent); commercial uses (1.27 percent); office and business park uses (1.35 percent); residential uses (0.98 percent); and civic, institutional, and other public uses (15.15 percent). Vacant parcels account for approximately 5.38 percent of the City's total land area.

While a significant portion of the City is made up of flood control improvements and quarries, according to the City's existing General Plan, the City has made an effort to move beyond its "quarry image" and has made improvements to transform the area into an attractive place in which to live and work. The General Plan Community Development Element notes that entryway monument signs, street trees, and landscaped medians, specifically along Irwindale Avenue and Arrow Highway, contribute to the improved visual appearance of the City. The General Plan also states that Irwindale Avenue between Cypress Avenue and Arrow Highway represents the most complete and visually pleasant streetscape in the City. Additionally, the General Plan states that the City's historic river-rock buildings reflect the City's past, specifically Our Lady of Guadalupe Catholic Mission and El Divino Salvador Presbyterian Church (currently the Saint Cyril of Alexandria Coptic Orthodox Church).

4.1.3 Regulatory Framework

This section provides the relevant local regulations regarding aesthetics applicable to the Project. There are no federal, State, or regional regulations which apply to the Project.

Local

City of Irwindale General Plan

The City's General Plan guides development in the City through a set of integrated policies and programs. The City has design guidelines and a review program for commercial and industrial development; however, since those uses are not proposed, they are not included in the applicable policies below. The General Plan's Community Development Element includes the following applicable policies related to aesthetics:

Issue Area - Urban Design. The City of Irwindale will continue its effort in improving the appearance of the community.

Community Development Element Policy 14. The City of Irwindale will continue to promote property maintenance in all areas of the City.

Community Development Element Policy 15. The City of Irwindale will continue to work towards improving the appearance of the City entryways.

Community Development Element Policy 16. The City of Irwindale will continue to work towards the development of streetscape, sign standards, and a Public Art Program.

City of Irwindale Municipal Code

Title 17 of the Irwindale Municipal Code (IMC) establishes zoning code requirements to permit the highest and best use of buildings, structures, and land within the City; to serve the needs of residential, commercial, and industrial developments within the City; and to regulate and limit the height, number of stories, size, and location of buildings and other structures throughout the City. Chapters 17.16, 17.20, and 17.24 of the IMC provide regulations for the development of residential areas, including R-1 (single-family residential), R-2 (light-multiple residential), and R-3 (heavy-multiple residential) zones, respectively. Single-family residential is also allowed in C-3, Heavy Commercial-Residential, per regulations in Chapter 17.44 of the IMC.

4.1.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to aesthetics if the project would:

Threshold AES-1: Have a substantial adverse effect on a scenic vista;

Threshold AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic highway;

Threshold AES-3: In non-urbanized area, 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;

Threshold AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The Initial Study (Appendix A of this PEIR) found that no potentially significant impacts related to creating a substantial adverse effect on a scenic vista (Threshold AES-1); damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic highway (Threshold AES-2); or creating new sources of light or glare (Threshold AES-4) would occur with implementation of the Project. Therefore, these issues are not studied further in this PEIR.

Methodology

The evaluation of aesthetics and aesthetic impacts is generally subjective by nature, and therefore the level of the Project's visual impact is difficult to quantify. As such, this analysis was conducted qualitatively, assessing potential implications of the Project.

Project Impact Analysis

Conflict with Applicable Regulations Governing Scenic Quality

Threshold AES-3: The Project would have a significant impact if future development allowed by the General Plan Update would conflict with applicable zoning and other regulations governing scenic quality.

Impact AES-3: The Project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be less than significant.

Implementation of the 2021-2029 Housing Element would encourage development of new residential units within the City on five identified Housing Sites. Since the City would not be able to fully accommodate its 6th Cycle RHNA with the identified Housing Sites' existing zoning, the Housing Element also includes a program to redesignate and rezone the five Housing Sites for residential development via new residential development overlay zones, which includes a building height limit increase. As detailed in the Housing Element, per the IMC, the current maximum residential building height in the City is 35 feet, except in the C-3 zone, where building heights can be up to 45 feet. Given that the R-3 district is intended to accommodate higher density multi-family residential developments, the 35-foot height limit in this zone may be considered a constraint to achieving the targeted densities. While a 35-foot height limit may accommodate a three-story building, this maximum may constrain design options at the three-story level and would preclude more than three story development. To address this potential density constraint, the Housing Element contains a component to increase the maximum residential building height in the R-3 and C-3 zoning districts to 48 feet, which would facilitate four-story developments within these zones. In light of the proposed changes of the Project, amendments to the Community Development Element and Land Use Map would be made to be consistent with the 2021-2029 Housing Element, as well as amendments to Title 17 of the IMC and Zoning Map, to ensure consistency between the General Plan and Zoning Ordinance

as required by State law. The City would also ensure consistency between the General Plan and Zoning Ordinance revisions in terms of policies and regulations to protect scenic quality.

Since the increase in densities and heights would be achieved through a residential overlay zone, the base zoning for the five Housing Sites would remain the same as in existing conditions. Future residential development projects proposed for the five Housing Sites would be required to comply with the zoning requirements of the applicable residential development overlay zones, which would regulate visual qualities, such as height, bulking, mass, and setbacks, of future residential projects. In addition, future residential development projects would undergo project-level planning review prior to approval to ensure the proposed development is consistent with the existing visual character and that conflicts in the visual landscape would be avoided. Therefore, compliance with the applicable residential development overlay zoning requirements would ensure that future residential development would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts would be less than significant and no mitigation would be required.

Mitigation Measures

None required.

Level of Significance after Mitigation: Not applicable. The Project would result in a less-than-significant impact related to conflicts with applicable zoning and other regulations governing scenic quality.

4.1.5 Cumulative Impact Analysis

The geographical context for the cumulative impacts associated with aesthetics assumes full build-out of the Irwindale General Plan, in combination with build-out of neighboring jurisdictions' general plans. A cumulative aesthetic impact would occur if housing development as part of the Project, combined with other development projects in the City and nearby jurisdictions, would result in conflicts with applicable zoning and other regulations governing scenic quality. As detailed above, construction of the five Housing Sites would result in a less than significant impact regarding conflict with applicable zoning regulations governing scenic quality. Future development in the City, including building height and density growth anticipated under the Project, would not conflict with any zoning regulation governing scenic quality, as future development would be required to be consistent with the zoning code. Similarly, future development in the surrounding jurisdictions would be required to undergo planning review in each jurisdiction, which would ensure consistency with applicable zoning regulations governing scenic quality. Therefore, future development, including growth as part of the Project, would have a less-than-significant cumulative impact with respect to zoning conflicts governing scenic quality.

4.2 Air Quality

4.2.1 Introduction

This section provides an analysis of potential local and regional impacts on air quality from the City's Housing Element and General Plan Update Project (proposed Project or Project), including those related to air quality plans and standards, criteria pollutants, sensitive receptors, and objectionable odors. This section provides context regarding air quality standards and local air quality, as well as relevant federal, State, regional, and local regulations and programs. This section focuses on criteria air pollutants and toxic air contaminants; greenhouse gases (GHGs) are evaluated in Section 4.6, *Greenhouse Gas Emissions*, of this Draft PEIR.

Comments received in response to the Notice of Preparation (NOP) regarding topics covered in this section include the following:

- Reducing health risks by improving air quality.
- Identifying air quality impacts from all phases of the project, including both construction and operations.
- Providing mitigation measures to reduce air quality impacts if applicable.
- Strategies to reduce health risks if applicable.

4.2.2 Environmental Setting

Regional Context

Criteria Pollutants and Effects

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety, and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.^{1,2} As the scientific methods for the study of air pollution health effects have progressed over the past decades, adverse effects have been shown to occur at lower levels of exposure. For some pollutants, no clear thresholds for effects have been demonstrated. New findings over time have, in turn, led to the revision and lowering of NAAQS which, in the judgment of the U.S. Environmental Protection Agency (USEPA), are necessary to protect public health. Ongoing assessments of the scientific evidence from health studies continue to be an important part of setting and informing revisions to federal and State air quality standards.³

¹ United States Environmental Protection Agency (USEPA). 2024. "NAAQS Table" [webpage]. Last updated February 7, 2024. <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed February 2025.

² California Air Resource Board (CARB). 2024. "Ambient Air Quality Standards". Last updated July 16, 2024. https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed February 2025.

³ South Coast Air Quality Management District (SCAQMD). 2022. *2022 Air Quality Management Plan*, Appendix I: Health Effects. Adopted December 2, 2022, page 154.

The six principal pollutants for which national and State criteria and standards have been promulgated, known as “criteria pollutants”, and which are most relevant to current air quality planning and regulation in the South Coast Air Basin (Air Basin) include ozone (O₃), respirable and fine particulate matter (PM₁₀ and PM_{2.5}, respectively), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). These pollutants are referred to as “criteria air pollutants” as a result of the specific standards, or criteria, which have been adopted for them, as summarized in **Table 4.2-1, *Ambient Air Quality Standards***.

Ozone (O₃). Ozone is a secondary pollutant formed by the chemical reaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. According to the USEPA, ozone can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath.⁴ Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease.⁵ Long-term exposure to ozone is linked to aggravation of asthma, and is likely to be one of many causes of asthma development and long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children.⁶ According to the California Air Resource Board (CARB), inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, and exposure to ozone can reduce the volume of air that the lungs breathe in and cause shortness of breath.⁷

⁴ United States Environmental Protection Agency (USEPA). 2023. “Health Effects of Ozone Pollution” [webpage]. Last updated May 24, 2023. <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed February 2025.

⁵ United States Environmental Protection Agency (USEPA). 2023. “Health Effects of Ozone Pollution” [webpage]. <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed February 2025.

⁶ United States Environmental Protection Agency (USEPA). 2023. “Health Effects of Ozone Pollution” [webpage] <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed February 2025.

⁷ California Air Resource Board (CARB). 2024. “Ozone & Health, Health Effects of Ozone”. [webpage]. <https://ww2.arb.ca.gov/resources/ozone-and-health>. Accessed February 2025.

**TABLE 4.2-1
AMBIENT AIR QUALITY STANDARDS**

		California Standards ^a		National Standards ^b		
Pollutant	Average Time	Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
O ₃ ^h	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
NO ₂ ⁱ	1 Hour	180 ppb (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb	None	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	30 ppb (57 µg/m ³)		53 ppb	Same as Primary Standard	
CO	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m ³)		9 ppm (10 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
SO ₂ ^j	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) ⁹
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ^j	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ^j	—	
PM10 ^k	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
PM2.5 ^k	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ^{3k}	15 µg/m ³	
Lead ^{l,m}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ^m	Same as Primary Standard	
	Rolling 3-Month Average ^m	—		0.15 µg/m ³		

Pollutant	Average Time	California Standards ^a		National Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Visibility Reducing Particles ^h	8 Hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates (SO ₄)	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ⁱ	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

a. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equalled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms/per cubic meter (µg/m³) is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

c. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d. Any equivalent procedure which can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.

e. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

f. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

g. Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

h. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

i. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb.

j. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

k. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m³ to 12.0 µg/m³.

l. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

m. The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

n. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: California Air Resources Board (CARB). 2016. Ambient Air Quality Standards. May 4, 2016.

The USEPA states that people most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.⁸ Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure.⁹ According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults.¹⁰ Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures.¹¹ Further research may be able to better distinguish between health effects in children and adults.¹²

Volatile Organic Compounds (VOCs). VOCs are organic chemical compounds of carbon and are not “criteria” pollutants themselves; however, in combination with nitrogen oxides they form ozone, and are regulated to prevent the formation of ozone.¹³ According to CARB, some VOCs are highly reactive and play a critical role in the formation of ozone, other VOCs have adverse health effects, and in some cases, VOCs can be both highly reactive and have adverse health effects.¹⁴ VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.).¹⁵

Nitrogen Dioxide (NO₂) and Nitrogen Oxides (NO_x). NO_x is a term that refers to a group of compounds containing nitrogen and oxygen. The primary compounds of air quality concern include NO₂ and nitric oxide (NO). Ambient air quality standards have been promulgated for NO₂, which is a reddish-brown, reactive gas.¹⁶ The principle form of NO_x produced by combustion is NO, but NO reacts quickly in the atmosphere to form NO₂, creating the mixture of NO and NO₂ referred to as NO_x.¹⁷ Major sources of NO_x include emissions from cars, trucks and buses, power plants, and off-road equipment.¹⁸ The terms NO_x and NO₂ are sometimes used interchangeably. However, the term NO_x is typically used when discussing emissions, usually from combustion-related activities, and the term NO₂ is typically used when discussing

⁸ United States Environmental Protection Agency (USEPA). 2023. “Health Effects of Ozone Pollution”. Last updated May 24, 2023. <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed February 2025.

⁹ United States Environmental Protection Agency (USEPA). 2023. “Health Effects of Ozone Pollution”. Last updated May 24, 2023. <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed February 2025.

¹⁰ California Air Resource Board (CARB). 2024. “Ozone & Health, Health Effects of Ozone”. [webpage]. <https://ww2.arb.ca.gov/resources/ozone-and-health>. Accessed February 2025.

¹¹ California Air Resource Board (CARB). 2024. “Ozone & Health, Health Effects of Ozone”. [webpage]. <https://ww2.arb.ca.gov/resources/ozone-and-health>. Accessed February 2025.

¹² California Air Resource Board (CARB). 2024. “Ozone & Health, Health Effects of Ozone”. [webpage]. <https://ww2.arb.ca.gov/resources/ozone-and-health>. Accessed February 2025.

¹³ United States Environmental Protection Agency (USEPA). 2023. “Technical Overview of Volatile Organic Compounds”. <https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds>. Accessed February 2025.

¹⁴ California Air Resource Board (CARB). 2024. “CARB Identified Toxic Air Contaminants” [webpage]. <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>. Accessed February 2025.

¹⁵ California Air Resource Board (CARB). 2024. “CARB Identified Toxic Air Contaminants” [webpage]. <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>. Accessed February 2025.

¹⁶ California Air Resource Board (CARB). 2024. “Nitrogen Dioxide & Health” [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

¹⁷ California Air Resource Board (CARB). 2024. “Nitrogen Dioxide & Health” [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

¹⁸ United States Environmental Protection Agency (USEPA). 2023. “Nitrogen Dioxide (NO₂) Pollution” [webpage]. Last updated July 25, 2023. <https://www.epa.gov/no2-pollution/basic-information-about-no2>. Accessed February 2025.

ambient air quality standards. Where NO_x emissions are discussed in the context of the thresholds of significance or impact analyses, the discussions are based on the conservative assumption that all NO_x emissions would oxidize in the atmosphere to form NO₂.

According to the USEPA, short-term exposures to NO₂ can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms while longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections.¹⁹ According to CARB, controlled human exposure studies show that NO₂ exposure can intensify responses to allergens in allergic asthmatics.²⁰ In addition, a number of epidemiological studies have demonstrated associations between NO₂ exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.²¹ Infants and children are particularly at risk from exposure to NO₂ because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.²² CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO₂ and there is only limited information for NO and NO_x, as well as large uncertainty in relating health effects to NO or NO_x exposure.²³

Carbon Monoxide (CO): Carbon monoxide (CO) is primarily emitted from combustion processes and motor vehicles due to the incomplete combustion of fuel, such as natural gas, gasoline, or wood, with the majority of outdoor CO emissions from mobile sources.²⁴ According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death.²⁵ Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress.²⁶ In these situations, short-term exposure to elevated CO may result in

¹⁹ United States Environmental Protection Agency (USEPA). 2023. "Nitrogen Dioxide (NO₂) Pollution" [webpage]. Last updated July 25, 2023. <https://www.epa.gov/no2-pollution/basic-information-about-no2>. Accessed February 2025.

²⁰ California Air Resource Board (CARB). 2024. "Nitrogen Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

²¹ California Air Resource Board (CARB). 2024. "Nitrogen Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

²² California Air Resource Board (CARB). 2024. "Nitrogen Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

²³ California Air Resource Board (CARB). 2024. "Nitrogen Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed February 2025.

²⁴ California Air Resource Board (CARB). 2024. "Carbon Monoxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed February 2025.

²⁵ United States Environmental Protection Agency (USEPA). 2024. "Carbon Monoxide (CO) Pollution in Outdoor Air" [webpage]. Last updated January 19, 2024. <https://www.epa.gov/co-pollution>. Accessed February 2025.

²⁶ United States Environmental Protection Agency (USEPA). 2024. "Carbon Monoxide (CO) Pollution in Outdoor Air" [webpage]. Last updated January 19, 2024. <https://www.epa.gov/co-pollution>. Accessed February 2025.

reduced oxygen to the heart accompanied by chest pain also known as angina.²⁷ According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.²⁸ 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.²⁹ Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO.³⁰

Sulfur Dioxide (SO₂). According to the USEPA, the largest source of sulfur dioxide (SO₂) emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities while smaller sources of SO₂ emissions include industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.³¹ In 2006, California phased-in the ultra-low-sulfur diesel regulation limiting vehicle diesel fuel to a sulfur content not exceeding 15 parts per million (ppm), down from the previous requirement of 500 ppm, substantially reducing emissions of sulfur from diesel combustion.³² According to the USEPA, short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult.³³ According to CARB, health effects at levels near the State 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity and exposure at elevated levels of SO₂ (above 1 ppm) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.³⁴ Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO₂.^{35,36}

Particulate Matter (PM₁₀ and PM_{2.5}). Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air.³⁷ Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye while other particles are so small they can only be detected using an electron

²⁷ United States Environmental Protection Agency (USEPA). 2024. "Carbon Monoxide (CO) Pollution in Outdoor Air" [webpage]. Last updated January 19, 2024. <https://www.epa.gov/co-pollution>. Accessed February 2025.

²⁸ California Air Resource Board (CARB). 2024. "Carbon Monoxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed February 2025.

²⁹ California Air Resource Board (CARB). 2024. "Carbon Monoxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed February 2025.

³⁰ California Air Resource Board (CARB). 2024. "Carbon Monoxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed February 2025.

³¹ United States Environmental Protection Agency (USEPA). 2024. "Sulfur Dioxide (SO₂) Pollution" [webpage]. Last updated January 31, 2024. <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects>. Accessed February 2025.

³² California Air Resource Board (CARB). 2004. *Amendments to the California Diesel Fuel Regulations, Amend Section 2281, Title 13, California Code of Regulations*. Adopted May 10, 2004.

³³ United States Environmental Protection Agency (USEPA). 2024. "Sulfur Dioxide (SO₂) Pollution" [webpage]. Last updated January 31, 2024. <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects>. Accessed February 2025.

³⁴ California Air Resource Board (CARB). 2024. "Sulfur Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health>. Accessed February 2025.

³⁵ California Air Resource Board (CARB). 2024. "Sulfur Dioxide & Health" [webpage]. <https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health>. Accessed February 2025.

³⁶ United States Environmental Protection Agency (USEPA). 2024. "Sulfur Dioxide (SO₂) Pollution" [webpage]. Last updated January 31, 2024. <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects>. Accessed February 2025.

³⁷ United States Environmental Protection Agency (USEPA). 2023. "Particulate Matter (PM) Pollution" [webpage]. Last updated July 11, 2023. <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>. Accessed February 2025.

microscope.³⁸ Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally 10 micrometers and smaller (PM10); and fine inhalable particles with diameters that are generally 2.5 micrometers and smaller (PM2.5).³⁹ Thus, PM2.5 comprises a portion or a subset of PM10. Sources of PM10 emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.⁴⁰ Sources of PM2.5 emissions include combustion of gasoline, oil, diesel fuel, or wood.⁴¹ PM10 and PM2.5 may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO₂, NO_x, and certain organic compounds.⁴² According to CARB, both PM10 and PM2.5 can be inhaled, with some depositing throughout the airways; PM10 is more likely to deposit on the surfaces of the larger airways of the upper region of the lung while PM2.5 is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage, and lung inflammation.⁴³ Short-term (up to 24 hours duration) exposure to PM10 has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits.⁴⁴ The effects of long-term (months or years) exposure to PM10 are less clear, although studies suggest a link between long-term PM10 exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.⁴⁵ Short-term exposure to PM2.5 has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days and long-term exposure to PM2.5 has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.⁴⁶ According to CARB, populations most likely to experience adverse health effects with exposure to PM10 and PM2.5 include older adults with chronic heart or lung disease, children, and asthmatics, and children and infants are more susceptible to harm from inhaling pollutants such as PM10 and PM2.5 compared to healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems.⁴⁷

³⁸ United States Environmental Protection Agency (USEPA). 2023. "Particulate Matter (PM) Pollution" [webpage]. Last updated July 11, 2023. <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>. Accessed February 2025.

³⁹ United States Environmental Protection Agency (USEPA). 2023. "Particulate Matter (PM) Pollution" [webpage]. Last updated July 11, 2023. <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>. Accessed February 2025.

⁴⁰ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴¹ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴² California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴³ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴⁴ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴⁵ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴⁶ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

⁴⁷ California Air Resource Board (CARB). 2024. "Inhalable Particulate Matter and Health (PM2.5 and PM10)" [webpage]. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>. Accessed March 2024.

Lead (Pb). Major sources of lead emissions include ore and metals processing, piston-engine aircraft operating on leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers.⁴⁸ In the past, leaded gasoline was a major source of lead emissions; however, the removal of lead from gasoline has resulted in a decrease of lead in the air by 98 percent between 1980 and 2014.⁴⁹ Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen carrying capacity of blood.⁵⁰ The lead effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage.⁵¹ Excessive lead exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.⁵²

Existing Criteria Pollutants Levels at Nearby Monitoring Stations

The South Coast Air Quality Management District (SCAQMD) maintains a network of air quality monitoring stations located throughout the South Coast Air Basin (SCAB) to measure ambient pollutant concentrations. The City of Irwindale is located in SCAQMD Source Receptor Area (SRA) 9 (East San Gabriel Valley).⁵³ SRA 9 has two air monitoring station in its area, the Glendora-Laurel Monitoring station, approximately 4.4 miles from the northeastern border of the City of Irwindale and the Azusa Monitoring station, approximately 0.30 miles from the northeastern border of the City of Irwindale.^{54,55} These stations collect monitored data for CO, O₃, NO₂, PM₁₀, and PM_{2.5}. The nearest station which collects data on SO₂ and lead is Los Angeles (Main St.) located in SRA 1 (Central Los Angeles).

The most recent data available from SCAQMD for the Glendora-Laurel, Azusa, and Los Angeles (Main St.) monitoring stations are from years 2019 to 2022. The pollutant concentration data for these years are summarized in **Table 4.2-2, *Air Pollutant Standards and Ambient Air Quality Data***. As shown, ambient concentrations have remained relatively consistent between 2019 and 2022, trending lower in more recent years.

⁴⁸ United States Environmental Protection Agency (USEPA). 2023. "Lead Air Pollution" [webpage]. Last updated July 5, 2023. <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>. Accessed February 2025.

⁴⁹ United States Environmental Protection Agency (USEPA). 2023. "Lead Air Pollution" [webpage]. Last updated July 5, 2023. <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>. Accessed February 2025.

⁵⁰ United States Environmental Protection Agency (USEPA). 2023. "Lead Air Pollution" [webpage]. Last updated July 5, 2023. <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>. Accessed February 2025.

⁵¹ California Air Resource Board (CARB). 2024. "Lead & Health" [webpage]. <https://ww2.arb.ca.gov/resources/lead-and-health>. Accessed February 2025.

⁵² California Air Resource Board (CARB). 2024. "Lead & Health" [webpage]. <https://ww2.arb.ca.gov/resources/lead-and-health>. Accessed February 2025.

⁵³ South Coast Air Quality Management District (SCAQMD). 1999. "South Coast Air Quality Management District General Forecast Areas and Monitoring Areas" [map]. Scale not given.

⁵⁴ South Coast Air Quality Management District (SCAQMD). 2024. Site Survey Report for Glendora. Last updated May 7, 2024.

⁵⁵ South Coast Air Quality Management District (SCAQMD). 2022. Site Survey Report for Azusa. Last updated May 19, 2022.

**TABLE 4.2-2
AIR POLLUTANT STANDARDS AND AMBIENT AIR QUALITY DATA**

Pollutant/Standard	2019 ^{b,c}	2020 ^{b,c}	2021 ^{b,c}	2022 ^{b,c}
Ozone, O₃ (1-hour)				
Maximum Concentration (ppm)	0.130	0.173	0.125	0.143
Days > CAAQS (0.09 ppm)	46	76	39	46
Ozone, O₃ (8-hour)				
Maximum Concentration (ppm)	0.102	0.138	0.125	0.101
4th High 8-hour Concentration (ppm)	0.097	0.124	0.090	0.094
Days > CAAQS (0.070 ppm)	58	97	58	61
Days > NAAQS (0.070 ppm)	58	97	54	60
Nitrogen Dioxide, NO₂ (1-hour)				
Maximum Concentration (ppm)	0.060	0.065	0.078	0.054
Days > CAAQS (0.18 ppm)	0	0	0	0
98th Percentile Concentration (ppm)	0.050	0.054	0.051	0.047
Days > NAAQS (0.100 ppm)	0	0	0	0
Nitrogen Dioxide, NO₂ (Annual)				
Annual Arithmetic Mean (0.030 ppm)	13.7	13.6	14.8	13.0
Carbon Monoxide, CO (1-hour)				
Maximum Concentration (ppm)	1.6	2.4	1.5	1.5
Days > CAAQS (20 ppm)	0	0	0	0
Days > NAAQS (35 ppm)	0	0	0	0
Carbon Monoxide, CO (8-hour)				
Maximum Concentration (ppm)	1.1	2.0	1.4	1.3
Days > CAAQS (9.0 ppm)	0	0	0	0
Days > NAAQS (9 ppm)	0	0	0	0
Sulfur Dioxide, SO₂ (1-hour)^a				
Maximum Concentration (ppm)	0.010	0.004	0.002	0.007
Days > CAAQS (0.25 ppm)	0	0	0	0
99th Percentile Concentration (ppm)	0.002	0.003	0.002	0.004
Days > NAAQS (0.075 ppm)	0	0	0	0
Respirable Particulate Matter, PM₁₀ (24-hour)				
Maximum Concentration (µg/m ³)	97	105	121	98
Samples > CAAQS (50 µg/m ³)	4	9	11	7
Samples > NAAQS (150 µg/m ³)	0	0	0	0
Respirable Particulate Matter, PM₁₀ (Annual)				
Annual Arithmetic Mean (20 µg/m ³)	28.1	37.7	32.8	37.9
Fine Particulate Matter, PM_{2.5} (24-hour)				
Maximum Concentration (µg/m ³)	28.3	33.0	61.9	18.4
98th Percentile Concentration (µg/m ³)	21	25.8	36.1	17.8
Samples > NAAQS (35 µg/m ³)	0	0	3	0

Pollutant/Standard	2019 ^{b,c}	2020 ^{b,c}	2021 ^{b,c}	2022 ^{b,c}
Fine Particulate Matter, PM_{2.5} (Annual)				
Annual Arithmetic Mean (12 µg/m ³)	9.18	11.1	11.4	9.9
Lead^a				
Maximum 30-day average (µg/m ³)	0.012	0.013	0.012	0.008
Samples > CAAQS (1.5 µg/m ³)	0	0	0	0
Maximum 3-month rolling average (µg/m ³)	0.010	0.011	0.012	0.007
Days > NAAQS (0.15 µg/m ³)	0	0	0	0

NOTES: SRA = Source Receptor Area; ppm = parts per million; µg/m³ = micrograms per cubic meter;

a. SO₂ is not measured at the Glendora-Laurel nor Azusa monitoring stations. Therefore, the closest monitoring station, Los Angeles (Main St.), is used to report SO₂ pollution data for years 2019 to 2022.

b. The highest pollutant concentrations from either the Glendora or Azusa station is shown.

c. As of July 1, 2022, monitoring data at the Azusa station is no longer available as the Azusa station is being moved to a new location. This does not affect the latest air monitoring data provided by SCAQMD.

SOURCE: South Coast Air Quality Management District (SCAQMD). 2024. Historical Data by Year for 2019, 2020, 2021, and 2022.

<http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>. Accessed February 2025.

Toxics Air Contaminants

In addition to criteria pollutants, the SCAQMD periodically assesses levels of toxic air contaminants (TACs) in the Air Basin. A TAC is defined by California Health and Safety Code Section 39655 as an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant. CARB has listed approximately 200 toxic substances, including diesel particulate matter (DPM), which are identified on the California Air Toxics Program's TAC List. TACs are not classified as "criteria" air pollutants. The effects of TACs can be diverse and their health impacts tend to be local rather than regional. Consequently, ambient air quality standards for these pollutants have not been established, and analysis of health effects is instead based on cancer risk and non-cancer exposure levels.

The SCAQMD periodically assesses levels of TACs in the Air Basin. In August 2021, the SCAQMD released the Final Multiple Air Toxics Exposure Study V (MATES V).⁵⁶ The MATES V includes a fixed site monitoring program with 10 stations, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the Air Basin. The purpose of the fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in SCAQMD's programs such as permitting, Air Toxics Hot Spots (Assembly Bill [AB] 2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time.

⁵⁶ South Coast Air Quality Management District (SCAQMD). 2021. *MATES V: Multiple Air Toxics Exposure Study in the South Coast Air Basin*. Final Report. August 2021.

Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazard Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. This has led to a reduction of the Air Basin average air toxics cancer risk in MATES V of 455 in one million (multiple exposure pathways), compared to MATES IV of 997 in one million.⁵⁷ The Air Basin average air toxics cancer risk in MATES V for the inhalation exposure pathway only is 424 in one million. The key takeaways from the MATES V study: air toxics cancer risk has decreased by about 50 percent since MATES IV based on modeling data; MATES V average multi-pathway air toxics cancer risk of the Air Basin is 455 in one million, with the highest risk locations being in the Los Angeles International Airport, downtown and the ports areas; DPM is the main risk driver for air toxics cancer risk; goods movement and transportation corridors have the highest air toxics cancer risks; and the chronic noncancer risk was estimated for the first time with a chronic hazard index of approximately 5 to 9 across all 10 fixed stations.⁵⁸

Existing Conditions

Existing Emissions

Proposed future development under the Project would allow for future construction of 124 new dwelling units on five separate development sites within the City. Two of these five sites are vacant while the other three sites are developed with industrial/business park uses. However, some of the on-site buildings on the developed sites have recent periods of vacancy and/or have insignificant operational air quality emissions. Therefore, for the purposes of this analysis, existing operational air quality emissions were not calculated and the Project's air quality emissions would be considered net new emissions.

Existing Health Risks from Toxics Air Contaminants

As part of the SCAQMD MATES V, the SCAQMD has released a mapping tool that shows regional trends in estimated outdoor cancer risk from TAC emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the City is estimated in the range of 534 in one million in Zip Code 91702, 563 in one million in Zip Code 91706, and 567 in one million in Zip Code 91010 (compared to an overall Air Basin-wide risk of 455 in one million [multiple exposure pathways] for the average of 10 fixed monitoring sites).⁵⁹ Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, rail yards and ports). The bulk of the City's cancer risk comes from DPM emissions (64.6 to 65.7 percent) due to the City's proximity to Interstate 215 and 605.⁶⁰

⁵⁷ South Coast Air Quality Management District (SCAQMD). 2021. *MATES V: Multiple Air Toxics Exposure Study in the South Coast Air Basin*. Final Report. August 2021.

⁵⁸ South Coast Air Quality Management District (SCAQMD). 2021. *MATES V: Multiple Air Toxics Exposure Study in the South Coast Air Basin*. Final Report. August 2021.

⁵⁹ South Coast Air Quality Management District (SCAQMD). 2024. "Multiple Air Toxics Exposure Study, MATES V Data Visualization Tool, Cancer Risk" [digital GIS tool]. https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=view_38. Accessed February 2025.

⁶⁰ South Coast Air Quality Management District (SCAQMD). 2024. "Multiple Air Toxics Exposure Study, MATES V Data Visualization Tool, Cancer Risk" [digital GIS tool]. https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=view_38. Accessed February 2025.

Sensitive Populations and Receptors

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. SCAQMD defines sensitive receptors as any residence (including private homes, condominiums, apartments, and other living quarters), schools, preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. It also includes long-term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

As discussed in Chapter 2, *Project Description*, the proposed development of the additional 279 housing units would be located at five individual sites; refer to Figure 2-6, *Proposed Housing Sites Inventory*. Out of these five development sites, Site 1, Site 2, and Site 3 are located near sensitive receptor uses, including residential uses adjacent to the development site. Thus, to be conservative, it is assumed that the nearest sensitive receptors are adjacent to the sites.

4.2.3 Regulatory Framework

This section provides the relevant federal, State, regional, and local regulations applicable to the Project.

Federal

Clean Air Act

The federal Clean Air Act (CAA) governs air quality in the United States. The USEPA is responsible for implementation and enforcement of the Clean Air Act. The Clean Air Act establishes federal NAAQS and specifies future dates for achieving compliance. It also requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The Clean Air Act also mandates that the State submit and implement a State implementation plan (SIP) for each criteria pollutant if the NAAQS for the pollutant has not been achieved. The SIP includes pollution control measures that demonstrate how the standards will be met. The sections of the Clean Air Act which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I requirements are implemented for the purpose of attaining NAAQS for the following criteria pollutants: O₃; NO₂; CO; SO₂; PM₁₀; and Pb. The NAAQS were amended in July 1997 to include an 8-hour standard for O₃ and to adopt a NAAQS for PM_{2.5}. The NAAQS were also amended in September 2006 to include an established methodology for calculating PM_{2.5} as well as revoking the annual PM₁₀ threshold.

Table 4.2-1 above shows the NAAQS currently in effect for each criteria pollutant. **Table 4.2-3, *South Coast Air Basin Attainment Status (Los Angeles County)***, shows the attainment status of the Air Basin for each criteria pollutant. As shown in Table 4.2-3, the Air Basin is currently in nonattainment of NAAQS for O₃, PM_{2.5}, and in one area of the Air Basin for Pb.

In addition to criteria pollutants, Title I also includes air toxics provisions which require the USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112, the USEPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAPs). The list of hazardous air pollutants (HAPs), or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

**TABLE 4.2-3
SOUTH COAST AIR BASIN ATTAINMENT STATUS (LOS ANGELES COUNTY)**

Pollutant	National Standards	California Standards
O ₃ (1-hour standard)	—	Non-attainment
O ₃ (8-hour standard)	Non-attainment – Extreme	Non-attainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
PM10	Attainment	Non-attainment
PM2.5	Non-attainment – Serious	Non-attainment
Lead	Non-attainment (Partial) ^a	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride	N/A	N/A

NOTES: N/A = not applicable

a. Partial Nonattainment designation – Los Angeles County portion of the Air Basin only for near-source monitors.

SOURCES:

United States Environmental Protection Agency (USEPA). 2024. "Nonattainment Areas for Criteria Pollutants (Green Book)" [webpage]. Last updated on January 31, 2024. <https://www.epa.gov/green-book>. Accessed February 2025.

California Air Resources Board (CARB). 2024. "Maps of State and Federal Area Designations" [webpage]. <http://www.arb.ca.gov/design/adm/adm.htm>. Accessed February 2025.

Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles which have strengthened in recent years to improve air quality. For example, the standards for NO_x emissions have been lowered substantially, and the specification requirements for cleaner burning gasoline are more stringent.

State

California Clean Air Act

The California Clean Air Act, signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practical date. The CAAQS apply to the same criteria pollutants as the federal Clean Air Act but also include State-identified criteria pollutants, which include sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. CARB has primary responsibility for ensuring the implementation of the California Clean Air Act, responding to the federal Clean Air Act planning requirements applicable to the State, and regulating emissions from motor vehicles and consumer products within the State. Table 4.2-1 shows the CAAQS currently in effect for each of the criteria pollutants as well as the other pollutants recognized by the State. As shown in Table 4.2-1, the CAAQS include more stringent standards than the NAAQS for most of the criteria air pollutants.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table 4.2-3 provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the State standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles. Because vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant.

Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

Because the transportation sector accounts for a large percentage of California’s CO₂ emissions, Assembly Bill (AB) 1493 (Health and Safety Code Sections 42823 and 43018.5) (also referred to as the “Pavley standards”), enacted on July 22, 2002, required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. The federal CAA ordinarily preempts State regulation of motor vehicle emissions standards; however, California is allowed to set its own standards with a federal CAA waiver from the USEPA. In June 2009, the USEPA granted California the waiver.

President George W. Bush issued Executive Order 13432 in 2007, directing the USEPA, the U.S. Department of Transportation (USDOT), and the U.S. Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. The National Highway Traffic Safety Administration (NHTSA) subsequently issued multiple final rules, known as the Corporate Average Fuel Economy (CAFE)⁶¹ standards, regulating fuel efficiency for, and GHG emissions from, cars and light-duty trucks for model year 2011 and later for model years 2012–2016 and 2017–2021 (49 CFR Part 531 and 49 CFR part 533). In 2020, the USDOT and the USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026.⁶² These standards set a combined fleet-wide (inclusive of passenger cars, light trucks, and medium-duty passenger vehicles) average of 33.2 miles per gallon (mpg) to 37.1 mpg for the model years affected.⁶³

In February 2022, the USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.⁶⁴ This final rule revises current GHG standards beginning for vehicles in model year 2023 and through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of

⁶¹ The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

⁶² National Highway Traffic Safety Administration (NHTSA). 2020. “SAFE The Safer Affordable Fuel Efficient “SAFE” Vehicles Rule” [webpage]. [https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20\(SAFE\)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026](https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026). Accessed February 2025.

⁶³ National Highway Traffic Safety Administration (NHTSA). 2020. “SAFE The Safer Affordable Fuel Efficient “SAFE” Vehicles Rule” [webpage]. [https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20\(SAFE\)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026](https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026). Accessed February 2025.

⁶⁴ United States Environmental Protection Agency (USEPA). 2023. “Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026” [webpage]. Last updated December 15, 2023. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed February 2025.

40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles.⁶⁵

On July 28, 2023, the NHTSA proposed new CAFE standards for passenger cars and light trucks for model years 2027 through 2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans for model years 2030 through 2035. The proposed rule would require an industry fleet-wide average of approximately 58 mpg for passenger cars and light trucks in model year 2032, by increasing fuel economy by two percent year over year for passenger cars and four percent year over year for light trucks.⁶⁶ For heavy-duty pickup trucks and vans, the proposed rule would increase fuel efficiency by 10 percent year over year.⁶⁷

California Air Resources Board On-Road and Off-Road Vehicle Rules

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In 2008, CARB also approved the Truck and Bus regulation to reduce PM and NO_x emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The requirements were amended to apply to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. For the largest trucks and buses in the fleet, those with a GVWR greater than 26,000 pounds, all must be equipped with diesel particulate filters (DPFs) from 2014 and onward, and must have 2010 model year engines by January 1, 2023. For trucks and buses with a GVWR of 14,001 to 26,000 pounds, those with engine model years 14 to 20 years or older must be replaced with 2010 model year engines in accordance with the schedule specified in the regulation.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models (13 CCR Section 2449). Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with large fleets beginning compliance in 2014, medium fleets in 2017, and small fleets in 2019. Each fleet must demonstrate compliance through one of two

⁶⁵ United States Environmental Protection Agency (USEPA). 2023. “Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026” [webpage]. Last updated December 15, 2023. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed February 2025.

⁶⁶ National Highway Traffic Safety Administration (NHTSA). 2023. “Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035” [Notice of proposed rulemaking]. *Federal Register* 88(158): 56128. August 17, 2023.

⁶⁷ National Highway Traffic Safety Administration (NHTSA). 2023. “Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035” [Notice of proposed rulemaking]. *Federal Register* 88(158): 56128. August 17, 2023.

methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS installation) be fully implemented by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

California Air Resources Board Air Quality and Land Use Handbook

CARB published the Air Quality and Land Use Handbook in 2005 to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more dry cleaning machines, and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year).⁶⁸

In April 2017, CARB published a Technical Advisory supplement to the Air Quality and Land Use Handbook recognizing that infill developments as promoted by the State can place sensitive individuals in close proximity to high-volume roadways. The Technical Advisory provides planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. The strategies include those that reduce traffic emissions, such as vehicle speed reduction mechanisms, including roundabouts, traffic signal management, and speed limit reductions on high-speed roadways. Strategies also include those that increase the dispersion of traffic emissions, such as implementing designs that promote air flow and pollutant dispersion along street corridors (e.g., wider sidewalks, bicycle lanes, streets characterized by buildings of varying heights), solid barriers such as sound walls, and vegetation for pollutant dispersion. Other strategies include those that remove pollution from the air such as indoor high efficiency filtration. This Technical Advisory is not intended as guidance for any specific project, nor does it create any presumption regarding the feasibility of mitigation measures for purposes of compliance with CEQA.⁶⁹

Airborne Toxics Control Measures

The California Air Toxics Program is an established two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk

⁶⁸ California Air Resource Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

⁶⁹ California Air Resource Board (CARB). 2017. *Technical Advisory: Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*. April 2017.

identification step, CARB and the OEHHA determine if a substance should be formally identified, or “listed,” as a TAC in California. In the risk management step, CARB reviews emissions sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of ATCMs, both for stationary and mobile sources, including On-Road and Off-Road Vehicle Rules. These ATCMs include measures such as limits on heavy-duty diesel motor vehicle idling and emissions standards for off-road diesel construction equipment in order to reduce public exposure to DPM and other TACs. These actions are also supplemented by the AB 2588 Air Toxics “Hot Spots” program and SB 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce their risk through implementation of a risk management plan. SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

Advanced Clean Trucks Regulation

In 2020, CARB approved the Advanced Clean Trucks (ACT) regulation (13 CCR, Sections 1963–1963.5 and 2012–2012.3) to accelerate a large-scale transition to zero- and near-zero-emissions medium- and heavy-duty vehicles. The regulation requires manufacturers of medium- and heavy-duty vehicles to sell an increasing percentage of zero-emissions models from 2024 to 2035 with up to 55 percent of Classes 2b–3 trucks, 75 percent of Classes 4–8 trucks, and 40 percent of truck tractor sales. The regulation also includes reporting requirements to provide information that would be used to identify future strategies. The ACT is part of the statewide goal to considerably reduce NOx and PM emissions in accordance with the NAAQS, reduce GHG emissions by 40 percent, and reduce petroleum use by 50 percent by 2030. By transitioning to zero-emissions trucks, the State would move away from petroleum dependency and emit less air pollutants from heavy-duty mobile sources.

Heavy-Duty Engine and Vehicle Omnibus Regulation

CARB’s Heavy-Duty Engine and Vehicle Omnibus Regulation (Omnibus Regulation) was adopted on September 9, 2021, and became effective on December 22, 2021, to drastically cut smog-forming NOx from conventional heavy-duty engines. The Omnibus Regulation will significantly increase the stringency of NOx emissions standards and will also lengthen the useful life and emissions warranty of heavy-duty diesel engines for use in vehicles with a GVWR greater than 10,000 pounds. The more stringent NOx emission standards begin with the 2024 model year engines and become more stringent with 2027 and subsequent model year engines.⁷⁰

CARB has proposed amendments to the heavy-duty omnibus regulation, which is currently in public review and has not yet been adopted. These amendments would provide additional compliance flexibility to engine manufacturers while ensuring the proposed amendments will not reduce the emissions benefits of the program.

⁷⁰ California Air Resources Board (CARB). 2024. “Omnibus Regulation Transit Exemption” [webpage]. <https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/omnibus-regulation#:~:text=The%20Heavy%2DDuty%20Engine%20and,from%20conventional%20heavy%2Dduty%20engines>. Accessed February 2025.

Senate Bill 1000

Senate Bill (SB) 1000 amended California's Planning and Zoning Law to require local governments to identify disadvantaged communities and incorporate environmental justice into their general plans. The purpose of SB 1000 is to provide transparent public engagement in local government planning and decision making, to reduce pollutants associated with health risk in environmental justice communities, and to promote equitable access to health-inducing benefits such as healthy food options, housing, public facilities, and recreation.

Assembly Bill 617

Assembly Bill (AB) 617 emphasizes the protection of local communities from the harmful effects of air pollution. As part of AB 617 CARB has implemented the Community Air Protection Program (CAPP) to reduce air pollution and improve public health in communities experiencing disproportionate burdens from exposure to air pollution. The City of Irwindale does not lie within a CAPP area.

Senate Bill 535

SB 535 (De León, Chapter 830, 2012) acknowledges that low-income and disadvantaged communities have potentially increased vulnerability to poor air quality and requires funds to be spent to benefit these disadvantaged communities. CalEPA has identified disadvantaged communities based on geographic, socioeconomic, public health, and environmental hazard criteria as identified in Health and Safety Code Section 39711, Subsection (a).⁷¹ CalEPA identifies disadvantaged communities as those that score within the top 25 percent of the census tract when analyzed by CalEnviroScreen Version 4.0.⁷² The City of Irwindale, designated a single census tract, and meet the criteria of a disadvantaged community pursuant of Health and Safety Code Section 39711, Subsection (a) and definition under SB 535.

Regional

South Coast Air Quality Management District

SCAQMD has jurisdiction over air quality planning for all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The SCAB is a subregion within SCAQMD jurisdiction. While air quality in the Air Basin has improved, the Air Basin requires continued diligence to meet the air quality standards.

Air Quality Management Plan

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs), which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the Air Basin into attainment with the standards in a timely manner. The most current AQMP is the

⁷¹ California Environmental Protection Agency (CalEPA). 2021. "CalEPA Proposed SB 535 Disadvantaged Communities" [digital GIS map]. October 2021. <https://oehha.maps.arcgis.com/apps/instant/minimalist/index.html?appid=b2a617f0e8984f3b96d8156bf968a36d>. Accessed February 2025.

⁷² California Environmental Protection Agency (CalEPA). 2022. Final Designation Of Disadvantaged Communities Pursuant To Senate Bill 535. May 2022. https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf. Accessed February 2025.

2022 Air Quality Management Plan (2022 AQMP),⁷³ which was adopted on December 2, 2022. The goal of the 2022 AQMP is to provide a regional roadmap to help the Air Basin achieve the USEPA's NAAQS 2015 8-hour ozone standard (70 parts per billion).

On January 26, 2023, CARB adopted Resolution 23-4, which directs the CARB Executive Officer to submit the 2022 AQMP to the USEPA for inclusion in the California SIP to be effective, for purposes of federal law, after notice and public hearing as required by Section 110(l) of the Clean Air Act and 40 Code of Federal Regulations Section 51.102 and approval by the USEPA. USEPA approval has not yet occurred.

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

The 2022 AQMP incorporates the transportation strategy and transportation control measures from Southern California Association of Governments (SCAG) *Connect SoCal 2020 (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [2020–2045 RTP/SCS])*.⁷⁴ SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and State air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities “conform” to, and are supportive of, the goals of regional and State air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP.

The 2022 AQMP forecasts future emissions inventories with growth based on SCAG’s 2020–2045 RTP/SCS. According to the 2022 AQMP, the South Coast Air Basin is projected to see a 12 percent growth in population, 17 percent growth in housing units, 11 percent growth in employment, and an 8 percent growth in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, State and federal levels.⁷⁵

Noteworthy control strategies for mobile sources in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with future development that could occur under the proposed General Plan and Zoning Code Updates include strategies denoted in the 2022 AQMP as

⁷³ South Coast Air Quality Management District (SCAQMD). 2022. *2022 Air Quality Management Plan*. Adopted December 2, 2022.

⁷⁴ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. Adopted September 30, 2020.

⁷⁵ South Coast Air Quality Management District (SCAQMD). 2022. *2022 Air Quality Management Plan*. Adopted December 2, 2022.

MOB-05, MOB-06, and MOB-10, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment.⁷⁶ Descriptions of these measures are provided below:

MOB-05 – ACCELERATED RETIREMENT OF OLDER LIGHT-DUTY AND MEDIUM-DUTY VEHICLES: This measure seeks to achieve emission reductions by accelerating retirement of older gasoline- and diesel-powered vehicles with up to 8,500 lbs. gross vehicle weight rating (GVWR).

MOB-06 – ACCELERATED RETIREMENT OF OLDER ON-ROAD HEAVY-DUTY VEHICLES: This measure seeks additional emission reductions from existing heavy-duty vehicles with GVWR greater than 8,500 lbs through an accelerated vehicle replacement program with zero or low NO_x emission vehicles.

MOB-10 – OFF-ROAD MOBILE SOURCE EMISSION REDUCTION CREDIT GENERATION PROGRAM: This measure seeks to develop mechanisms to incentivize early deployment of Tier 4, low NO_x, and zero off-road equipment, where applicable, through the generation of mobile source emission reduction credits.

Rules and Regulations

Several SCAQMD rules adopted to implement portions of the AQMP may apply to the Project. For example, SCAQMD Rule 403 requires implementation of best available fugitive dust control measures during active construction periods capable of generating fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads. Rules and regulations that are most relevant to future development that could occur under the proposed Project include the following:

Regulation IV – Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules that apply to the Project:

- **Rule 401 – Visible Emissions:** This rule states that 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 three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
- **Rule 402 – Nuisance:** This rule states that 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, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM₁₀ emissions to less than 50 micrograms per cubic meter (µg/m³) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical

⁷⁶ South Coast Air Quality Management District (SCAQMD). 2022. *2022 Air Quality Management Plan*. Adopted December 2, 2022.

stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by USEPA.

- **Rule 445 – Wood Burning Devices:** This rule reduces the emission of particulate matter from wood-burning devices and establishes contingency measures for applicable ozone standards for the reduction of volatile organic compounds. The rule generally prohibits the installation of a wood-burning device into any new development, which means residential or commercial, single or multi-building unit, which begins construction on or after March 9, 2009.

Regulation XI – Source Specific Standards: Regulation XI sets emissions standards for specific sources. The following is a list of rules which may apply to the Project as a result of project construction activities (i.e., application of architectural coatings, and potential sediment and dirt being tracked onto roads), proposed restaurant uses on-site, and on-site water heaters for the proposed uses:

- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_x emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.
- **Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads (including city street), use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII – New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and State statutes for new and modified sources located in areas that do not meet the Clean Air Act standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply BACT measures. Facilities with a net increase in emissions are required to offset the emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition, certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

- **Regulation XIV – Toxics and Other Noncriteria Pollutants:** Regulation XI sets emissions standards for TACs and other noncriteria pollutant emissions. The following is a list of rules which may apply to the Project due to the demolition of existing buildings/structures that could contain asbestos and the operation of diesel-powered generators during operations since diesel particulate matter is a TAC:
- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities:** This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- **Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants:** This rule sets requirements to minimize the amount of fugitive dust containing toxic air contaminants that is

emitted during earth-moving activities, including, excavating, grading, handling, treating, stockpiling, transferring, and removing soil that contains applicable TACs. Rule 1466 is applicable to the transportation of soils with applicable TACs through the SCAB. Applicable requirements include covering the truck loads for soil that contains applicable TACs.

- **Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule applies to stationary compression ignition engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

Regulation XXIII– Facility Based Mobile Source Measures: In order to obtain the 80 ppb and 75 ppb 8-hour ozone standards by the 2023 and 2031 applicable attainment dates, respectively, and in support of the 2016 AQMP, the SCAQMD formulated Facility Based Mobile Sources Rules to reduce NOx emissions from indirect sources (e.g., mobile sources generated by, or attracted to facilities). The following rule will likely apply to portions of the Project:

Southern California Association of Governments

Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation. Pursuant to Health and Safety Code Section 40460, SCAG is responsible for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment and transportation programs, measures and strategies. On September 3, 2020, the SCAG Regional Council adopted the 2020–2045 *Regional Transportation Plan/Sustainable Communities Strategy* (2020–2045 RTP/SCS).⁷⁷

SCAG’s RTP/SCS is “built on a foundation of contributions from communities, cities, counties and other local agencies” and “based on local general plans as well as input from local governments.”⁷⁸ SCAG’s 2020–2045 RTP/SCS provide specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a “Complete Streets” policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.⁷⁹

⁷⁷ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. Adopted September 30, 2020.

⁷⁸ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. Adopted September 30, 2020.

⁷⁹ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. Adopted September 30, 2020.

The 2020–2045 RTP/SCS overall land use pattern reinforces the trend of focusing new development and employment in the region’s high quality transit areas (HQTAs), which SCAG defines as an area within a one-half mile of a well-served transit stop.⁸⁰ HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and availability of community amenities.

Local

City of Irwindale General Plan

The Resource Management Element of the City of Irwindale 2020 General Plan discusses air quality planning efforts and policies within the City.⁸¹ This includes continued participation with SCAQMD and SCAG to develop and implement strategies to improve regional air quality, as well as the following policies.

Resource Management Element Policy 19. The City of Irwindale will consider environmental justice issues as they are related to potential health impact associated with air pollution and ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location from the health effects of air pollution.

Resource Management Element Policy 20. The City of Irwindale will encourage site plan designs to provide the appropriate setbacks and/or design features that reduce toxic air contaminants at the source.

Resource Management Element Policy 21. The City of Irwindale will encourage the applicant for sensitive land uses (e.g., residences, schools, daycare facilities, playgrounds, and medical facilities) to incorporate design features (e.g., pollution prevention, pollution reduction, barriers, landscaping, ventilation systems, or other measures) in the planning process to minimize the potential pollution impacts on sensitive receptors.

Resource Management Element Policy 22. The City of Irwindale will facilitate communications among residents, businesses, and the South Coast Air Quality Management District (SCAQMD) to quickly resolve air pollution nuisance complaints. The City will distribute information to advise residents on how to register a complaint with SCAQMD (SCAQMD’s —Cut Smog program).

Resource Management Element Policy 23. The City of Irwindale will actively participate in decisions on the site or expansion of facilities of land uses (e.g., freeway expansions), to ensure the inclusion of air quality mitigation measures.

Resource Management Element Policy 24. The City of Irwindale will collaborate with local transit providers to develop programs and educate employers about employee rideshare and transit.

Resource Management Element Policy 25. The City of Irwindale will monitor traffic and congestion to determine when and where the City needs new transportation facilities to achieve increased mobility efficiency.

⁸⁰ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. Adopted September 30, 2020.

⁸¹ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

Resource Management Element Policy 26. The City of Irwindale will design traffic plans, including the development of suggested routes for trucks, to minimize truck idling time.

Resource Management Element Policy 27. The City of Irwindale will encourage vegetative thinning or mowing for weed abatement activities to minimize wind blown dust.

Resource Management Element Policy 28. The City of Irwindale will require conditions for discretionary approvals that require fugitive dust controls and compliance mechanisms for stationary sources (landfill, composting facilities, aggregate facilities, etc.).

Resource Management Element Policy 29. The City of Irwindale will encourage vegetation or chemical stabilization for disturbed land as well as construction screening on fencing for phased construction project.

Resource Management Element Policy 30. The City of Irwindale will provide regional and local air quality information on the City's website, including the SCAQMD's 1-800-CUT-SMOG number for the public to report air pollution complaints to the SCAQMD.

City of Irwindale Municipal Code

Title 15 – Buildings and Construction of the City's Municipal code discusses the adopted Los Angeles County Building Code, 2023 edition (Title 26 of the Los Angeles County Code), which incorporates and amends the 2022 California Building Code, as well as Title 31, Green Building Standards Code, of the Los Angeles County Code, as amended and in effect on January 1, 2020, which adopts the California Green Building Standards Code, 2019 Edition (Part 11 of Title 24 of the California Code of Regulations).⁸² The adopted California Building Code, as well as California Green Building Standards code include provisions to help the City reduce its criteria pollutant emissions from buildings and construction.⁸³

4.2.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G questions regarding air quality, a project would have a significant impact if the project would:

Threshold AQ-1: Conflict with or obstruct implementation of the applicable air quality plan;

⁸² City of Irwindale. 2024. Irwindale Municipal Code, Title 15: Buildings and Construction. Website last updated June 5, 2024. https://library.municode.com/ca/irwindale/codes/code_of_ordinances?nodeId=TIT15BUCO.

⁸³ The City of Irwindale Municipal Code hasn't been updated since June 5, 2024. Future development under the Irwindale Housing Element and General Plan Update would have to conform with the most recent building codes and green building codes in effect at the time of construction. Currently, the applicable Los Angeles County Building Codes in effect are the 2023 California Building Code and 2023 California Green Standards Building Code.

- Threshold AQ-2:** 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;
- Threshold AQ-3:** Expose sensitive receptors to substantial pollutant concentrations; or
- Threshold AQ-4:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

In determining whether an effect is significant, State CEQA Guidelines (Section 15064.7) states that a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, provided that the decision to use such thresholds is supported by substantial evidence. Furthermore, with regard to air quality, Appendix G checklist's air quality section preamble reads:

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

In a February 2018 CEQA Guidance document released by SCAQMD, the SCAQMD further states that:⁸⁴

"Air districts' thresholds provide a clear quantitative benchmark to determine the significance of project and project alternative air quality impacts. They also help identify the magnitude of the impacts, facilitate the identification of feasible mitigation measures, and evaluate the level of impacts before and after mitigation measures. Since one of the basic purposes of CEQA is to inform government decision makers and the public about the potential, significant environmental effects of any proposed activities (CEQA Guidelines § 15002(a)(1)), use of air district thresholds is a best practice for CEQA impact determinations."

In compliance with State CEQA guidelines and SCAQMD guidance, the City of Irwindale uses the SCAQMD's established thresholds for evaluating air quality impacts of proposed projects and assessing the significance of quantifiable impacts as applicable under each Appendix G question. The potential air quality impacts of the Project are, therefore, evaluated in consideration of the thresholds adopted by SCAQMD in connection with its CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent SCAQMD guidance as discussed previously.⁸⁵

Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

The threshold used for determining whether the Project would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether the project is consistent with the assumed growth,

⁸⁴ South Coast Air Quality Management District (SCAQMD). 2018. Guidance on Frequently Questioned Topics in Roadway Analysis for the California Environmental Quality Act. February 2018.

⁸⁵ While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from commercial and residential land use projects such as the Project. As a result, lead emissions are not further evaluated in this Draft PEIR.

applicable control measures and air emission reduction policies in the AQMP. Therefore, the Project would have a significant impact if it would:

- Conflict with or obstruct implementation of the AQMP or any other adopted regional and local plans adopted for reducing air quality impacts.

Cumulatively Considerable Net Increase in Criteria Pollutants

Construction

Given that construction impacts are temporary and limited to the construction phase, SCAQMD has established numerical thresholds of significance for construction air pollutant emissions specific to construction activity. The numerical thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.⁸⁶ Based on the thresholds in the SCAQMD CEQA Air Quality Handbook, the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

- Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily emissions thresholds:⁸⁷
 - VOC: 75 pounds per day
 - NO_x: 100 pounds per day
 - CO: 550 pounds per day
 - SO_x: 150 pounds per day
 - PM₁₀: 150 pounds per day
 - PM_{2.5}: 55 pounds per day

Operational

The SCAQMD has established numerical thresholds of significance for operational air pollutant emissions. The numerical significance thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.⁸⁸ The SCAQMD has established numeric thresholds of significance in part based on Section 182(e) of the Clean Air Act which identifies 10 tons per year of VOC as a significance level for stationary source emissions in extreme non-attainment areas for ozone.⁸⁹ As shown in Table 4.2-3, the Air Basin is designated as extreme non-attainment for ozone. The SCAQMD converted this significance level to pounds per day for ozone precursor emissions (10 tons per year × 2,000 pounds per ton ÷ 365 days per year = 55 pounds per day). The numeric thresholds for other pollutants are also based on federal stationary source significance levels. Based on the thresholds in the SCAQMD CEQA Air

⁸⁶ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993.

⁸⁷ South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. Revised March 2023.

⁸⁸ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993.

⁸⁹ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993.

Quality Handbook, the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

- Regional operational emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily emissions thresholds:⁹⁰
 - VOC: 55 pounds per day
 - NO_x: 55 pounds per day
 - CO: 550 pounds per day
 - SO_x: 150 pounds per day
 - PM₁₀: 150 pounds per day
 - PM_{2.5}: 55 pounds per day

Sensitive Receptors

Localized Significance Thresholds

The SCAQMD published its Final Localized Significance Threshold Methodology and Final Methodology to Calculate PM₁₀ and PM_{2.5} Significance Thresholds, recommending that all air quality analyses include a localized assessment of both construction and operational impacts of the Project on nearby sensitive receptors.^{91,92} Localized Significance Thresholds (LSTs) are only applicable to the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from an individual project site that are not expected to result in an exceedance of federal or State AAQS. LSTs are based on the ambient concentrations of that pollutant within the SRA where a project is located and the distance to the nearest sensitive receptor. The Planning Area is located in the SRA 9 (East San Gabriel Valley).

In the case of CO and NO₂, if ambient levels are below the air standards for these pollutants, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}, both of which are nonattainment pollutants in the Basin. For these latter two pollutants, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 µg/m³ applies to construction emissions (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of 2.5 µg/m³ applies to non-aggregate handling operational activities.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As previously discussed, sensitive receptors are located in proximity to the proposed housing sites and have the potential to be exposed to localized construction and operational emissions.

⁹⁰ South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. Revised March 2023.

⁹¹ South Coast Air Quality Management District (SCAQMD). 2006. *Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds*. October 2006.

⁹² South Coast Air Quality Management District (SCAQMD). 2008. *Final Localized Significance Threshold Methodology*. July 2008.

The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily on-site emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without project-specific dispersion modeling.⁹³ This analysis uses the screening criteria to evaluate impacts from localized emissions. If the Project would result in exceedance of the following screening criteria LSTs for the above pollutants, this would constitute a significant impact, unless dispersion modeling demonstrates no exceedance of the concentration-based standards.

Representative LST screening levels are provided below. Actual screening levels utilized by future development projects should be based on the applicable criteria (i.e., SRA, size, and receptor distance) in the SCAQMD Final Localized Significance Threshold Methodology, Appendix C.

- Construction (5-acre site within 25 meters of sensitive receptors in SRA 9):⁹⁴
 - NO_x: 203 pounds per day (SRA 9)
 - CO: 1,733 pounds per day (SRA 9)
 - PM₁₀: 14 pounds per day (SRA 9)
 - PM_{2.5}: 8 pounds per day (SRA 9)
- Operation (5-acre site within 25 meters of sensitive receptors in SRA 9):⁹⁵
 - NO_x: 203 pounds per day (SRA 9)
 - CO: 1,733 pounds per day (SRA 9)
 - PM₁₀: 4 pounds per day (SRA 9)
 - PM_{2.5}: 2 pounds per day (SRA 9)

Carbon Monoxide Hotspots

With respect to the formation of CO hotspots, the Project would be considered significant if the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:

- The Project would cause or contribute to an exceedance of the CAAQS 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively.⁹⁶

⁹³ Only on-site emissions from either construction or operational activities are counted towards the SCAQMD screening criteria LSTs. For construction screening, the total possible daily disturbance (in acres) is counted towards the site size, not the physical site size. This means that a 10-acre could fall within the 1-acre site screening threshold if only 1 acre of the site is disturbed per day. For operations, only the on-site mobile emissions are counted towards the screening criteria LST, not the total daily mobile emissions.

⁹⁴ South Coast Air Quality Management District (SCAQMD). 2009. Appendix C: Mass Rate LST Look-up Tables. Revised October 21, 2009.

⁹⁵ South Coast Air Quality Management District (SCAQMD). 2009. Appendix C: Mass Rate LST Look-up Tables. Revised October 21, 2009.

⁹⁶ South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. Revised March 2023.

Toxic Air Contaminants

Based on the criteria set forth by the SCAQMD, the Project would expose sensitive receptors to substantial concentrations of toxic air contaminants if any of the following would occur:⁹⁷

- The Project emits carcinogenic materials or TACs that exceed the maximum incremental cancer risk of ten in one million or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to 1 in 1 million) or an acute or chronic hazard index of 1.0.

Other Emissions

With respect to other emissions such as those leading to odors, the threshold is qualitative. The Project's impact would be considered significant if:

- The Project creates an odor nuisance pursuant to SCAQMD Rule 402.
- The Project exceeds the significance thresholds for regional emissions shown above for attainment, maintenance, or unclassified pollutant emissions.

Methodology and Assumptions

Construction

Construction of new development that could occur from adoption of the proposed Project would have the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites. In addition, fugitive dust emissions would result from demolition and various soil-handling activities.

The Project is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified. Therefore, quantification of emissions associated with buildout cannot be specifically determined at this time. Further, the analysis will be based on the potential for construction emissions to exceed threshold values in the context of development intensity and compliance with regulatory emissions standards.

Operational

Regional

Operation of new development that could occur from adoption of the proposed Project would generate criteria air pollutant emissions from vehicle trips throughout the City, energy sources, such as natural gas combustion, and area sources, such as operation of landscaping equipment and use of consumer products, including solvents used in non-industrial applications which emit VOCs during their product use, such as cleaning supplies, kitchen aerosols, cosmetics and toiletries. Operational impacts were assessed for the full Project buildout year of 2029, as well as for the existing uses operating in future year 2029. Daily maximum criteria air pollutant emissions were compared with the SCAQMD operational thresholds to determine the operational impacts of the Project.

VMT data, which takes into account mode and trip lengths, was developed for the transportation analysis. Emissions from motor vehicles are dependent on vehicle type. Thus, the emissions were calculated using a

⁹⁷ South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. Revised March 2023.

representative motor vehicle fleet mix for the Project based on the CARB EMFAC2021 model and default fuel type. EMFAC2021 was used to generate emissions factors for operational mobile sources based on fuel type and vehicle class. However, traffic reduction policies within the General Plan Infrastructure element, to which the regional travel demand model may not be fully sensitive (such as connectivity in neighborhoods, presence of bicycle and pedestrian facilities, and transportation demand management measures), may not be fully reflected in the VMT and emissions estimates. Therefore, estimated mobile source emissions are conservatively higher.

The operational area emissions from the Project were estimated using the California Emissions Estimator Model (CalEEMod version 2022.1) software. Area source emissions are based on hearth (i.e., fireplace) emissions, architectural coatings, landscaping equipment, and consumer product usage rates provided in CalEEMod. For new development, CalEEMod default values were used for area source emissions except that wood stoves and wood fireplaces were removed from the emissions calculations as they are not permitted within SCAQMD's jurisdiction for most new commercial and residential development per SCAQMD Rule 445. Gas fireplaces were assumed to be included in single family homes, however, gas fireplaces are not permitted in multi-family residential units. Future development is assumed to comply with the Title 24 building energy efficiency standards, which is a conservative assumption since future Title 24 standards, typically adopted every three years, would reduce building energy demand for future development permitted in 2026 and later. A municipal solid waste diversion rate of 75 percent is assumed in compliance with AB 341 (refer to Section 4.14, *Utilities and Service Systems*, of this Draft PEIR, for additional information regarding AB 341).

Local

Localized Significance Thresholds

The localized effects from the on-site portion of daily operational emissions are dependent on the exact size, nature, and location of an individual land use type, combined with reductions in localized impacts from the removal of existing land use types as applicable (i.e., conversion of light industrial uses). The Project includes five proposed housing sites in various locations throughout the City. In order to provide a conservative analysis, the five sites were considered one Project Site and were compared to localized significance thresholds for a 5-acre site in SRA 9 with sensitive receptors located 25 meters (82 feet) from the Project Site.

Intersection Hotspot Analysis

Operation of the Project has the potential to generate traffic congestion and increase delay times at intersection within the local study area. The pollutant of primary concern when assessing the Project's impacts at local intersections is CO because an elevated concentration of CO tends to accumulate near areas of heavy traffic congestion and where average vehicle speeds are low. Tailpipe emissions are of concern when assessing localized impacts of CO along paved roads.

An adverse concentration of CO, known as a "hotspot", would occur if there was an exceedance of the NAAQS or CAAQS. SCAQMD does not currently have guidance for conducting intersection hot spot analysis. However, Caltrans has guidance for evaluating CO hot spots in their Transportation Project-Level Carbon Monoxide Protocol (CO Protocol). Detailed guidance discussing which modeling programs to use, calculating emission rates, receiver placement, calculating 1-hour and 8-hour concentrations, and utilizing background concentrations are provided in the Caltrans' CO Protocol.

The potential for the Project to cause or contribute to CO hotspots is evaluated by comparing project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations.

Toxic Air Contaminants Impacts (Construction and Operations)

Construction and operational activities have the potential to result in health risk impacts (cancer, or other acute or chronic conditions) related to TACs exposure from airborne emissions, specifically the emissions of diesel particulate matter. Health risk is a localized impact based on exposure of sensitive receptors to construction and operational activities that emit TACs. Because there are no specific development projects identified under the proposed Project, the location of the development projects, and the exact nature of the development are unknown, determining health risk as this time is speculative. Therefore, the analysis of health risk is discussed qualitatively in this analysis based on the potential for TAC emissions to exceed threshold values in the context of development intensity, proximity to sensitive receptors, and compliance with regulatory emissions standards.

Additionally, as identified in the Initial Study, implementation of the Safety and Environmental Justice (EJ) Elements would have no impacts related to population and housing, thus no further analysis of the Safety and EJ Elements related to this topic are discussed below.

Project Impact Analysis

Conflict with or Obstruct Applicable Air Quality Plan

Threshold AQ-1: The Project would have a significant impact if future development allowed by the Project would conflict with or obstruct implementation of the applicable air quality plan.

Impact AQ-1: The Project would result in a potentially significant impact related to a conflict with or obstructing implementation of the applicable air quality plan due to growth that could exceed demographic assumptions for the City of Irwindale. While implementation of mitigation measures would serve to reduce the severity of the effects, impacts would remain significant and unavoidable.

The SCAQMD recommends that, when determining whether a project is consistent with the applicable AQMP, the lead agency should assess whether the project would directly obstruct implementation of the plans by impeding SCAQMD's efforts to achieve attainment with respect to any criteria air pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and PM2.5) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential units) upon which the plan is based. The SCAQMD numerical significance thresholds for construction and operational emissions are designed for the analysis of individual projects and not for long-term planning documents, such as the proposed Project. Emissions are dependent on the exact size, nature, and location of an individual land use type, combined with reductions in localized impacts from the removal of existing land use types, as applicable (i.e., conversion of light industrial uses). Emissions associated with the operation of individual projects could exceed project-specific thresholds established by SCAQMD. SCAQMD guidance indicates that projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the

plan and would not interfere with its attainment even if the numerical significance thresholds would be exceeded.⁹⁸

As discussed above, the SCAQMD has adopted a series of AQMPs to lead the Air Basin into compliance with several criteria air pollutant standards and other federal requirements, while taking into account construction and operational emissions associated with population and economic growth projections provided by SCAG. The 2022 AQMP incorporates population and economic growth projections from SCAG's 2020–2045 RTP/SCS.

CEQA requires that general plans be evaluated for consistency with the AQMP. Because the AQMP strategy is based on projections from local general plans, only new or amended general plan elements, specific plans, or individual projects under the general plan need to undergo a consistency review. Projects considered consistent with the local general plan are consistent with the air quality-related regional plan. Indicators of consistency include:

- **Control Strategies:** Whether implementation of a project would increase the frequency or severity of existing air quality violations; would cause or contribute to new violations; or would delay the timely attainment of AAQS or interim emissions reductions within the AQMP.
- **Growth Projections:** Whether implementation of the project would exceed growth assumptions within the AQMP, which in part bases its strategy on growth forecasts from local general plans.

Construction

Control Strategies

The Air Basin is designated nonattainment for O₃ and PM_{2.5} under the CAAQS and NAAQS, nonattainment for lead (Los Angeles County only) under the NAAQS, and nonattainment for PM₁₀ under the CAAQS. The Project involves long-term growth associated with buildout of the City of Irwindale, therefore the emissions of criteria pollutants associated with future developments under the Project could exceed SCAQMD thresholds for criteria pollutants. Future development under the proposed Project would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the ATCM to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, as applicable to the type of growth, individual projects under the proposed Project would comply with fleet rules to reduce on-road truck emissions. Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Therefore, the construction anticipated by the Project would be consistent with the AQMP under the first indicator.

Growth Projections

The Project would result in an increase in short-term employment compared to existing conditions. Although the construction anticipated by the Project would generate construction workers, it would not necessarily create new construction jobs; construction-related jobs generated by the Project would likely be filled by employees within the construction industry within the City and the greater Los Angeles County region. Construction industry jobs generally have no regular place of business, as construction workers

⁹⁸ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993.

commute to job sites throughout the region, which may change several times a year. Moreover, these jobs would be temporary in nature. Therefore, the construction jobs generated by the Project would not conflict with the long-term employment or population projections upon which the AQMPs are based.

Operation

Control Strategies

Future development under the Project would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and, to the extent applicable, to the growth projections in the 2020–2045 RTP/SCS, which are incorporated into the 2022 AQMP.

As discussed above, the AQMP includes land use and transportation strategies from the 2020–2045 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. The applicable land use strategies include: planning for growth around livable corridors; providing more options for short trips/neighborhood mobility areas; supporting zero emission vehicles and expanding vehicle charging stations; and supporting local sustainability planning. The applicable transportation strategies include: managing through the Transportation Demand Management (TDM) Program and the Transportation System Management (TSM) Plan including advanced ramp metering, and expansion and integration of the traffic synchronization network; and promoting active transportation. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

The location, design, and land uses of the growth anticipated by the Project would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing residential density, which would allow for increased mixed-use density at infill locations and near public transit. Several transit agencies provide local and regional transit service to the residents of Irwindale, including Metro and Foothill Transit. The Irwindale Station is part of the Foothill Gold Line from Pasadena to Azusa. Foothill Transit serves the San Gabriel and Pomona Valleys, including the City of Irwindale. Foothill Transit operates four bus routes in the City including Lines 185, 492, 190, and 280. Line 185 provides connections with Hacienda Heights and Azusa, via Irwindale Avenue every half hour on weekdays. Line 492 extends between Los Angeles and Montclair, via Arrow Highway in Irwindale, every half-hour on weekdays. Line 190 extends between El Monte and Pomona and intersects North Irwindale Avenue below Cypress Street, every half-hour on weekdays. Line 280 provides connection from Azusa to Walnut to the south, intersecting Arrow Highway, approximately every 30 minutes on weekdays. Refer to Section 4.12, *Transportation*, of this Draft PEIR, for a summary of transit service in the City.

The proposed Project focuses on developing residential on either vacant lots or infill development within the City. These efforts are targeted at five sites which are in close proximity to community infrastructure, such as schools, grocery stores, and public transportation. Site 1 is a vacant 10-acre site located along Allen Drive. Site 2, located at 12881 Ramona Boulevard, is a privately-owned, non-vacant 1.18-acre parcel, which is developed with an existing two-story, 19,700 square feet (sf) commercial building that is currently vacant and has had long periods of vacancy since it was built in 1994. Site 3 is a privately-owned, non-vacant 4.3-acre parcel, located at 13201 Ramona Boulevard, developed with an existing self-storage facility built in 1988 and includes 52,230 sf of office and storage facilities. Site 4 located to the west of the intersection of Irwindale Avenue and Interstate 210 (I-210) in proximity to the Irwindale A Line Metro

Station, is a vacant, privately-owned area comprised of three parcels encompassing approximately 90 acres. Site 5, located to the southeast of the intersection of Irwindale Avenue and I-201, is a non-vacant area comprised of 15 adjacent parcels encompassing approximately 20 acres in total and developed with a business park totaling roughly 550,224 sf. The Project includes the redesignation and rezoning of the five sites to accommodate the proposed residential development associated with the Project. As the Project intends to build housing on vacant lots and infill locations close to existing infrastructure and transit, it would reduce VMT. Therefore, the Project would not conflict with AQMP land use and transportation strategies that are intended to reduce VMT and resulting regional mobile source emissions and would result in a less than significant impact associated with air quality. The proposed Project would be consistent with the AQMP under the first indicator.

Growth Projections

The emissions inventory for the South Coast Air Basin is formed, in part, by existing city and county general plans. The AQMP is based on population, employment and VMT forecasts by SCAG. A project might be in conflict with the AQMP if the development is greater than that anticipated in the local general plan and SCAG's growth projections. Future development in the City of Irwindale that is consistent with the proposed Project would increase vehicle trips and VMT that would result in emissions of ozone precursors and particulate matter. Individual projects under the proposed Project would be required to undergo subsequent environmental review pursuant to CEQA and would be required to demonstrate compliance with the AQMP. Individual projects would also be required to demonstrate compliance with SCAQMD rules and regulations governing air quality.

Growth projections for housing under the Project were presented in Chapter 2, *Project Description*, of this Draft PEIR which estimates the City currently has 414 housing units. Future development under the Project would include 279 new housing units. SCAG growth forecast shows that in 2045 the City would have 500 housing units.⁹⁹ Thus, the additional housing units expected under the Project would exceed the SCAG growth forecast by 193 households.

The Project is intended to accommodate the City's RHNA for the planning period. The City continues to coordinate with SCAQMD and SCAG to ensure city-wide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Nonetheless, the operation of future development under the proposed Project would conflict with or obstruct the implementation of the applicable air quality plan. Future SCAQMD and SCAG plans would incorporate the new growth projections proposed by the Project.

The existing and proposed General Plan policies listed below would potentially reduce emissions, which would address potential impacts related to conflicts with an applicable air quality plan. Nonetheless, the growth projections under the Project would exceed the SCAG growth forecasts included in the 2022 AQMP for the City of Irwindale; therefore, impacts would be significant and mitigation measures would be required.

⁹⁹ Southern California Association of Governments (SCAG). 2020. *Connect SoCal Demographics and Growth Forecast Technical Report*. Adopted September 3 2020.

General Plan Policies that Address the Impact

Resource Management Element

Resource Management Element Policy 19. The City of Irwindale will consider environmental justice issues as they are related to potential health impact associated with air pollution and ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location from the health effects of air pollution.

Resource Management Element Policy 20. The City of Irwindale will encourage site plan designs to provide the appropriate setbacks and/or design features that reduce toxic air contaminants at the source.

Resource Management Element Policy 21. The City of Irwindale will encourage the applicant for sensitive land uses (e.g., residences, schools, daycare facilities, playgrounds, and medical facilities) to incorporate design features (e.g., pollution prevention, pollution reduction, barriers, landscaping, ventilation systems, or other measures) in the planning process to minimize the potential pollution impacts on sensitive receptors.

Resource Management Element Policy 22. The City of Irwindale will facilitate communications among residents, businesses, and the South Coast Air Quality Management District (SCAQMD) to quickly resolve air pollution nuisance complaints. The City will distribute information to advise residents on how to register a complaint with SCAQMD (SCAQMD's —Cut Smog program).

Resource Management Element Policy 23. The City of Irwindale will actively participate in decisions on the site or expansion of facilities of land uses (e.g., freeway expansions), to ensure the inclusion of air quality mitigation measures.

Resource Management Element Policy 24. The City of Irwindale will collaborate with local transit providers to develop programs and educate employers about employee rideshare and transit.

Resource Management Element Policy 25. The City of Irwindale will monitor traffic and congestion to determine when and where the City needs new transportation facilities to achieve increased mobility efficiency.

Resource Management Element Policy 26. The City of Irwindale will design traffic plans, including the development of suggested routes for trucks, to minimize truck idling time.

Resource Management Element Policy 27. The City of Irwindale will encourage vegetative thinning or mowing for weed abatement activities to minimize wind blown dust.

Resource Management Element Policy 28. The City of Irwindale will require conditions for discretionary approvals that require fugitive dust controls and compliance mechanisms for stationary sources (landfill, composting facilities, aggregate facilities, etc.).

Resource Management Element Policy 29. The City of Irwindale will encourage vegetation or chemical stabilization for disturbed land as well as construction screening on fencing for phased construction project.

Resource Management Element Policy 30. The City of Irwindale will provide regional and local air quality information on the City's website, including the SCAQMD's 1-800-CUT-SMOG number for the public to report air pollution complaints to the SCAQMD.

Draft Housing Element

Policy 2: Remove Governmental Constraints: The City will work to remove governmental constraints to the production and maintenance of housing in Irwindale.

Program 4: Facilitate adaptive reuse of commercial and industrial properties within ½ mile of transit to residential.

Program 7: Mixed-Use Development. Create new standards and add to IMC, providing for ministerial approval.

Policy 3: Provide Adequate Housing Sites: The City will ensure that it maintains a supply of land, appropriately zoned, that is sufficient to accommodate the City's Regional Housing Need Allocation for the 6th Cycle.

Program 10: Arrow Hwy Commercial Corridor Specific Plan. Adopt new Specific Plan with potential mixed use and/or housing development.

Policy 5: Affirmatively Further Fair Housing and Address Special Housing Needs: The City will dedicate specific resources and take active steps to ensure housing opportunities for the community's most vulnerable populations, including traditionally under-represented minority populations and other populations with special housing needs.

Program 22: Provide a variety of housing types per SB 330 and SB 35 for streamlined ministerial approval process.

Program 27: Mixed-use zoning for by-right emergency shelters.

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Draft Safety Element

Goal SAF2: A community with complementary uses that reduce air pollution exposure and prioritize the health and safety of people and the environment

Policy SAF2.1: Sensitive Uses near Pollution Sources. Require new residential developments and sensitive uses (e.g., schools, daycares, community centers, senior centers, parks) in proximity to pollution sources to incorporate design elements that provide mitigation or buffers, such as urban greening and landscaping, air conditioning, and ventilation. Where feasible, expand requirements for existing developments to incorporate such design elements

Mitigation Measures

Refer to MM AQ-1 through MM AQ-5, under Threshold AQ-2.

Significance After Mitigation: Implementation of MM AQ-1 through MM AQ-5 stated below would serve to reduce the severity of the impacts to emissions of criteria pollutants associated with future development and projected growth from future development under the Project. However, even with implementation of

MM AQ-1 through MM AQ-5, the growth projections under the Project would exceed the SCAG growth forecasts included in the 2022 AQMP for the City of Irwindale; therefore, impacts would remain significant and unavoidable.

Result in Cumulatively Considerable Net Increase of any Criteria Pollutant for which the Region is Non-attainment

Threshold AQ-2: The Project would have a significant impact if future development allowed by Project would 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.

Impact AQ-2: The Project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. This impact is significant and unavoidable.

O₃, NO₂ and VOC (as ozone precursors), PM₁₀, and PM_{2.5} are pollutants of concern, as the South Coast Air Basin has been designated as a nonattainment area for State O₃, PM₁₀, and PM_{2.5} and as a federal nonattainment area for ozone and PM₁₀. The South Coast Air Basin is currently in attainment for State and federal CO, SO₂, and NO₂ and federal attainment for PM₁₀. SCAQMD has established numerical significance thresholds for regional emissions during construction and operation. The numerical significance thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health. Future projects developed under the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if emissions would exceed the SCAQMD regional significance thresholds during construction or operation. Construction and operational impacts are discussed below.

Construction

Construction has the potential to create regional air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from each specific project site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. However, as there are no specific projects currently approved or proposed under the Project and there is no knowledge as to timing of construction, location or the exact nature of future projects, analysis of construction emissions would be speculative at best. Information regarding specific development projects, including specific buildings and facilities proposed to be constructed, construction schedules, quantities of grading, and other information would be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible.

Each future project developed under the proposed Project would be required to comply with SCAQMD rules and regulations and CEQA analysis would be required, as applicable to determine significance based on the individual project specifics. Furthermore, future construction activities under the Project would be required to comply with the CARB Air Toxics Control Measure, which limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel

Vehicle regulation, CARB Truck and Bus regulation, and CARB ACT regulation, which all require construction equipment and vehicle fleet operators to repower or replace higher-emitting equipment with less polluting models, including zero- and near-zero-emissions on-road truck technologies as they become developed and commercially available. Additionally, construction of future development would be required to comply with SCAQMD rules and regulations including Rule 403 for the control of fugitive dust and Rule 1113 for the control of VOC emissions from architectural coatings. Mandatory compliance with these CARB and SCAQMD rules and regulations would reduce emissions, particularly for NO_x, PM₁₀, and PM_{2.5}, during future construction activities under the proposed Project.

Even with mandatory compliance with CARB and SCAQMD rules regulations, it is possible that some future development projects could be large enough in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that construction period emissions could exceed the SCAQMD significance thresholds. Therefore, project-related construction activities could result in a significant regional air quality impact.

Operation

Operation of future development under the proposed Project would generate criteria pollutant emissions from vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. The on-road mobile sources related to the operation of the Project include passenger vehicles, on-site use of off-road equipment, and delivery trucks. VMT data takes into account ridership, mode, and distance on freeways and local streets. Projected emissions resulting from operational activities of both existing and future development under the Project are presented in **Table 4.2-4, Estimated Maximum Regional Operational Emissions**.

**TABLE 4.2-4
ESTIMATED MAXIMUM REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY)**

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
City of Irwindale Project (2029)						
Area (Consumer Products, Landscaping)	10.4	2.1	16.7	<0.1	0.2	0.2
Energy (Natural Gas)	0.1	1.6	0.7	<0.1	0.1	0.1
Mobile (Based on 2029 with GPU VMT)	4.2	5.6	38.5	0.1	11.5	2.9
Total Regional Emissions^a	14.7	9.3	55.9	0.1	11.8	3.2
SCAQMD Regional Significance Threshold	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds Thresholds?	No	No	No	No	No	No

NOTE:

a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.

SOURCE: ESA 2025; CalEEMod 2022; EMFAC 2021.

As shown in Table 4.2-4, the operational emissions at 2029 Project buildout of new development under the Project would not exceed the SCAQMD regional significance thresholds. It should be noted that the SCAQMD thresholds were specifically developed for use in determining significance for individual projects and not for program-level documents, such as the Project. Furthermore, development of the new residential uses would be based on market demand and would be constructed over the buildout duration through 2029. Overlapping emissions from the construction and operation of new phased development

could occur under the proposed Project, and the SCAQMD requires such overlapping emissions to be compared to the numeric thresholds for operations. It is possible that some future development projects could be large enough in scale and/or intensity such that overlapping emissions from the construction and operation of new phased development could exceed the SCAQMD significance thresholds and result in a significant regional air quality impact.

The existing and proposed General Plan policies, listed below, would potentially reduce emissions, which could potentially address impacts. In addition, future development under the proposed Project would be required to conduct their own CEQA analysis, as necessary, to determine significance based on the individual project specifics. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation.

General Plan Policies that Address the Impact

Resource Management Element Policy 19, Policy 20, Policy 21, Policy 22, Policy 23, Policy 24, Policy 25, Policy 26, Policy 27, Policy 28, Policy 29, and Policy 30; Draft Housing Element Policy 2, Program 4, Program 7, Policy 3, Program 10, Policy 5, Program 22, Program 27, Policy 6, Program 29, Program 30; Draft Safety Element Policy SAF2.1 as discussed under Impact AQ-1.

Mitigation Measures

Construction

MM AQ-1: Applicants for new development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds during construction for emissions of NO_x, CO, PM₁₀ and/or PM_{2.5} shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (USEPA) Tier 4 final emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to the City of Irwindale Department of Building and Safety that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.

Prior to construction, the project engineer shall ensure that all plans for construction phases (e.g., demolition, grading) that would exceed the SCAQMD significance thresholds clearly show the requirement for EPA Tier 4 final or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Irwindale Department of Building and Safety. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.

MM AQ-2: Applicants for new development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds

during construction for emissions of volatile organic compounds (VOCs) as a result of VOC off-gassing emissions from architectural coatings and industrial maintenance coatings shall require the construction contractor to use SCAQMD Low-VOC and/or Super-Compliant VOC architectural coatings and industrial maintenance coatings such that daily volume of coatings applied would not result in emissions that exceed the SCAQMD significance threshold for VOC, unless it can be demonstrated to the Department of Building and Safety that such coatings for a required application are not available. During construction, the construction contractor shall maintain a list of all architectural coatings and industrial maintenance coatings in use on the construction site and the daily volumes of coatings applied for verification by the Department of Building and Safety.

Operations

MM AQ-3: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for the new development show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the City Department of Building and Safety prior to issuance of a certificate of occupancy.

MM AQ-4: Applicants for new residential development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for new development projects within the proposed housing sites, indicate on the building plans that the feature below has been incorporated into the design of the building(s). Proper installation of this feature shall be verified by the City Department of Building and Safety prior to issuance of a certificate of occupancy.

- For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code (or its successor code).

MM AQ-5: Applicants for new non-residential development projects within the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for new development projects on the proposed housing sites, indicate on the building plans that the features below have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City Department of Building and Safety prior to issuance of a certificate of occupancy.

- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code).
- Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code).

Significance After Mitigation: The Project would result in a significant and unavoidable impact with respect to a cumulatively considerable net increase of a criteria pollutant for which the region is non-attainment under an applicable federal or State ambient air quality standard. Implementation of MM AQ-1

through MM AQ-5 stated above would help to reduce the severity of the impact. However, even with the implementation of these measures, this impact would remain significant and unavoidable.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Threshold AQ-3: The Project would have a significant impact if future development allowed by the Project would expose sensitive receptors to substantial pollutant concentrations.

Impact AQ-3: The Project would result in a less than significant impact with respect to the exposure of sensitive receptors to substantial pollutant concentrations during operation. The Project would result in a potentially significant impact related to exposing sensitive receptors to substantial pollutant concentrations during construction. While implementation of mitigation measures would serve to reduce the severity of the effects, construction impacts would remain significant and unavoidable.

Criteria air pollutant emissions have the potential to result in health impacts on sensitive receptors located near new development within the Planning Area. As discussed previously, localized impacts are associated with on-site project activities. In addition to these localized impacts, vehicle travel associated with the Planning Area has the potential to result in exposure of sensitive receptors to CO emissions from intersection congestion. Based on the nature and extent of new development, nearby sensitive receptors could be exposed to levels of toxic air contaminants that could result in a potential increase in cancer, acute, and/or chronic risk.

Construction

Construction of future individual projects under the Project has the potential to create localized air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from the project site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

The SCAQMD provides guidance for conducting the analysis of localized emissions in their *Localized Significance Threshold Methodology*,¹⁰⁰ which relies on on-site mass emission rate screening tables and project-specific dispersion modeling typically for sites sized one, two, and five acres. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive receptor (see Section 4.2.4 for an example screening localized significance threshold, above). The localized significance thresholds are applicable to NO_x, CO, PM₁₀, and PM_{2.5}. Should individual projects exceed applicable screening level thresholds in the SCAQMD *Localized Significance Threshold Methodology* (or successor guidance document), project-

¹⁰⁰ South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. July 2008.

specific dispersion modeling may be conducted to demonstrate that no exceedance of the concentration-based thresholds (from which the screening tables are derived) would occur.

Concentrations of TACs, or in federal parlance, HAPs, are also used as indicators of ambient air quality conditions. Sensitive receptors may be located within close proximity to future development projects under the Project. SCAQMD recommends that construction health risk assessments be conducted for substantial sources of DPM emissions (e.g., projects with substantial construction activities, such as earth-moving and excavation construction activities) in proximity to sensitive receptors and has provided guidance for analyzing mobile source diesel emissions. Localized DPM emissions strongly correlate with localized PM_{2.5} emissions. However, localized analysis does not directly measure health risk impacts. Therefore, future development projects under the Project may potentially require project-specific dispersion modeling to evaluate potential health risk impacts associated with construction.

However, there are no specific projects currently proposed under the Project and there is no information regarding specific development projects, including specific buildings and facilities proposed to be constructed, construction schedules, quantities of grading, and other information that would be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible and would be speculative at best. Each future development project under the Project would be required to conduct their own CEQA analysis, as necessary, to determine significance based on the individual project's specifics. Through each project's individual environmental review process, localized emissions may be quantified and compared against project-specific thresholds. Individual projects that exceed the thresholds would normally be considered significant and require mitigation. Because potential new development could occur close to existing sensitive receptors, the development that would occur as a result of the Project has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions has the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions or DPM and result in a potentially significant impact. Even with compliance with applicable SCAQMD rules and Mitigation Measures AQ-1, AQ-2, AQ-6, and AQ-7, which would reduce construction related impacts on sensitive receptors, project specific emissions could still exceed SCAQMD's applicable significance thresholds.

Operational

Local Air Quality

Future development projects that could occur under the Project would generate vehicle trips and other operational emissions, such as emissions from landscape maintenance activities, painting, and the use of consumer products. Sufficient detail about future development projects is not currently known. However as discussed above, the SCAQMD established localized screening thresholds,¹⁰¹ which relies on on-site mass emission rate screening tables and project-specific dispersion modeling typically for sites sized one, two, and five acres. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive

¹⁰¹ South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. July 2008.

receptor. The localized significance thresholds are applicable to NO_x, CO, PM₁₀, and PM_{2.5}. Should individual projects exceed applicable screening level thresholds in the SCAQMD *Localized Significance Threshold Methodology* (or successor guidance document), project-specific dispersion modeling may be conducted to demonstrate that no exceedance of the concentration-based thresholds (from which the screening tables are derived) would occur.

Although specific future development under the Project is not known at this time, an LST analysis was conducted assuming that all five proposed development sites were operational at the same time and with sensitive receptors located adjacent to the development sites. In other words, the proposed development sites under the Project were treated as one project to conservatively analyze localized emissions. The maximum daily localized emissions and the localized significance thresholds are presented in **Table 4.2-5, Estimated Maximum Localized Operational Emissions**. As shown in Table 4.2-5, operations-related localized emissions would not exceed the SCAQMD localized significance thresholds for any criteria air pollutants. Therefore, future development facilitated by the Project's impact related to localized operational emissions to existing sensitive receptors would be less than significant.

**TABLE 4.2-5
ESTIMATED MAXIMUM LOCALIZED OPERATIONAL EMISSIONS (POUNDS PER DAY)**

Source	NO _x	CO	PM ₁₀	PM _{2.5}
Project (2029)				
Area (Consumer Products, Landscaping)	2.1	16.7	0.2	0.2
Energy (Natural Gas)	1.6	0.7	0.1	0.1
Total Localized Emissions^a	3.7	17.4	0.3	0.3
SCAQMD Localized Significance Threshold ^b	203.0	1,733.0	4.0	2.0
Exceeds Thresholds?	No	No	No	No

NOTES:

- a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.
- b. The SCAQMD LSTs are based on Source Receptor Area 9 (East San Gabriel Valley) for a 5-acre site with sensitive receptors conservatively assumed to be 25 meters to the Project Site.

SOURCE: ESA 2025; CalEEMod 2022; EMFAC 2021

The existing and proposed General Plan policies, listed below, would potentially reduce emissions, which could potentially address impacts. In addition, future development under the Project would be required to conduct their own CEQA analysis, as necessary, to determine significance based on the individual project specifics. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation.

Intersection Hotspot Analysis

The potential for the Project to cause or contribute to CO hotspots is evaluated by comparing project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at project intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

As shown previously in Table 4.2-2, CO levels in the Planning Area are substantially below the federal and State standards. Maximum CO levels in recent years are 1.5 to 2.4 ppm (1-hour average) and 1.1 to 2.0 ppm (8-hour average). CO levels decreased dramatically in the Air Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Air Basin since 2003¹⁰² and the Air Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not expected that CO levels at Project-impacted intersections would rise to the level of an exceedance of these standards.

Additionally, SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 (8-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the screening values would be up to 7.0 ppm (1-hour average) and 5.2 ppm (8-hour average), which are significantly below the AAQS of 20 ppm (1-hour average) and 9 ppm (8-hour average). Based on the intersection volumes identified at these modeled intersections, if a project's traffic levels exceed 100,000 vehicles per day at any project impacted intersection, there would be the potential for a significant impact and dispersion modeling would need to be conducted to determine the project level impact.

Based on Transportation Assessment Report, the Project would generate 1,862 daily trip ends during a typical weekday (931 inbound trips and 931 outbound trips).¹⁰³ These trips would be spread throughout the five sites within the City so vehicle trips would not be concentrated at one intersection. However, assuming that they were all concentrated at one intersection, the 1,862 vehicle trips would be significantly below the 100,000 vehicles per day modeled in SCAQMD's 2003 AQMP CO attainment demonstration. Furthermore, CO emissions from vehicles have substantially reduced compared to 2003 era vehicles based on improved vehicle emissions standards. As a result, CO concentrations are expected to be less than those estimated in the 2003 AQMP, which would not exceed the applicable thresholds. Thus, this comparison demonstrates that the Project would not contribute considerably to the formation of CO hotspots and no further CO analysis is required. The Project would result in a less than significant impact with respect to CO hotspots.

Toxic Air Contaminants

Construction

Construction of the Project would result in emissions of TACs, predominantly from diesel particulate emissions from on- and off-road vehicles during construction. Although the Project would develop residential uses, because this is a program-level document no site specific information is known and health risk impacts from TACs are cumulative over the life of the nearby receptors, quantification of potential health risks would be speculative. However, as construction of these future developments may occur within close proximity to sensitive receptors, there is the potential for risk to exceed regulatory levels. Therefore,

¹⁰² South Coast Air Quality Management District (SCAQMD). 2017. *Final 2016 Air Quality Management Plan*. March 2017.

¹⁰³ Linscott, Law & Greenspan, Engineers. 2025. Transportation Assessment Report – Irwindale Housing Element and General Plan Update. February 2025.

health risk with respect to the construction of development anticipated by the Project would be potentially significant.

Operations

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes and automotive repair facilities. The Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays) and delivery and/or waste collection truck trips. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the future residential uses. Based on the uses expected on the five housing sites, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and would not be expected to exceed the SCAQMD significance thresholds. Operational impacts would be less than significant.

Health Impacts

Construction

Because regional emissions could exceed the SCAQMD regulatory thresholds during construction, there is the potential that these emissions would exceed the CAAQS and NAAQS thus resulting in a health impact. Without knowing the exact specifications for all projects that may be developed under the proposed Project, there is no way to accurately calculate the potential for health impacts from the overall Project. Individual projects will be required to provide their own environmental assessments to determine health impacts from the construction of their projects. Because there is no way to determine the potential for these projects to affect health of sensitive receptors within the City, the Project would result in a potentially significant health impact with respect to the construction.

Operations

The SCAQMD recommends that operational health risk assessments be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.¹⁰⁴ The Project would include the operation of residential uses that would generate only minor amounts of diesel emissions from mobile sources, such as occasional delivery trucks and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units within a localized area. Furthermore, such delivery and maintenance trucks would be required to comply with the applicable provisions of the CARB 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and NO_x emissions from existing diesel trucks as well as idling restrictions. Therefore, Project operations would not be considered a substantial source of diesel particulates.

General Plan Policies that Address the Impact

Resource Management Element Policy 19, Policy 20, Policy 21, Policy 22, Policy 23, Policy 24, Policy 25, Policy 26, Policy 27, Policy 28, Policy 29, and Policy 30; Draft Housing Element Policy 2, Program 4, Program 7, Policy 3, Program 10, Policy 5, Program 22, Program 27, Policy 6, Program 29, Program 30; Draft Safety Element Policy SAF2.1 as discussed under Impact AQ-1.

¹⁰⁴ SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

Mitigation Measures

MM AQ-6: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing localized significance thresholds (LST) air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City shall require that applicants for development projects incorporate MM AQ-1 through MM AQ-5 to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Division.

MM AQ-7: Applicants for new development projects on the proposed housing sites that are subject to CEQA (California Environmental Quality Act) review (i.e., discretionary projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential health risk impacts to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing health risk impacts. If health risk impacts are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City shall require that applicants for new development projects incorporate MM AQ-1 through MM AQ-5 to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Division.

Significance After Mitigation: The Project would result in less than significant impacts with respect to the exposure of sensitive receptors to substantial pollutant concentrations during operation. The Project would result in a potentially significant and unavoidable impact with respect to the exposure of sensitive receptors to substantial pollutant concentrations during construction due to potential development generating substantial emissions in proximity to sensitive receptors. Implementation of MM AQ-6 and MM AQ-7 stated above would help to reduce the severity of the impact. However, even with the implementation of these measures, this impact would remain significant and unavoidable during construction.

Result in Other Emissions (such as those leading to Odors)

Threshold AQ-4: The Project would have a significant impact if future development allowed by the Project would result in other emissions (such as those leading to odors) affecting a substantial number of people.

Impact AQ-4: The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Therefore, impacts would be less than significant, and no mitigation measures are required.

Construction

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment

is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. The Project would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. Construction of the Project's uses would not be expected to generate nuisance odors at nearby air quality sensitive receptors. Therefore, Project-related construction activities would not result in significant impacts related to other emissions (such as those leading to odors) affecting a substantial number of people, and impacts would be less than significant.

Operational

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project's land uses are related to growth in residential land uses and would not have associated odor causing operational activities. Mandatory compliance with CARB and SCAQMD rules regulations would minimize emissions leading to odors. Further, operational emissions for the Project would not exceed SCAQMD significance thresholds for attainment, maintenance or unclassified pollutants, as shown in Table 4.2-4 above. Therefore, the Project-related operational activities would not result in significant impacts related to other emissions (such as those leading to odors) affecting a substantial number of people, and impacts would be less than significant.

General Plan Policies that Address the Impact

Resource Management Element Policy 19, Policy 20, Policy 21, Policy 22, Policy 23, Policy 24, Policy 25, Policy 26, Policy 27, Policy 28, Policy 29, and Policy 30; Draft Housing Element Policy 2, Program 4, Program 7, Policy 3, Program 10, Policy 5, Program 22, Program 27, Policy 6, Program 29, Program 30; Draft Safety Element Policy SAF2.1 as discussed under Impact AQ-1.

Mitigation Measures

None required.

Significant After Mitigation: Not applicable. The Project would result in less than significant impacts with regard to other emissions, such as odors.

4.2.5 Cumulative Impact Analysis

The SCAQMD recommends using two methodologies to assess the cumulative impact of air quality emissions: (1) a project's consistency with the current AQMP be used to determine its potential cumulative impacts. or (2) that project-specific air quality impacts be used to determine the project's potential cumulative impacts to regional air quality.¹⁰⁵

¹⁰⁵ South Coast Air Quality Management District (SCAQMD). 2003. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, Appendix D.

Consistency with Air Quality Management Plan

The SCAQMD recommends assessing a project's cumulative impacts based on whether the project is consistent with the current AQMP. CEQA Guidelines Section 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, CEQA Guidelines Section 15064(h)(3) states in part that:

A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's cumulative air quality impacts are determined not to be significant based on its consistency with the SCAQMD's adopted 2022 AQMP. As discussed above in Impact AQ-1, the City's proposed Project would not conflict with AQMP construction, land use, and transportation strategies that are intended to reduce construction emissions, VMT, and resulting regional mobile source emissions. In addition, construction would not conflict with growth projections as the City of Irwindale continues to coordinate with SCAQMD and SCAG to ensure city-wide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. However, the total housing units under Project operation would conflict with SCAG's growth projections. As such, a cumulative impact would be significant and unavoidable.

Project-Specific Impacts

The SCAQMD CEQA Air Quality Handbook states that the "Handbook is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects."¹⁰⁶ The SCAQMD CEQA Air Quality Handbook also states that "[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District."¹⁰⁷ The SCAQMD has provided guidance on addressing the cumulative impacts for air quality, as discussed below:¹⁰⁸

"As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR ... Projects that exceed the Project-specific significance thresholds are

¹⁰⁶ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993, page iii.

¹⁰⁷ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. April 1993, page 6-1.

¹⁰⁸ South Coast Air Quality Management District (SCAQMD). 2003. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, Appendix D.

considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

The SCAQMD recommends evaluating cumulative impacts for individual projects based on whether the project exceeds the SCAQMD's recommended daily thresholds for project-specific impacts for those pollutants for which the Air Basin is in non-attainment. Thus, the cumulative analysis of air quality impacts follows SCAQMD's guidance such that construction or operational Project emissions would be considered cumulatively considerable if Project-specific emissions exceed an applicable SCAQMD recommended significance threshold. As discussed above in Impact AQ-2, future development that may occur under the proposed Project may result in construction or operational emissions that could exceed the SCAQMD significance thresholds. Implementation of Mitigation Measure(s) MM AQ-1 through MM AQ-6 stated above would help to reduce the severity of the impacts. However, even with implementation of these measures, the cumulative impact would remain significant and unavoidable.

4.3 Biological Resources

This section evaluates the potential for implementation of the City’s Housing Element and General Plan Update (proposed Project or Project) to result in substantial adverse effects to biological resources. This section provides context regarding the existing biological resources within and in proximity to the five Housing Sites identified for future development under the Project. This section also discusses relevant federal, State, regional, and local regulations and programs that are applicable to future development that could occur under the Project. Future discretionary projects that could be developed would be evaluated for project-specific impacts to biological resources, as needed, at the time that they are proposed.

The primary sources of information referenced in this section include the following:

- California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDDB);^{1,2,3}
- California Native Plant Society (CNPS) *Rare Plant Inventory* (RPI);^{3,4,5}
- United States Fish and Wildlife Service (USFWS) Critical Habitat Mapper;⁶ and
- CDFW Connectivity Mapper.⁷

4.3.1 Environmental Setting

As discussed in Chapter 2, *Project Description*, the City encompasses approximately 9.5 square miles in the eastern portion of Los Angeles County (County) within the San Gabriel Valley. The City is located just south of the foothills of the San Gabriel Mountains. Nearby cities include Duarte to the north and west, Azusa to the east, Baldwin Park to the south, and Monrovia and Arcadia to the west. Regional access to the City is provided by the Foothill Freeway (I-210) which crosses the northerly portion of the City in an east/west orientation, and the San Gabriel River Freeway (I-605) that parallels the San Gabriel River. The regional location of the City is shown in Figure 2-1 in Chapter 2, *Project Description*.

¹ California Department of Fish and Wildlife (CDFW). 2024. “California Natural Diversity Database” [online database]. <https://wildlife.ca.gov/Data/CNDDDB>. Accessed March 2024.

² California Department of Fish and Wildlife (CDFW). 2025. “California Natural Diversity Database” [online database]. <https://wildlife.ca.gov/Data/CNDDDB>. Accessed February 2025.

³ The query included the Baldwin Park United States Geological Survey (USGS) 7.5-minute Quadrangle map in which the City is located as well as the surrounding eight USGS quadrangles: Azusa, El Monte, Glendora, La Habra, Mt. Wilson, San Dimas, Whittier, and Yorba Linda.

⁴ California Native Plant Society (CNPS). 2024. “Rare Plant Inventory” [online database]. <https://rareplants.cnps.org/Search/Advanced>. Accessed March 2024.

⁵ California Native Plant Society (CNPS). 2025. “Rare Plant Inventory” [online database]. <https://rareplants.cnps.org/Search/Advanced>. Accessed February 2025.

⁶ United States Fish and Wildlife Service (USFWS). 2025. “Critical Habitat for Threatened and Endangered Species” [digital GIS map]. <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed February 2025.

⁷ California Department of Fish and Wildlife (CDFW). 2025. “Habitat Connectivity Viewer” [digital GIS map]. <https://apps.wildlife.ca.gov/bios6/?bookmark=648>. Accessed February 2025.

The local climate is characterized as Mediterranean with warm dry summers and mild winters. Annual rainfall typically averages from 12 to 16 inches and the majority of rainfall occurs during the winter months.⁸

Land Cover Types

The land cover classifications presented for the five identified Housing Sites were determined based on a desktop review of the historic and current uses associated with the five Housing Sites identified for future development under the proposed Project. The land cover types associated with each potential of the Housing Sites are shown in **Table 4.3-1** and described in more detail below.

TABLE 4.3-1
LAND COVER TYPES OF FIVE IDENTIFIED HOUSING SITES

Potential Housing Site	Land Cover
Site 1 – Allen Drive	Disturbed
Site 2 – 12881 Ramona Boulevard	Urban/Developed
Site 3 – 13201 Ramon Boulevard	Urban/Developed
Site 4 – Gold Line Reliance II	Disturbed
Site 5 – Irwindale/Padilla	Urban/Developed

Urban/Developed

Developed areas include areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer present. Developed areas include paved roads as well as residential, commercial, and industrial areas. Developed areas lack habitat value for most native wildlife species with the exception of resident and migratory birds that have become accustomed to urbanized areas.

Disturbed

Disturbed land cover types refer to areas with minimal vegetation, or areas devoid of vegetation or that support mostly barren soils with sparse non-native vegetative growth and no native species.

Special-Status Species

The term *special-status species* refers to plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or currently are, listed as rare, threatened, or endangered by the federal and/or State governments. Such species are legally protected under the federal and/or State Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the regulatory and scientific community to qualify for protection. Special-status species includes the following:

- Species listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (FESA) (Code of Federal Regulations Title 50, Section 17.12 [listed plants] and Section 17.11 [listed animals] and various notices in the *Federal Register* [FR] [proposed species]);

⁸ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

- Species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (California Code of Regulations Title 14, Section 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code [CFGF] Section 1900 et seq.);
- Species designated by CDFW as California Species of Special Concern (SSC);⁹
- Animals fully protected under the CFGF (Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380); and
- Plants considered by CDFW and the California Native Plant Society (CNPS) to be “rare, threatened or endangered in California” (California Rare Plant Rank 1A, 1B, and 2).

A list of special-status plant and wildlife species that may occur in the five identified Housing Sites that could be developed under the proposed Project was created by reviewing the resources cited above. The CDFW, CNDDDB, and CNPS RPI were queried based on a search of the Azusa, Baldwin Park, El Monte, Glendora, La Habra, Mt. Wilson, San Dimas, Whittier, and Yorba Linda quadrangles.^{10,11} The results of these queries formed the basis for analysis of the potential for special-status species to occur in the housing opportunities sites.

Based on the existing development and/or historical disturbance and vegetation management on the vacant lands comprising the currently undeveloped sites, no special-status plant species are expected to occur within the identified Housing Sites. However, three special-status wildlife species were determined to have a moderate potential to occur within the identified Housing Sites due to these species’ ability to utilize disturbed areas and tolerate disturbance and because of the proximity of certain sites to suitable habitat. The potential for special-status wildlife species to occur within the identified Housing Sites is summarized in **Table 4.3-2, *Species Potential to Occur Within the Identified Housing Site***, and included in Appendix C. Only species with at least a moderate potential to occur are considered subject to potentially significant project-related impacts. Those impacts are analyzed under Section 4.3.3, *Environmental Impacts and Mitigation Measures*.

⁹ California Department of Fish and Wildlife has designated certain vertebrate species as “Species of Special Concern” because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. Not all SSCs have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet criteria for listing under State and/or federal endangered species acts.

¹⁰ California Department of Fish and Wildlife (CDFW). 2024. “California Natural Diversity Database” [online database]. <https://wildlife.ca.gov/Data/CNDDDB>. Accessed March 2024.

¹¹ California Native Plant Society (CNPS). 2024. “Inventory of Rare and Endangered Plants of California” [online database]. <https://www.cnps.org/rare-plants/cnps-inventory-of-rare-plants>. Accessed March 2024.

**TABLE 4.3-2
SPECIES POTENTIAL TO OCCUR WITHIN THE IDENTIFIED HOUSING SITES**

Common Name Scientific Name	Sensitivity Status¹	Potential to Occur²
Crotch's bumble bee <i>Bombus crotchii</i>	Federal: None State: SCE	Moderate potential to occur. The open space directly adjacent to identified Housing Site #4 exhibits potentially suitable habitat for this species.
American bumble bee ³ <i>Bombus pensylvanicus</i>	Federal: None State: None	Moderate potential to occur. Open fields could provide low quality habitat at identified Housing Sites #1 and #4 and CNDDDB observations occur near the sites.
coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: None Other: CDFW WL	Low potential to occur. This species occurs in the Santa Fe Dam Open Space which is located on the alluvial flood plain of the San Gabriel River, in proximity to identified Housing Site #4.
black swift <i>Cypseloides niger</i>	Federal: None State: None Other: USFWS BCC, CDFW SSC	Low to very low potential to occur. Due to the very mobile nature of this species and the availability of marginally suitable foraging habitat on the identified Housing Sites, this species has a low to very low potential to occur.
burrowing owl <i>Athene cunicularia</i>	Federal: None State: SCE Other: CDFW SSC, USFWS BCC	Moderate potential to occur. Suitable disturbed habitats are present within identified Housing Sites #1 and #4 and this species has been recently observed within the Santa Fe Dam Open Space which is on the alluvial floodplain of the San Gabriel River in proximity to Identified Housing Site #4.
pallid bat <i>Antrozous pallidus</i>	Federal: None State: None Other: CDFW SSC	Low potential to occur. Identified Housing Sites #1 and #4 provide suitable foraging habitat for this species and identified Housing Site #4 is located near I-210 which includes underpasses and bridges that could provide suitable roosting habitat. Therefore, this species has a low potential to occur.
western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: None Other: CDFW SSC	Low potential to occur. Identified Housing Sites #1 and #4 provide suitable foraging habitat for this species. In addition, identified Housing Site #2 has existing buildings which may contain suitable roosting habitat. Therefore, this species has a low potential to occur.

NOTES:

1. Status Codes

SCE = State Candidate as Endangered

USFWS BCC = U.S. Fish and Wildlife Service Birds of Conservation Concern

CDFW SSC = California Department of Fish and Wildlife Species of Special Concern

2. Potential to Occur Categories

Low - One or more of the five identified Housing Sites and/or immediate vicinity provide limited and/or low quality habitat and/or the species' geographic or elevational range may not overlap the study area.

Moderate - One or more of the five identified Housing Sites are within the known range of the species and suitable habitat is present in/or near these sites. There are documented occurrences of the species in the near vicinity.

High - One or more of the five identified Housing Sites are within the known range of the species and suitable habitat is present, and recent occurrences of the species have been documented within an appropriate distance.

3. Although American bumble bee is not currently federally or State listed, this species has been studied extensively and the 2021 Petition to List the American Bumble Bee *Bombus pensylvanicus* as an Endangered Species under the U.S. Endangered Species Act (Center for Biological Diversity and Bombus Pollinators Association of Law Students 2021) may result in USFWS accepting it as a Candidate for listing.

SOURCES:

Appendix C of this EIR.

California Department of Fish and Wildlife (CDFW). 2025. California Natural Diversity Database (CNDDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed February 2025. California Department of Fish and Wildlife (CDFW). 2024. "California Natural Diversity Database" [online database]. <https://wildlife.ca.gov/Data/CNDDDB>. Accessed March 2024.

California Native Plant Society (CNPS). 2024. Rare Plant Inventory (RPI). Available online at <https://rareplants.cnps.org/>. Accessed March 2024.

CNPS. 2025. Rare Plant Inventory (RPI). Available online at <https://rareplants.cnps.org/>. Accessed February 2025.

eBird. 2024. Species Maps. Available online at: <https://ebird.org/map>. Accessed on February 2025. California Native Plant Society (CNPS). 2024. "Inventory of Rare and Endangered Plants of California" [online database]. <https://www.cnps.org/rare-plants/cnps-inventory-of-rare-plants>. Accessed March 2024.

Critical Habitat

USFWS can designate critical habitat for species that have been listed as threatened or endangered. Critical habitat is defined in FESA Section 3(5)(A) as those lands (or waters) within a listed species' current range that contain the physical or biological features that are considered essential to its conservation. The five identified Housing Sites that could be developed under the Project do not intersect with any USFWS-designated critical habitat. However, southwestern willow flycatcher critical habitat has been identified adjacent to the identified Housing Site #4, along the San Gabriel River. See **Figure 4.3-1, *Southwestern Willow Flycatcher Critical Habitat***.

Designated critical habitat is based on the presence of primary constituent elements (PCEs). PCEs are those specific elements of the physical or biological features that provide for a species' life history processes and are essential to the conservation of the species including roost sites, nesting grounds, seasonal wetlands, water quality, tide, and soil type.¹² Primary constituent elements that have been identified specifically for southwestern willow flycatcher include:¹³

- Riparian vegetation: Riparian habitat along a dynamic river or lakeside, in a natural or manmade successional environment (for nesting, foraging, migration, dispersal, and shelter) that is comprised of trees and shrubs and some combination of:
 - Dense riparian vegetation with thickets of trees and shrubs that can range in height from about 2 to 30 meters (m);
 - Areas of dense riparian foliage at least from the ground level up to approximately 4 m (13 ft) above ground or dense foliage only at the shrub or tree level as a low, dense canopy;
 - Sites for nesting that contain a dense (about 50 percent to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground); and/or
 - Dense patches of riparian forests that are interspersed with small openings of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.1 hectare (ha, approximately 0.25 ac) or as large as 70 ha (175 ac).
- Insect prey populations: A variety of insect prey populations found within or adjacent to riparian floodplains or moist environments.

It is important to recognize that, while the critical habitat map designations are intended to capture areas that contain the PCEs for a particular species, the broad scale of such mapping often also includes areas that do not provide the necessary constituent elements that provide the species' habitat. In this case, there is a strip of woody riparian vegetation that is assumed to provide all PCEs within the segment of the San Gabriel River in the City to the west of Housing Site #4. However, there is also a wide strip of scrub habitat between Housing Site #4 and the riparian vegetation within the upper floodplain of the River, that is not properly considered critical habitat as it does not provide PCEs for southwestern willow flycatcher. The strip of riparian vegetation along the active river channel that might support this species is situated roughly parallel to the western edge of Housing Site #4 but is at least 1,200 to 1,400 feet away from the Housing

¹² United States Fish and Wildlife Service (USFWS). 2013. "Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Southwestern Willow Flycatcher" [Final rule]. *Federal Register* 78(2):344. January 3, 2013.

¹³ United States Fish and Wildlife Service (USFWS). 2013. "Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Southwestern Willow Flycatcher" [Final rule]. *Federal Register* 78(2):344. January 3, 2013.

Site #4 on the other side of the intervening strip of upland scrub vegetation that lacks any riparian vegetation PCEs needed by the willow flycatcher.

Aquatic Resources

The main watershed for the San Gabriel Valley is the San Gabriel River watershed, which encompasses part of the Angeles National Forest, the San Gabriel valley, and large urban areas in the southeast portion of Los Angeles County. It is bounded by the Los Angeles River on the west and extends to San Bernardino and Orange counties. The main watercourse in this watershed is the San Gabriel River. The San Gabriel River is a perennial stream that extends 59 stream miles from the Angeles National Forest to the Pacific Ocean. It also recharges groundwater tables in several basins. The major tributaries that feed the San Gabriel River include Coyote Creek, Walnut Creek, Puente Creek and San Jose Creek.¹⁴ Totaling more than 640 square miles, the San Gabriel River watershed supports aquatic resources including streams, creeks, drainages, riparian vegetation, and wetlands.

The USFWS National Wetlands Inventory is a nationwide database showing the distribution and type of U.S. wetlands to aid in conservation efforts. According to the National Wetlands Inventory Mapper, a portion of Housing Site #4 is identified as a freshwater pond classified with a PUSC_x designation.^{15,16} Although the National Wetlands Inventory Mapper identifies a portion of the Housing Site #4 as a freshwater pond, the area was mapped based on aerial imagery collected in 2005 and may not provide currently accurate information. Based on a review of aerial imagery, it is clear that Housing Site #4 previously held water in a deeply excavated part of the property that was used as a quarry; however, the quarry site has been reclaimed and current aerial imagery indicates that the site is now relatively level and is not likely to pond water significantly. Surface waters have not been identified within any of the other four housing sites.

Wildlife Movement Corridors

Habitat linkages are contiguous areas of open space that connect two larger habitat areas. Linkages allow for both diffusion and dispersal of a variety of species within the landscape. In addition, linkages can serve as primary habitat for some smaller species. Wildlife corridors are features that exist as topographical or structural pinch points that, among other purposes, are utilized by wildlife for travel between one geographical area to the next. While these resources may be utilized strictly for travel purposes, for example, a dry culvert under a roadway or bridge, they can contain natural vegetation and habitats that support foraging, roosting, and breeding activities as well. Very often, particularly in the case of riparian corridors, aquatic species depend entirely on these features to persist. Corridors provide for movement and dispersal, but do not necessarily include habitat capable of supporting all life history requirements of a species.

¹⁴ County of Los Angeles, Department of Regional Planning (DRP). 2024. *East San Gabriel Valley Area Plan, Natural Resources Conservation, and Open Space Element*. January 2024.

¹⁵ The PUSC_x classification designates this resource as a palustrine system, with an unconsolidated shore and a seasonally flooded water regime. The resource has also been excavated.

¹⁶ United States Fish and Wildlife (USFW). 2005. "National Wetlands Inventory Surface Waters and Wetlands" [digital GIS map]. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed January 2025.

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Wildlife movement corridors are critical for the long-term health of ecological systems for several reasons. Corridors provide connections that provide wildlife with access to water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for genetic exchange between populations of wildlife in otherwise separated natural areas, thereby improving genetic variability within species which also enhances a species' ability to respond to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor use and wildlife movement patterns varies greatly among species.

The Missing Linkages: Restoring Connectivity to the California Landscape report was prepared based on the results of a coordinated statewide effort to identify, study, and protect wildlife corridors. This report identified a low-priority missing link along the San Gabriel River adjacent to the northwestern boundary of Housing Site #4. Missing links, as defined in the Missing Linkages: Restoring Connectivity to the California Landscape report, are highly impacted areas currently providing limited to no connectivity function, but based on location, is critical to restore connectivity function. The low priority was determined based on the conservation opportunity for the linkage, the overall threat, presence of target species, feasibility of conserving the linkage, and the existence of documentation related to the linkage.¹⁷ Another effort to protect and restore systems of connected wildlands is South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. The South Coast Missing Linkages report is the result of a collaborative inter-agency effort to identify missing landscape linkages throughout Southern California that are important to habitat connectivity. The nearest regional linkage identified by South Coast Wildlands is the San Gabriel – San Bernardino Connection, to the northeast of the City of Irwindale.¹⁸ In addition, CDFW's Essential Connectivity Map shows a statewide network of intact Natural Landscape Blocks connected by Essential Connectivity Areas. The entire City of Irwindale has been designated as a "Limited Connectivity Opportunity," indicating the lowest level of terrestrial connectivity in this classification system.¹⁹

4.3.2 Regulatory Framework

Federal

The FESA, Clean Water Act Section 404, and Migratory Bird Treaty Act (MBTA) are the primary federal planning, treatment, and review mechanisms for biological resources that would be applicable to the Project. Each is summarized below.

Federal Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) are the designated federal agencies responsible for administering the FESA. The FESA defines species as "endangered" and "threatened" and provides regulatory protection for any species thus designated. FESA Section 9 prohibits the "take" of species listed by USFWS as threatened or endangered. As defined in the FESA, *taking* means "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct."

¹⁷ San Diego Zoo. 2000. *Missing Linkages: Restoring Connectivity to the California Landscape*. November 2, 2000. http://www.scwildlands.org/reports/missing_linkages.pdf/. Accessed January 2025.

¹⁸ South Coast Wildlands. 2008. *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion*. March 2008. <http://www.scwildlands.org/reports/scmlregionalreport.pdf>. Accessed March 2024.

¹⁹ California Department of Fish and Wildlife (CDFW). 2024. "Habitat Connectivity Viewer" [digital GIS map]. <https://apps.wildlife.ca.gov/bios6/?bookmark=648>. Accessed March 2024.

Recognizing that take cannot always be avoided, FESA Section 10(a) includes provisions for takings that are incidental to, but not the purpose of, otherwise lawful activities.

FESA Section 7(a)(2) requires all federal agencies, including USFWS, to evaluate projects authorized, funded, or carried out by federal agencies with respect to any species proposed for listing or already listed as endangered or threatened and the species' critical habitat, if any is proposed or designated. Federal agencies must undertake programs for the conservation of endangered and threatened species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined in the FESA, "individuals, organizations, States, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding."²⁰

FESA Section 4(a)(3) and (b)(2) requires the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in FESA Section 3(5)(A): (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (PCEs) (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the law was significantly reorganized and expanded in 1972. "Clean Water Act" became the law's common name with amendments in 1972.

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Activities in waters of the U.S. regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and mining projects. Section 404 requires that a permit be issued before dredged or fill material may be discharged into waters of the U.S., unless the activity is exempt from regulation under Section 404 (e.g., certain farming and forestry activities).

Section 401 of the CWA gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the U.S. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the state or appropriate interstate water pollution control agency in/where the discharge

²⁰ Endangered Species Act of 1973, Public Law 93-205, 87 Stat. 884, 16 U.S.C. §§ 1531-1544.

originates or will originate. Any such discharge will comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307.

Migratory Bird Treaty Act

The MBTA is the domestic law that affirms and implements a commitment by the United States to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. Unless and except as permitted by regulations, the MBTA makes it unlawful at any time, by any means, or in any manner to intentionally pursue, hunt, take, capture, or kill migratory birds anywhere in the United States. The law also applies to the intentional disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season.

State

In addition to CEQA, the primary State planning, treatment, and review mechanisms for biological resources that could be impacted by development under the Project are the California Endangered Species Act (CESA), Clean Water Act 401, Porter-Cologne Water Quality Control Act, and California Fish and Game Code Sections 3503, 3503.5, and 3513. Each is summarized below.

California Endangered Species Act

CESA closely parallels the conditions of the FESA; however, it is administered by CDFW. CESA prohibits the take of plant and animal species that the California Fish and Game Commission has designated as either threatened or endangered in California. “Take” in the context of this regulation means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill a listed species (CFGC section 86). The take prohibitions also apply to candidates for listing under CESA. However, section 2081 of CESA allows the department to issue permits for the minor and incidental take of species by an individual or permitted activity listed under the act. Unlike FESA, species that are candidates for State listing are granted the same protections as listed species under CESA.

In accordance with the requirements of CESA, an agency reviewing a project within its jurisdiction must determine whether any State-listed endangered or threatened species could be present. The agency also must determine whether the project could have a potentially significant impact on such species. In addition, the department encourages informal consultation on any project that could affect a candidate species.

Porter-Cologne Water Quality Control Act

Most projects involving water bodies or drainages are regulated by the Regional Water Quality Control Board (RWQCB), the principal state agency overseeing water quality of the state at the regional and local levels. In the absence of waters of the United States, waters may be regulated under the Porter-Cologne Water Quality Control Act and require a permit from the RWQCB if project activities, discharges, or proposed activities or discharges could affect California’s surface, coastal, or ground waters. The permit submitted by the applicant and issued by the RWQCB is either a water quality certification (in the presence of waters of the United States) or a waste discharge requirement (in the absence of waters of the United States).

California Fish and Game Code

Under Sections 3503, 3503.5, and 3513 of the California FGC, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to California FGC Section 3800.

Local

City of Irwindale General Plan

The City of Irwindale General Plan (General Plan) guides development in the City through a set of integrated policies and programs. The General Plan includes the following policies related to biological resources:

Issue Area – Natural Resources. The City of Irwindale will continue to cooperate in the maintenance and conservation of the area's natural resources.

- The City of Irwindale will continue to work with the quarries and other regulatory agencies to facilitate their reclamation.
- The City of Irwindale will require that ongoing mining activities adhere to any pertinent regulatory controls as a means to protect the public's safety and health.
- The City of Irwindale will work with quarry owners and/or operators and regulatory agencies to help facilitate their timely reclamation.
- The City of Irwindale will continue to protect the use of the area's resources through appropriate land use controls and planning.

Issue Area – Resource Preservation. The City of Irwindale will maintain and preserve those natural and man-made amenities that contribute to the City's livability.

- The City will identify and preserve those sites/buildings that are important to the community for the benefit of the future generations that will reside or work in the City.
- The City of Irwindale will continue to cooperate with surrounding cities in the formulation and implementation of regional resource management plans and programs.

4.3.3 Environmental Impacts and Mitigation Measures

Thresholds of Significance and Methodology

Thresholds of Significance

The thresholds of significance for impacts related to biological resources are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project would have a significant impact on the environment if it would:

Threshold BIO-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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

- Threshold BIO--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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Threshold BIO--3:** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Threshold BIO--4:** 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;
- Threshold BIO--5:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Threshold BIO--6:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Methodology

Potential impacts to biological resources are discussed based on the CEQA significance thresholds included in Appendix G of the CEQA guidelines as listed above. The impact analysis is based on the resources and references listed at the beginning of this section. The analysis considers the potential for direct or indirect impacts to result from construction or operation of the residential projects that could be developed as a result of the Project, defined as follows:

- *Direct impacts* are those that could occur at the same time and place as project implementation, such as the removal of habitat as a result of ground disturbance.
- *Indirect impacts* are those that could occur either at a later time or at a distance from the project areas, but that are reasonably foreseeable, such as the loss of an aquatic species as a result of upstream effects on water quality or quantity.

The analysis considers the potential impacts of implementation of the Project and the development of the identified Housing Sites on suitable habitat, special-status species, sensitive natural communities, wetlands, and wildlife corridors, using the significance criteria listed above. Mitigation measures are identified and prescribed as necessary to reduce impacts to less-than-significant levels.

Project Impact Analysis

Threshold BIO-1: The Project would have a significant impact to biological resources if it would a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Impact BIO-1: The Project could have a substantial adverse effect, either directly, indirectly, or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. However, with implementation of mitigation measures, impacts would be less than significant.

As the Project is a long-range policy document, it does not include specific development projects that could have adverse impacts on special-status species or their habitat. However, future development that could occur under the proposed Project, including construction of residential housing units on the five identified Housing Sites, could impact special-status species during construction and operation. The five identified Housing Sites that could be developed as a result of the Project do not include suitable habitat for any of the special-status plants documented in the CDFW CNDDDB and CNPS RPI. However, three special-status wildlife species were identified as having a moderate potential to occur on one or more of the five identified Housing Sites.

Special-Status Plants

As noted above, no special-status plant species have any potential to occur within any of the five identified Housing Sites. Therefore, construction and operation of future development under the Project would have no impact on these any special-status plants.

Special-Status Wildlife

As discussed above, three special-status wildlife species were identified as having a moderate potential to occur within one or more of the five identified Housing Sites including Crotch's bumble bee, American bumble bee,^{21,22} and burrowing owl. Housing Sites #2, #3, and #5 are currently developed with existing buildings and do not contain suitable habitat for any special-status species such that they may have a moderate potential to occur on-site. However, due to the vacant, disturbed nature of Housing Sites #1 and #4, it is possible that these sites could support American bumble bee and burrowing owl and these species have a moderate potential to occur. In addition, Housing Site #4 could support Crotch's bumble bee and this species has a moderate potential to occur on the site. Therefore, construction of future projects under the Project could result in impacts to wildlife species through direct mortality or removal of habitat and displacement of species.

The operation of future projects developed under the Project could also result in adverse impacts to special-status wildlife because such additional development would result in increased vehicular traffic and a

²¹ Although American bumble bee is not currently federally or State listed, this species has been studied extensively and the 2021 Petition to List the American Bumble Bee *Bombus pensylvanicus* as a federally Endangered Species under the U.S. Endangered Species Act may result in USFWS accepting it as a Candidate for listing. Therefore, this species is being considered as special-status for the purposes of this analysis.

²² Center for Biological Diversity and Bombus Pollinators Association of Law Students. 2021. *Petition to list the American Bumble Bee Bombus Pensylvanicus as an Endangered Species Under the U.S. Endangered Species Act*. February 1, 2021.

corresponding increase in noise and threat of road kill by traffic; as well as an increase in human presence in preserved or open space areas; an increase in predatory pets and stray or feral animals; an increase in litter, pollutants, dust, oil, and other human debris; and an increase in nighttime light spilling into open space. However, the five identified Housing Sites and the surrounding areas are already substantially disturbed and/or developed. Therefore, the incremental addition of future housing projects that could be developed under the Project would not result in any significant indirect impacts to special-status wildlife species.

In addition, the Housing Site #4 is located directly adjacent to designated critical habitat for southwestern willow flycatcher. As discussed in Chapter 2, *Project Description*, Housing Site #4 could be developed with 21 housing units. Operation of these 21 housing units would not significantly increase noise and human presence within the vicinity of critical habitat compared to baseline conditions; therefore, operation of the proposed Project would not impact southwestern willow flycatcher critical habitat. However, southwestern willow flycatcher critical habitat adjacent to Housing Site #4 could be impacted by construction noise during future development of the site. Critical habitat is designated by the USFWS for the survival and recovery of federally listed endangered and/or threatened species.

As discussed above, the broad scale of critical habitat mapping often includes areas that do not provide the necessary constituent elements that provide the species' habitat. Rather, the presence of PCEs is a better indicator of habitat suitability, as PCEs are the physical biological features essential for the conservation of a species. There is a wide strip of scrub habitat within the designated critical habitat area, shown in Figure 4.3-1, that is not properly considered critical habitat as it does not provide PCEs for southwestern willow flycatcher. This strip of scrub habitat buffers a portion of riparian vegetation along the active river channel that does include PCEs and could support this species. The suitable riparian vegetation is approximately 1,200 to 1,400 feet away from Housing Site #4. Therefore, there is no critical habitat containing PCEs that could be affected by new residential development on Housing Site #4 that may be facilitated under the Project and the implementation of the Project would not impact designated southwestern willow flycatcher critical habitat with PCEs.

Future individual discretionary projects that could be developed as a result of the Project would undergo site-specific review and CEQA analysis to identify and mitigate potential significant impacts to candidate, sensitive, or special-status species and their habitats. Furthermore, any future development would be required to comply with all applicable laws, regulations, and ordinances related to special-status wildlife. Development within areas identified as potentially supporting special-status wildlife would be required to comply with CESA and/or FESA through applicable regulatory permitting processes. In terms of CEQA compliance, specific mitigation measures may be required to avoid, minimize, or compensate for adverse effects to special-status species or to remove or adversely impact suitable habitat. Project-specific mitigation would be determined through project-level analyses for each project. Likewise, any FESA- or CESA-related permitting would be required to be secured prior to construction of individual projects.

Mitigation Measures MM BIO-1, MM BIO-2, and MM BIO-3 would be required to reduce impacts to special-status wildlife species and assure they will be addressed and reduced to a less-than-significant level on a project-by-project basis. The mitigation measures listed below would require future projects developed under the Project to implement procedures and processes related to protecting special-status wildlife such as preconstruction surveys, and protection and/or avoidance of special-status wildlife. Implementation of

the mitigation measures would ensure that the impacts to special-status wildlife from construction and operation of future projects developed under the Project would be reduced to less than significant.

Mitigation Measures

MM BIO-1: Special-Status Bees. Prior to approval of individual projects on Housing Sites #1 or #4 that are subject to CEQA review (i.e., non-exempt projects) and may impact potentially suitable habitat for Crotch's bumble bee and/or American bumble bee, the City shall require a habitat assessment to be completed by a qualified biologist(s) with demonstrated knowledge of the requirements of Crotch's bumble bee. If no suitable habitat for these species is identified within 300 feet of construction and/or maintenance activities, no further measures shall be required in association with the project.

For individual projects on identified Housing Sites #1 or #4 where a qualified biologist has evaluated the property and found suitable foraging or nesting habitat for Crotch's bumble bee or American bumble bee within 300 feet of construction and/or maintenance activities, the project applicant shall retain a qualified entomologist with the appropriate take authorization to conduct surveys to determine presence/absence in accordance with the applicable protocols established by the USFWS and/or CDFW at the time of site development.

Per the current CDFW requirements, set forth in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, surveys should be conducted within one year prior to vegetation removal and/or grading throughout the entire project site by a qualified entomologist familiar with the species' behavior and life history. A minimum of three surveys should be conducted during peak flying season when the species is most likely to be detected above ground, between April 1 to August 31 for Crotch's bumble bee and between June 1 to October 31 for American bumble bee.^{23,24} The qualified entomologist should utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation. During the surveys, the entomologist should flag inactive small mammal burrows and other potential nest sites to reduce the risk of take. Survey results, including negative findings, should be submitted to CDFW prior to obtaining appropriate permits. At minimum, a survey report should provide the following:

- Qualifications/resumes of surveyor(s) for qualified entomologist(s) and, if applicable, approved biologists for identification of photo vouchers.
- A description of location and map of the survey area, focusing on areas that could provide suitable habitat for bee species.
- Field survey conditions that should include name(s) of qualified entomologist(s); date and time of survey; temperature, wind speed/
- Detailed habitat assessment including percent cover of floral resources and potential nesting and overwintering habitat.
- Number of surveyors per acre, number of acres surveyed, amount of time of focused surveys.
- List of bee species observed.
- Foraging habitat surveys: host plant inventory list.

²³ California Department of Fish and Wildlife (CDFW). 2023. *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. June 6, 2023.

²⁴ Koch J, Strange J, Williams P. 2012. *Bumble Bees of the Western United States*. U.S. Forest Service and the Pollinator Partnership.

- Nesting habitat surveys: type of nest/structure surveyed and if bees were found in them, number of nests found in project site, photo log of suitable habitat and plants.
- Photo vouchers of bumble bees for identification and confirmation that photo vouchers were submitted and identified, if applicable.

If Crotch's bumble bee or American bumble bee is detected, the qualified entomologist should identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone should be established around any identified nest(s) to reduce the risk of disturbance or accidental take. A qualified entomologist should expand the buffer zone as necessary to prevent disturbance or take.

If Crotch's bumble bee is detected and impacts to this species cannot be feasibly avoided, project applicants shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP.

American bumble bee has declined by as much as 89 percent in terms of this species' relative abundance in the United States. Therefore, the Center for Biological Diversity and Bombus Pollinators Association of Law Students have submitted a Petition to List the American Bumble Bee *Bombus Pensylvanicus* as an Endangered Species Under the U.S. Endangered Species Act.²⁵ If this petition is accepted, American bumble bee may become a Candidate for listing under FESA. If American bumble bee is detected and the species is listed or identified as a candidate for listing under FESA, then project applicants would be required to consult with USFWS to obtain appropriate take authorization.

Any floral resource associated with Crotch's bumble bee or American bumble bee that will be removed or damaged by individual projects should be replaced at no less than 1:1. Floral resources should be replaced as close to their original location as is feasible. If active bumble bee nests have been identified and floral resources cannot be replaced within 200 meters of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources should be maintained in perpetuity and should be replanted and managed as needed to ensure the habitat is preserved.

MM BIO-2: Burrowing Owl. Prior to approval of individual projects on Housing Sites #1 or #4 that are subject to CEQA review (i.e., non-exempt projects) and may impact potentially suitable habitat for burrowing owl, the City shall require a habitat assessment to be completed by a qualified biologist(s) with demonstrated knowledge of the requirements of burrowing owl. If no suitable habitat for these species is identified within 500 meters of construction and/or maintenance activities, no further measures shall be required in association with the project.

For individual projects on Housing Sites #1 and #4 where a qualified biologist has evaluated the property and found suitable nesting habitat for burrowing owl within 500 meters of construction and/or maintenance activities, the project applicant shall retain a qualified biologist to conduct

²⁵ Center for Biological Diversity and Bombus Pollinators Association of Law Students. 2021. *Petition to list the American Bumble Bee Bombus Pensylvanicus as an Endangered Species Under the U.S. Endangered Species Act*. February 1, 2021.

surveys to determine presence/absence. Surveys should be conducted within one year prior to commencement of construction activities, in accordance with the applicable protocols established by the USFWS and/or CDFW at the time of site development.

Per the current CDFW requirements set forth in the Staff Report on Burrowing Owl Mitigation, a minimum of four focused surveys for burrowing owl shall be conducted in areas that contain suitable habitat for the species that would be directly impacted by construction of the Proposed Project.²⁶

If burrowing owl is detected, the qualified biologist shall establish avoidance and minimization measures that shall be approved by CDFW prior to commencement of construction activities. Avoidance and minimization measures may include:

- Avoiding construction during the nesting period (February 1 – August 31).
- Establishing buffers around nesting sites in accordance with the recommended buffer distances included in the *Staff Report on Burrowing Owl Mitigation*, as shown below:

**TABLE 4.3-3
BURROWING OWL NESTING SITES RECOMMENDED BUFFERS**

Time of Year	Level of Disturbance		
	Low	Medium	High
April 1–August 15	200 meter	500 meters	500 meters
August 16–October 15	200 meters	200 meters	500 meters
October 16–March 31	50 meters	100 meters	500 meters

- Ongoing monitoring to ensure that burrowing owls have not colonized/recolonized the site during construction.
- If burrowing owls are detected during protocol surveys, preparation of a Burrow Exclusion Plan by a qualified biologist. The Burrow Exclusion Plan shall meet the requirements specified in Appendix E of the *Staff Report on Burrowing Owl Mitigation* and shall be approved by CDFW.
- Conservation of mitigation lands to offset the impact to burrowing owl and its habitat. The conservation of mitigation lands shall be determined through consultation with CDFW depending on the ownership of the occupied land, which shall be established and approved prior to commencement of construction activities.

If burrowing owl is detected onsite and impacts to this species from future projects on Housing Site #1 and/or Housing Site #4 cannot be feasibly avoided, project applicants shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP.

²⁶ California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012.

MM BIO-3: Nesting Bird Surveys. Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the MBTA when in active use. This shall be accomplished by taking the following steps prior to demolition, site preparation (including clearing of vegetation), and construction work associated with future residential projects that occur as a result of the proposed Project.

All vegetation clearing for construction and fuel modification for future projects on the five identified Housing Sites shall occur outside of the breeding season (February 1 through August 31), if feasible, to ensure that no active nests would be disturbed unless clearing and/or grading activities cannot be avoided during that time period.

If construction is proposed during the nesting season (February 1 to August 31), a pre-construction survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal or construction to identify any active nests on the site and in the vicinity of proposed construction. Surveys shall be performed for the project area and vehicle and equipment staging areas, and suitable habitat within 150 feet of these areas, to locate any active passerine (e.g., songbird) nests and within 250 feet to locate any active raptor (e.g., bird of prey) nests.

If no active nests are identified during the survey period, or if construction activities are initiated during the non-breeding season (September 1 to January 31), construction may proceed with no restrictions.

If active nests are detected, the area shall be flagged along with a 300-foot buffer for song birds and a 500-foot buffer for raptors (or otherwise appropriate buffer as determined by the surveying biologist), and shall be avoided until the nesting cycle is complete or it is determined by the surveying biologist that the nest is no longer active. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the development site.

Any birds that begin nesting within the project area and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and no-disturbance zones shall not be established around active nests in these cases; however, should birds nesting within the project area and survey buffers amid construction activities begin to show disturbance associated with construction activities, no-disturbance buffers shall be established as determined by the qualified wildlife biologist.

Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest's success, work within the no-disturbance buffer shall halt until the nest occupants have fledged.

A pre-construction survey report of findings shall be prepared by the qualified biologist and submitted to the Director of Planning, Building and Code Enforcement, or the Director's designee for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season. The report shall either confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone and construction can proceed.

Threshold BIO-2: The Project would have a significant impact to biological resources if it would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Impact BIO-2: Implementation of the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

As discussed above, the five identified Housing Sites are characterized by disturbed and developed land use types. No riparian habitat or other sensitive natural community is present within the five Housing Sites that could be developed under the Project. Therefore, future development of the five Housing Sites under the Project would have no impact to riparian habitat or other sensitive natural community and no mitigation is required.

Mitigation Measures

None required.

Threshold BIO-3: The Project would have a significant impact to biological resources if it would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact BIO-3: Implementation of the Project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

As described above, Housing Sites #1, #2, #3, and #5 do not contain any natural or man-made surface drainage features or riparian or wetland habitat areas that have been identified by the National Wetlands Inventory. Although current aerial imagery indicates that Housing Site #4 is now relatively level and is not likely to pond water significantly, 16.4 acres of Housing Site #4 have been identified as freshwater pond habitat by the National Wetlands Inventory Mapper.²⁷ Therefore, future development of Housing Site #4 under the proposed Project could impact federally protected wetlands and Mitigation Measure MM BIO-4: Aquatic Resources, would be implemented at this site.

Mitigation Measures

MM BIO-4: Aquatic Resources. Prior to approval of individual projects on Housing Site #4, the City shall require a site assessment to be performed by a qualified biologist to determine whether potentially jurisdictional aquatic resources may be present onsite. The aquatic resources site assessment may be completed concurrently with habitat assessments for special-status bees and/or burrowing owl as required by MM BIO-1 and MM BIO-2.

If potentially jurisdictional aquatic resources are identified onsite, an aquatic resource delineation shall be conducted by a qualified biologist or regulatory specialist to identify and map the extent

²⁷ United States Fish and Wildlife (USFW). 2005. "National Wetlands Inventory Surface Waters and Wetlands" [digital GIS map]. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed January 2025.

of state and federally protected aquatic resources in project design, consistent with the provisions of Sections 404 and 401 of the CWA and Section 1600 of the Fish and Game Code, wherever practicable and feasible. Aquatic resources for avoidance shall be demarcated (e.g., using brightly colored flagging) and avoided during construction of future projects. The marked boundaries shall be maintained for the duration of the construction period and shall be clearly visible to personnel on foot as well as heavy equipment operators. If aquatic resources can be avoided, then no further mitigation shall be necessary.

If aquatic resources cannot be avoided by construction on Site #4, then the appropriate regulatory permits shall be obtained (e.g., CWA Section 404 Nationwide Permit from the USACE, CWA Section 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirement permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Wildlife Code from the CDFW). The following measures shall be incorporated, at a minimum, into the permit, subject to approval by the regulatory agencies:

- On- and/or off-site creation, restoration, and/or enhancement of USACE/RWQCB jurisdictional wetlands, waters of the U.S., and/or waters of the State at a ratio no less than 2:1 for permanent impacts. Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. For temporary impacts, restore impact area to pre-Project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate).
- On- and/or off-site creation, restoration, and/or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts. Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. For temporary impacts, restore impact area to pre-project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate).

Threshold BIO-4: The Project would have a significant impact to biological resources if it would 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.

Impact BIO-4: Implementation of the Project would not 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.

Wildlife Corridors

The City and surrounding areas are densely developed and the land areas associated with the identified Housing Sites do not link large areas of contiguous, intact habitat together. While one of the identified Housing Sites, Site #4, lies adjacent to a significant open space and natural area along the San Gabriel River, it is located within a Limited Connectivity Area, as classified by CDFW and does not contribute substantially to the movement pathway function of the adjacent open space.²⁸ Therefore, none of the identified Housing Sites currently function as part of an important regional migratory corridor. The entire City has been designated by CDFW as a Limited Connectivity Area; therefore, development that could

²⁸ California Department of Fish and Wildlife (CDFW). 2024. "Habitat Connectivity Viewer" [digital GIS map]. <https://apps.wildlife.ca.gov/bios6/?bookmark=648>. Accessed March 2024.

occur under the Project would have a less-than-significant impact to wildlife corridors and no mitigation is required.

Mitigation Measures

None required.

Nesting Birds

Construction

As the proposed Project is a long-range policy document, it does not include specific projects that would have adverse impacts on special-status species and their habitat. However, future development that could occur as a result of the Project, including the housing units on the five Housing Sites, could impact nesting birds protected by the CFGC and the MBTA during construction. Direct impacts to nesting birds could result from the removal of trees and vegetation and/or demolition of buildings where active nests are present. In addition, earth moving, operation of heavy equipment, and increased human presence could result in noise, vibration, and visual disturbance. These conditions could indirectly result in nest failure (disturbance, avoidance, or abandonment that leads to unsuccessful reproduction), or could cause flight behavior that expose adults or nestlings to predators. These activities could cause birds that have established a nest before the start of construction to change their behavior or abandon an active nest, putting eggs and/or nestlings at risk for mortality.

Generally, actions that result in nest destruction or nest failure violate the MBTA and CFGC sections 3503–3513. Impacts during the non-breeding season generally are not considered significant, primarily because of the birds' mobility and ability to access other comparable nest sites. However, impacts resulting in nest failure during the breeding season may be potentially significant. Therefore, projects that are developed as a result of the Project would be required to implement Mitigation Measure MM BIO-3, which requires preconstruction surveys to be conducted and no-disturbance buffers to be established around active nests to avoid or minimize impacts to nesting birds. With implementation of MM BIO-3, construction-related impacts would be reduced to a less-than-significant level with mitigation incorporated.

Mitigation Measures

MM BIO-3: Nesting Bird Surveys. See Impact BIO-1, above.

Operation

Operational activities associated with the five identified Housing Sites that could be developed under the Project are unlikely to indirectly impact nesting birds due to the baseline level of human disturbance already occurring within and adjacent to the five identified Housing Sites. Birds nesting in these areas are assumed to be habituated to disturbance; therefore, the impacts to nesting birds would be less than significant and no mitigation is required.

Mitigation Measures

None required.

Threshold BIO-5: The Project would have a significant impact to biological resources if it would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact BIO-5: Implementation of the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The City does not have a Tree Preservation Ordinance or equivalent tree protection requirement. Therefore, implementation of the Project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance and there would be no impact. No mitigation is required.

Mitigation Measures

None required.

Threshold BIO-6: The Project would have a significant impact to biological resources if it would Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact BIO-6: Implementation of the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The City does not have any adopted Habitat Conservation Plan, Natural Community Conservation Plan and no adopted local, regional, or state Habitat Conservation Plans or Natural Community Conservation Plans apply to any portion of the City.²⁹ Therefore, implementation of the Project would have no impact on an approved habitat conservation plan.

Mitigation Measures

None required.

4.3.4 Cumulative Impacts

This section presents an analysis of the cumulative effects of implementation of the Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. The geographic context for cumulative analysis for biological resources includes the San Gabriel Valley, Los Angeles County, and the Angeles National Forest to the north. Future development of the five identified Housing Sites that could be constructed as a result of the Project could have direct and/or indirect effects to special-status species.

However, since there are limited biological resources and habitats within the five identified Housing Sites, buildout of the Project would not significantly impact biological resources within the County, as the five

²⁹ California Department of Fish and Wildlife (CDFW). 2023. California Natural Community Conservation Plans [map]. Scale not given. August 2023.

Housing Sites and surrounding areas are already heavily disturbed and developed. Additionally, future projects that would be developed under the Project would implement MM BIO-1 through MM BIO-4, as appropriate, which would ensure that the impact to biological resources and habitats would be reduced to a less-than-significant level. For these reasons, the Project's contribution to the potentially significant cumulative impact would be less than cumulatively considerable.

4.4 Cultural Resources

4.4.1 Introduction

This section provides an analysis of potential impacts on cultural resources from future development allowed under the Housing Element and General Plan Update (proposed Project or Project), including those related to historic architectural resources, archaeological resources, and human remains. This section describes the historical setting as well as the context for historic architectural resources and archaeological resources in the City and at the Housing Sites. Tribal cultural resources are evaluated in Section 4.13, *Tribal Cultural Resources*, of this Draft PEIR.

4.4.2 Environmental Setting

The City encompasses approximately 9.5 miles (6,080 acres) and is located roughly 20 miles east of downtown Los Angeles. The City is located on the alluvial fan of the San Gabriel River situated approximately 1 to 5 miles south of the San Gabriel Mountain front.

Prehistoric Background

Based on recent research in the southern California region,¹ the following prehistoric chronology has been divided into four general time periods: the Paleocoastal Period (12,000 to 8,500 Before Present [B.P.]), the Millingstone Period (8,500 to 3,000 B.P.), the Intermediate Period (3,000 to 1,000 B.P.), and the Late Period (1,000 B.P. to Anno Domini [A.D.] 1542). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

Paleocoastal Period (12,000–8,500 B.P.)

While it is not certain when humans first came to California, their presence in southern California by about 11,600 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 11,100 and 10,950 B.P. During this time period, the climate of southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources.² In the vicinity of the Planning Area, evidence of Paleocoastal occupation is sparse, and none has been confirmed by scientific dating methods (such as radiocarbon dating).³

Millingstone Period (8,500–3,000 B.P.)

During this time period, there is evidence for the processing of acorns for food and a shift toward a more generalized economy. The first evidence of human occupation in the Los Angeles area dates to at least

¹ Douglass JG, Reddy SN, Ciolek-Torello R, Grenda DR, eds. 2016. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*. Technical Series 94. Tucson, Arizona and Redlands, California: Statistical Research, Inc.

² Byrd BF, Raab ML. 2007. "Prehistory of the Southern Bight: Models for a New Millennium." In *California Prehistory: Colonization, Culture, and Complexity*, edited by Jones TL and Klar KA, pp. 215–227.

³ Douglass JG, Reddy SN, Ciolek-Torello R, Grenda DR, eds. 2016. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*. Technical Series 94. Tucson, Arizona and Redlands, California: Statistical Research, Inc.

9,000 years B.P. and is associated with the Millingstone cultures.^{4,5} Millingstone cultures were characterized by the collection and processing of plant foods, particularly acorns, and the hunting of a wider variety of game animals.^{6,7} Millingstone cultures also established more permanent settlements that were located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources, including seeds, fish, shellfish, small mammals, and birds, were exploited. Early Millingstone occupations are typically identified by the presence of handstones (manos) and millingstones (metates), while those Millingstone occupations dating later than 5,000 B.P. contain a mortar and pestle complex as well, signifying the exploitation of acorns in the region. Cogged stones (cog-shaped stones) and discoidal (stone discs) are also indicative of the Millingstone Period.

In the vicinity of the Housing Sites, sites that date to this time period appear to have been small settlements or campsites reflecting resource gathering groups exploiting nearby lagoon or marshland (inland swamp) resources and specialized resource processing (such as shellfish). There is a gap in the archaeological record between 6,000 and 5,000 B.P., which suggests that the vicinity of the Housing Sites was sparsely occupied or abandoned during this time frame.⁸

Intermediate Period (3,000–1,000 B.P.)

During this time period, many aspects of Millingstone culture persisted, but a number of socioeconomic changes occurred.^{9,10,11} The native populations of southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Increasing population size necessitated the intensified use of existing terrestrial and marine resources.¹² Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants.¹³ This period is characterized by increased labor specialization, expanded trading networks for both utilitarian and non-utilitarian materials, and extensive travel routes. Trade increased dramatically during this period, with asphaltum (tar), seashells, and steatite being traded from southern California to the Great Basin. Use of the bow and arrow spread to the coast around 1,500 B.P., largely replacing the dart and

⁴ Wallace WJ. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11:214–230.

⁵ Warren CN. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*, edited by Irwin-Williams C, pp. 1–4. Eastern New Mexico University Contributions in Anthropology. Portales.

⁶ Byrd BF, Raab ML. 2007. "Prehistory of the Southern Bight: Models for a New Millennium." In *California Prehistory: Colonization, Culture, and Complexity*, edited by Jones TL and Klar KA, pp. 215–227.

⁷ Wallace WJ. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11:214–230.

⁸ Douglass JG, Reddy SN, Ciolek-Torello R, Grenda DR, eds. 2016. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*. Technical Series 94. Tucson, Arizona and Redlands, California: Statistical Research, Inc.

⁹ Erlandson JM. 1994. *Early Hunter-Gatherers of the California Coast*. New York: Plenum Press.

¹⁰ Wallace WJ. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11:214–230.

¹¹ Warren CN. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*, edited by Irwin-Williams C, pp. 1–4. Eastern New Mexico University Contributions in Anthropology. Portales.

¹² Erlandson JM. 1994. *Early Hunter-Gatherers of the California Coast*. New York: Plenum Press.

¹³ Byrd BF, Raab ML. 2007. "Prehistory of the Southern Bight: Models for a New Millennium." In *California Prehistory: Colonization, Culture, and Complexity*, edited by Jones TL and Klar KA, pp. 215–227.

atlatl.¹⁴ Increasing population densities, with ensuing territoriality and resource intensification, may have given rise to increased disease and violence between 3,300 and 1,650 B.P.¹⁵

The Intermediate Period is characterized by a lack of manos, metates, and core tools, an increase in the use of mortars and pestles, and the introduction of stone-lined earthen ovens. There is a wider variety and increased numbers of projectile points, and flexed burials are common.¹⁶

In the vicinity of the Housing Sites, the population density increased, possibly as a result of the migration of eastern desert Takic peoples into the Los Angeles Basin, which is postulated to have begun by the end of the late Millingstone period and to have continued into the late Intermediate Period. The Takic incursion resulted in the introduction of new material culture and mortuary practices, and an increase in genetic variation, population, number of sites, and focus on terrestrial resources. Changes in climate may also have contributed to the increased occupation of the area, as a wetter environment led to increased biological diversity.

Late Period (1,000 B.P.–A.D. 1542)

The Late Period is associated with the florescence of the Gabrielino, who are estimated to have had a population numbering around 5,000 in the pre-contact period. The Gabrielino occupied what is presently Los Angeles County and northern Orange County, along with the southern Channel Islands, including Santa Catalina, San Nicholas, and San Clemente.¹⁷ This period saw the development of elaborate trade networks and use of shell-bead currency. Fishing became an increasingly significant part of subsistence strategies at this time, and investment in fishing technologies, including the plank canoe, are reflected in the archaeological record.^{18,19} Settlement at this time is believed to have consisted of dispersed family groups that revolved around a relatively limited number of permanent village settlements that were located centrally with respect to a variety of resources.²⁰

In contrast to other parts of southern California, occupation of sites in the vicinity of the Housing Sites appears to decrease during the early Late Period, probably due to changing climate that resulted in an overall decline in precipitation, and episodic drought and flooding (the onset of the Late Period coincided with the

¹⁴ Homburg JA, Douglass JG, Reddy SN, eds. 2014. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*, Volume 1. Technical Series 94. Tucson, Arizona and Redlands, California: Statistical Research, Inc.

¹⁵ Raab LM, Porcasi JF, Bradford K, Yatsko A. 1995. "Debating Cultural Evolution: Regional Implications of Fishing Intensification at Eel Point, San Clemente Island." *Pacific Coast Archaeological Society Quarterly* 31(3):3–27.

¹⁶ Douglass JG, Reddy SN, Ciolek-Torello R, Grenda DR, eds. 2016. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*. Technical Series 94. Tucson, Arizona and Redlands, California: Statistical Research, Inc.

¹⁷ Kroeber AL. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78. Washington, DC: Smithsonian Institution.

¹⁸ Erlandson JM. 1994. *Early Hunter-Gatherers of the California Coast*. New York: Plenum Press.

¹⁹ Raab LM, Porcasi JF, Bradford K, Yatsko A. 1995. "Debating Cultural Evolution: Regional Implications of Fishing Intensification at Eel Point, San Clemente Island." *Pacific Coast Archaeological Society Quarterly* 31(3):3–27.

²⁰ Koerper HC, Mason RD, Peterson ML. 2002. "Complexity, Demography, and Change in Late Holocene Orange County." In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Erlandson JM and Jones TL, pp. 63–81. Perspectives in California Archaeology Volume 6. Los Angeles, California: University of California.

medieval climatic anomaly [or MCA], a period of extended drought that occurred between A.D. 800 and 1350).²¹

Ethnographic Setting

The City is situated within territory occupied by Gabrielino. Ethnographic information on this group is provided below.

Gabrielino

The City is located within Gabrielino (Gabrieleño, *Tongva*, or *Kizh*) territory. Bean and Smith²² researchers who studied the Gabrielino indicated that with the exception of the Chumash to the north, the Gabrielino “were the wealthiest, most populous, and most powerful ethnic nationality in aboriginal Southern California.” Named after the San Gabriel Mission, the Gabrielino occupied sections of Los Angeles, Orange, and San Bernardino counties, and the islands of San Nicolas, Santa Catalina, and San Clemente. The Gabrielino subsisted on a variety of resources in several ecological zones. Acorns, sage, and yucca were gathered throughout the inland areas whereas shellfish, fish, as well as a variety of plants and animals were exploited within the marshes and along the coast. Deer and various kinds of small mammals were hunted on an opportunistic basis. Their material culture reflected subsistence technology. Lithic tools such as arrow points and modified flakes were used to hunt and process animals. A variety of ground stone grinding implements, such as the mortar, pestle, mano, and metate, were used to process both plant and animal remains for food.²³

The settlement patterns of the Gabrielino, and other nearby groups such as the Juaneño and Luiseño, were similar and they often interacted through marriage, trade and warfare. The seasonal availability of water and floral and faunal resources dictated seasonal migration rounds with more permanent villages and base camps being occupied primarily during winter and spring months. In the summer months, the village populations divided into smaller units that occupied seasonal food procurement areas. The more permanent settlements tended to be near major waterways and food sources and various secular and sacred activities, such as food production and storage and tool manufacturing, were conducted at these areas.²⁴

Historic Setting

Early History of the City of Irwindale

The Cultural & Historic Resources section from the City’s General Plan is included as follows to illustrate the City’s early history:

The City’s beginning may be traced back to the 1860s with the area’s first settlement by two families originally from Sonora, Mexico - the Ayons and the Fraijos. Both families had previously lived in the San Juan Capistrano and Anaheim areas, until Gregorio Fraijo acquired title to 80-acres of land located

²¹ Douglass JG, Reddy SN, Ciolek-Torello R, Grenda DR, eds. 2016. *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California*. Technical Series 94. Tucson, Arizona Redlands, California: Statistical Research, Inc.

²² Bean LJ, Smith CR. 1978. “Gabrielino.” In: *Handbook of North American Indians*, Vol. 8, California, Heizer RF, ed, pp. 538-549. Washington, DC: Smithsonian Institution, page 538.

²³ Bean LJ, Smith CR. 1978. “Gabrielino.” In: *Handbook of North American Indians*, Vol. 8, California, Heizer RF, ed, pp. 538-549. Washington, DC: Smithsonian Institution.

²⁴ Bean LJ, Smith CR. 1978. “Gabrielino.” In: *Handbook of North American Indians*, Vol. 8, California, Heizer RF, ed, pp. 538-549. Washington, DC: Smithsonian Institution.

to the south of what is now Arrow Highway and near Irwindale Avenue. This site is now occupied by the Civic Center. Fraijo subsequently sold half his land holding to his close friend, Facundo Ayon. Don Gregorio grew tobacco, corn, beans and chilies on his land, and both men subsequently further divided their land holdings among their children. Many of the later settlers were expert horsemen, and earned their living tending cattle and sheep. Over the years, the two families became closer through marriage. Eventually, four of their sons and daughters married each other, giving rise to a thriving close-knit community.

The first homes in what would later become Irwindale were constructed of the abundant native “river rock” laboriously moved from the wide flood plain of the San Gabriel River. Water was obtained locally via a trench excavated from the river or from deep wells. As the years passed, several men from the area became master stone craftsmen, building practical and beautiful buildings, waterways and fences. In 1899, a Mr. Irwin bought property in the Cypress Street-Vincent Avenue area and established a successful citrus farm with the assistance of the area’s first gasoline-powered water pump. When the City was incorporated in 1957 as a general law City, it was named after this pioneer settler. “Jardin de Roca” (Garden of Rocks) became the new municipality’s motto, expressing the haven created from its natural environment. On November 2, 1976, the City changed to a charter City. There are a number of historic resources, sites, and structures in the City.²⁵

4.4.3 Regulatory Framework

This section provides the relevant federal, State, and local regulations applicable to the Project.

Federal

Section 106 of the National Historic Preservation Act

The principal federal law addressing historic properties is Section 106 of the National Historic Preservation Act (NHPA), as amended (54 United States Code of Laws [USC] 300101 et seq.), and its implementing regulations (36 CFR Part 800). Section 106 requires a federal agency with jurisdiction over a proposed federal action (referred to as an “undertaking” under the NHPA) to take into account the effects of the undertaking on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. The term “historic properties” refers to “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register” (36 CFR Part 800.16(l)(1)). The implementing regulations (36 CFR Part 800) describe the process for identifying and evaluating historic properties, for assessing the potential adverse effects of federal undertakings on historic properties, and seeking to develop measures to avoid, minimize, or mitigate adverse effects. The Section 106 process does not require the preservation of historic properties; instead, it is a procedural requirement mandating that federal agencies take into account effects to historic properties from an undertaking prior to approval.

The steps of the Section 106 process are accomplished through consultation with the State Historic Preservation Officer (SHPO), federally recognized Indian tribes, local governments, and other interested parties. The goal of consultation is to identify potentially affected historic properties, assess effects to such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement (36 CFR 800.1(a)). Consultation with Indian tribes regarding issues related to Section 106 and other authorities (such as NEPA and Executive Order No. 13007) must recognize the government-to-government relationship between the federal government and

²⁵ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008, page 116.

Indian tribes, as set forth in Executive Order 13175, 65 FR 87249 (Nov. 9, 2000), and Presidential Memorandum of Nov. 5, 2009.

Section 106 (36 CFR 800.13(b)) also provides a process for the lead federal agency to review unanticipated discoveries, if historic properties are unexpectedly encountered after the Section 106 process has been completed and no agreement document is in place. If discovered, the lead federal agency shall make reasonable efforts to avoid, minimize, or mitigate adverse effects to such properties.

National Register of Historic Places

The National Register of Historic Places (National Register) was established by the NHPA of 1966, as “an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment.”²⁶ The National Register recognizes properties that are significant at the national, State, and/or local levels.

To be eligible for listing in the National Register, a resource must possess significance in American history, architecture, archaeology, engineering, or culture. Four Criteria for Evaluation have been established to determine the significance present in districts, sites, buildings, structures, and objects:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That has yielded, or may be likely to yield, information important in prehistory or history.^{27,28}

In addition to meeting one or more of the criteria of significance, a property must have integrity. Integrity is defined as “the ability of a property to convey its significance.” The National Register recognizes seven qualities (i.e., A-G) that, in various combinations, define integrity. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

Properties That Have Achieved Significance Within the Past 50 Years

Ordinarily religious properties, moved properties, birthplaces or graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years are not considered eligible for the National Register unless they meet one of seven criteria

²⁶ Code of Federal Regulations, Title 36, Chapter 1, Part 60, Section 60.2: Effects of listing under Federal law.

²⁷ National Park Service. 1995. *Bulletin 15: How to Apply the National Register Criteria for Evaluation*. Revised for Internet 1995. Washington, DC: U.S. Department of the Interior, National Park Service, page 2.

²⁸ This publication explains how the National Park Service applies these criteria in evaluating the wide range of properties that may be significant in local, State, and national history.

considerations (A-G), in addition to meeting at least one of the four significance criteria and possessing integrity.

State

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA Section 21084.1, a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The CEQA Guidelines (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of CEQA Section and CEQA Guidelines Section 21084.1 and 15064.5, respectively, apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of Section 21083, which is as a unique archaeological resource. As defined in CEQA Section 21083.2, a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and 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; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall

be required. CEQA Guidelines Section 15064.5(c)(4) notes that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5(a). As defined in CEQA Guidelines Section 15064.5(b)(1), substantial adverse change is “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.” According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

- A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- B. Account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, pursuant to CEQA Guidelines Section 15064.5(b)(3), a project that complies with the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards)²⁹ is considered to have mitigated its impacts to historical resources to a less-than-significant level.

California Register of Historical Resources

The California Register is “an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, State, and/or federal level under one or more of the following four criteria:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- 2. Is associated with the lives of persons important in our past;

²⁹ Grimmer EA. 2017. *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. Washington, DC: U.S. Department of the Interior National Park Services: Technical Preservation Services.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Government Code Sections 7927.000 and 7927.005

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 7927.000 explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places” and Native American places, features, and objects maintained by the Native American Heritage Commission. Section 7927.005 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a State or local agency.”

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are

determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California Public Resources Code Section 5097.98 provides procedures in the event human remains of Native American origin are discovered during project implementation. Public Resources Code Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. Public Resources Code Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

Local

Los Angeles County Historic Preservation Ordinance

The Los Angeles County Board of Supervisors adopted the County's Historic Preservation Ordinance (HPO) on September 1, 2015. The HPO establishes criteria for designating landmarks and historic districts and provides protective measures for designated and eligible historic resources. The HPO applies to all privately owned property within the unincorporated territory of the County and all publicly owned landmarks, except properties that were not listed prior to the issuance of a demolition permit or properties affiliated with religious organizations. The HPO defines a landmark as "any property, including any structure, site, place, object, tree, landscape, or natural feature, that is designated as a landmark by the Board of Supervisors." The HPO defines a historic district as, "A contiguous or noncontiguous geographic area containing one or more contributing properties which has been designated as an historic district by the Board of Supervisors." Landmarks and historic districts may be designated if it is 50 years of age and meets one of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of the history of the nation, state, county, or community in which it is located;
2. It is associated with the lives of persons who are significant in the history of the nation, state, county, or community in which it is located;
3. It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the nation, state, county, or community in which it is located; or possesses artistic values of significance to the nation, State, County, or community in which it is located;
4. It has yielded, or may be likely to yield, significant and important information regarding the prehistory or history of the nation, state, county, or community in which it is located;
5. It is listed, or has been formally determined eligible by the United States National Park Service for listing, in the National Register of Historic Places, or is listed, or has been formally determined eligible by the State Historical Resources Commission for listing, on the California Register of Historical Resources;
6. If it is a tree, it is one of the largest or oldest trees of the species located in the County; or

7. If it is a tree, landscape, or other natural land feature, it has historical significance due to an association with an historic event, person, site, street, or structure, or because it is a defining or significant outstanding feature of a neighborhood.

Historic Districts

Property less than 50 years of age may be designated as a landmark if it meets one or more of the criteria listed above and exhibits exceptional importance.

A geographic area, including a noncontiguous grouping of related properties, may be designated as an historic district if all of the following requirements are met:

1. More than 50 percent of owners in the proposed district consent to the designation;
2. The proposed district satisfies one or more of criteria 1 through 5; and
3. The proposed district exhibits either a concentration of historic, scenic, or sites containing common character-defining features, which contribute to each other and are unified aesthetically by plan, physical development, or architectural quality; or significant geographical patterns, associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of parks or community planning.

City of Irwindale General Plan

The Resource Management Element focuses on four key issue areas: cultural resources (historic and archaeological), ecological resources (plant and animal life), natural resources (air, water, and minerals), and open space resources used for recreation. The Resource Management Element Plan of the City's General Plan provides the following goals and policies for the treatment of cultural resources:

Issue Area – Resource Preservation: The City of Irwindale will maintain and preserve those natural and man-made amenities that contribute to the City's livability.

Resource Management Element Policy 8. The City will identify and preserve those sites/buildings that are important to the community for the benefit of the future generations that will reside or work in the City.

Resource Management Element Policy 10. The City of Irwindale will continue to cooperate with surrounding cities in the formulation and implementation of regional resource management plans and programs.

Resource Management Element Programs: The following programs will be effective in implementing the policies contained in this Element.

Cultural Awareness. A cornerstone of this program will be the identification of a site/location that may be used for the storage and collection of artifacts, photographs, books, and displays. The City will cooperate with local organizations (such as the local historical society, Chamber of Commerce, etc.) and individuals to acquire resource materials concerning local history and culture. These materials include books, photographs, artifacts, furniture, etc., that may be displayed in a future City museum. The City will continue to support cultural resource conservation and preservation efforts in Irwindale.

Cultural Resource Management. Should archaeological or paleontological resources be encountered during excavation and grading activities, all work would cease until appropriate salvage measures are established. Appendix K of the California Environmental Quality Act (CEQA) Guidelines shall be followed for excavation monitoring and salvage work that may be necessary. Salvage and preservation efforts will be undertaken pursuant to Appendix K requirements outlined in CEQA.

Environmental Review. The City shall continue to evaluate the environmental impacts of new development and identify applicable mitigation measures prior to development approval, as required by the California Environmental Quality Act (CEQA). Environmental review shall be provided for those projects that will have a potential to adversely affect the environment. Issue areas that will be addressed in the environmental analysis related to resource issues include: air quality, water and hydrology, plant life, animal life, natural resources, energy, aesthetics, recreation, and cultural resources. In compliance with CEQA, the City shall also assign responsibilities for the verification of the implementation of any mitigation measures.

Historic Building Code. The City will investigate the feasibility of adopting alternate building code standards for historic structures, as authorized by the State Historical Building Code. The initial step will require City staff to amend the development code to include provisions for the maintenance, rehabilitation, and preservation of historic structures. Potential candidates include those historic resources described herein.

4.4.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G questions regarding cultural resources, a project would have a significant impact if the project would:

Threshold CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

Threshold CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or

Threshold CUL-3: Disturb any human remains, including those interred outside of formal cemeteries.

Methodology

SCCIC Records Search

A records search for the City was submitted on July 28, 2023, to the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University at Fullerton. The records search included a review of all recorded cultural resources (archaeological and historic architectural) and previous studies within the Project Area and a 0.5-mile radius. The results of the SCCIC cultural resources records search indicated that a total of 91 cultural

resource studies have been conducted within the one-half mile radius of the Project Area. Of these 91 studies, 42 have been conducted within the city's limits (Project Area). The results also indicated that a total of 27 cultural resources have been recorded within the one-half mile radius of the City. Of the 27 cultural resources previously recorded, 15 are located the city's limits (Project Area) (see **Table 4.4-1, *Previously Recorded Cultural Resources***). The 15 resources consist of 4 historic archaeological sites and 11 historic architectural resources.

Sacred Lands File Search

The Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on July 28, 2023, to request a search of the SLF. The NAHC responded on August 25, 2023, indicating that the results of the SLF search were positive and to contact the Gabrieleño Band of Mission Indians – Kizh Nation.

Review of Historic Topographic Maps and Aerial Photographs

Historic topographic maps and aerial photographs were examined to provide historical information about land uses of the city and to contribute to an assessment of the Project Area's archaeological sensitivity, specifically at the 5 identified Housing Sites, including Allen Drive, 12881 Ramona Boulevard, 13201 Ramona Boulevard, the Gold Line Site and the Irwindale/Padilla Site. Topographic maps reviewed included the following for each potential housing site - Site 1: 1894 Pomona 15-minute quadrangle, 1927 Puente 7.5-minute quadrangle, 1955 Baldwin Park 15-minute quadrangle; Sites 2 and 3: 1897 Pomona 15-minute quadrangle, 1927 Puente 7.5-minute quadrangle, 1955 Baldwin Park 7.5-minute quadrangle; Site 4: 1927 Puente 7.5-minute quadrangle; and Sites 5, 6 and 7: 1897 Pomona 15-minute quadrangle. Historic aerial photographs were available for the years of 1948, 1955, 1964, 1972, 1976, 1979, 1980, 1987, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, and 2003.³⁰

³⁰ NETROnline. 2024. Historic Aerials: Historic aerials for the years of 1948 to 2003 [database search].

**TABLE 4.4-1
PREVIOUSLY RECORDED CULTURAL RESOURCES**

Primary # (P-19-)	Permanent Trinomial (CA-LAN-)	Resource Description	Date of Construction	Dates Recorded	CRHR Eligibility	Overlaps Within City Limits or Outside of City Limits in Buffer	Overlaps with Housing Site Under Consideration
001368	1368H	Historic Site: Refuse scatter		1988	Unknown	Overlaps Within City Limits	No Overlap
002207	002207H	Historic Site: Concrete footings and historic artifacts		1994	Unknown	Overlaps Within City Limits	No Overlap
003117	003117H	Historic Site: Refuse scatter		2010	Unknown	Overlaps Within City Limits	No Overlap
003118	003118H	Historic Site: Refuse scatter		2010	Unknown	Overlaps Within City Limits	No Overlap
004119	004119H	Historic Built Environment: SCE TRTP Transmission Line and Historic Refuse scatter	c. 1914-1945	2010	Unknown	Overlaps Within City Limits	No Overlap
167222		Historic Structure: Former Baldwin Park Civic Center/ Central School, 14403 Pacific Avenue, Baldwin Hills	c. 1910	1978	Unknown	Outside of City Limits in Buffer	No Overlap
187085		Historic Structure, Other: Mojave Road	1859, road established, c.1960s rail tracks built	1989 2014	Unknown	Overlaps Within City Limits	No Overlap
187977		Historic Structure: Foxdale Bethany Baptist Church complex, 763 North Sunset Avenue, West Covina	Various: 1940 to 1966	2005	Not Eligible, 6Y	Outside of City Limits in Buffer	No Overlap
188782		Historic Structure: Single-family residence, 1806 S. Mountain Avenue, Duarte	c. 1948	2010	Not Eligible, 6Z	Outside of City Limits in Buffer	No Overlap
188783		Historic Structure: Single-family residence, 1812 S. Mountain Ave, Duarte	c. 1948-1952	2010	Not Eligible, 6Z	Outside of City Limits in Buffer	No Overlap
188983		Historic Structure, Element of district		1999, 2008, 2013, 2018 ,2020	Unknown	Overlaps Within City Limits	No Overlap
189104		Historic Structure: Santa Fe Bridge, San Gabriel River at Foothill Blvd., Irwindale	1903	1988, 2004	Not Eligible, 6Z pending SHPO concurrence	Overlaps Within City Limits	No Overlap
189106		Historic Structure: AT & SF Railroad bridge, Monrovia	1941	2004	Not Eligible, 6Z pending SHPO concurrence	Outside of City Limits in Buffer	No Overlap
189172		Historic Structure: Single-family residence, 1558 Three Ranch Road, Duarte	1949	2004	Not Eligible, 6Z pending SHPO concurrence	Outside of City Limits in Buffer	No Overlap

Primary # (P-19-)	Permanent Trinomial (CA-LAN-)	Resource Description	Date of Construction	Dates Recorded	CRHR Eligibility	Overlaps Within City Limits or Outside of City Limits in Buffer	Overlaps with Housing Site Under Consideration
189173		Historic Structure: Single-family residence, 1552 Three Ranch Road, Duarte	1949	2004	Not Eligible, 6Z pending SHPO concurrence	Outside of City Limits in Buffer	No Overlap
189202		Historic Structure: Single-family residence, 1500 Duarte Road, Duarte	1926	2004	Appears Eligible, 3 pending SHPO concurrence	Outside of City Limits in Buffer	No Overlap
189203		Historic Structure: Temple Beth Hatikvah, 1500 Duarte Road, Duarte	1939	2004	Appears Eligible, 3 pending SHPO concurrence	Outside of City Limits in Buffer	No Overlap
190065		Historic Structure: Church of the Annunciation, 1307 E. Longden Avenue, Arcadia	c. 1950	2012	Not Eligible	Outside of City Limits in Buffer	No Overlap
190504		Historic Structure: SCE Hondo-Amador-Jose-Mesa-Narrows transmission line	1951	2010, 2018	Not Eligible, 6Z	Overlaps Within City Limits	Overlaps with Housing Site (2 and 4)
190506		Historic Structure: SCE Rio Hondo-Bradbury transmission line	1951	2010	Not Eligible, 6Z	Overlaps Within City Limits	No Overlap
190510		Historic Structure: San Gabriel River Levee, Arcadia-El Monte-Irwindale Span	c. 1952-1969	2010	7N, needs to be reevaluated	Overlaps Within City Limits	No Overlap
190992		Historic Structure: Foothill Blvd. Bridge, Irwindale	c. 1923/1930	1988	Unknown	Overlaps Within City Limits	No Overlap
190993		Historic Structure: Pacific Electric Bridge (RS3)	1907, 1938	1988	Unknown	Outside of City Limits in Buffer	No Overlap
192162		Historic Structure: Single-family residence, 1610 Mayflower Avenue, Arcadia	1947	2014	Unknown	Outside of City Limits in Buffer	No Overlap
192471		Historic Structure: Modernist office building, 5010 Azusa Canyon Road, Irwindale	1963	2018	Not Eligible, 6Z	Overlaps Within City Limits	No Overlap
192581		Historic Structure: SCE Antelope-Mesa transmission line	1949	2010, 2010, 2014 2017,2018, 2019	Not Eligible, 6Z	Overlaps Within City Limits	No Overlap
192850		Historic Structure: Santa Fe Dam/ Flood Control Basin	c. 1941-1949	2015, 2020, 2021	Appears Eligible	Overlaps Within City Limits	No Overlap

Potential Housing Site 1: Allen Drive

The 9.885-acre Site 1 sits in the City's southeastern extent. Review of the 1897 topographic map indicates the presence of roadways to the north (present-day Arrow Highway), east (present-day N. Vicent Avenue), and west (present-day Allen Drive) of Site 1. A topographic map from 1925 indicates the presence of a small structure in the northeastern extent of the site which is no longer extant. A 1948 historic aerial indicates grading activities in the central and southern portions of Site 1, with a grouping of small structures to the north, and what appeared to be a farmstead in the northeast. By the 1955 topographic map, a gravel pit appears on Site 1. Los Angeles County Assessor's Portal indicates that a series of 1-story light industrial buildings were constructed in the northern extent of the site in 1959 which were visible by the 1964 historic aerial photograph. By 1967, Irwindale Park appeared on the topographic map, in the general location of the Merwin School.³¹

Potential Housing Site 2: 12881 Ramona Boulevard

The 1.185-acre Site 2 sits in the City's southwestern extent. The San Gabriel Wash (later referred to as the San Gabriel River) appeared on the 1897 topographic map, located to the west of Site 2. A 1927 topographic map indicates the presence of a Pacific Railroad line running along the present-day Ramona Boulevard, located south of Site 2. The earliest historic aerial from 1948 indicates the development of a single-family neighborhood to the immediate south of Site 2, and a golf course at what would become Site 2. According to a 1955 topographic map, it appears that a parallel electric car line was running along the Pacific Railroad line. Located to the north of Site 2 also in the 1955 topographic map, appeared Lake Shangri La surrounding a gravel pit. Several adjacent automobile roads were present or under construction at this time. An aerial photograph from 1987 indicates that the land surrounding and including Site 2 was graded, with roads constructed for the development of 1–3 story commercial offices, warehouses, and light manufacturing buildings. Construction continued over the course of the 1992, 1993, 1994, 1995, 1996, 1997, 1998, and 1999 aerial photographs, with the area appearing to be fully constructed by the 2000 aerial photograph. Site 2, a 2-story light manufacturing building appears to have been constructed between 1993 and 1994. Select infill continued in the vicinity through to 2003.

Potential Housing Site 3: 13201 Ramona Boulevard

The 4.308-acre Site 3 sits in the City's southwestern extent. A 1927 topographic map indicates the presence of a Pacific Railroad line running along the present-day Ramona Boulevard, located south of Site 3. The earliest historic aerial from 1948 indicates the development of a single-family neighborhood to the immediate south of Site 3 and a golf course at what would become Site 3. Between 1980 and 1987 historic aerial photographs, initial 1-story self-storage units and associated roadways appeared at Site 3. Development of Site 3 continued during 1992 and 1993, during which time a roundabout to the west and additional storage units, and RV camper parking was visible on historic aerial photographs, with additional construction continuing through to 2003. Site 3 is currently occupied by the "US Storage Centers: RV/Self Storage" business.

Potential Housing Site 4: Gold Line Reliance II Site

The 89.6-acre Site 4 sits in the City's northeastern extent. Review of the 1897 topographic map indicates that the Atchison, Topeka and Santa Fe Railway ran south of Site 4, with what would become Irwindale

³¹ Per information from Marilyn Simpson, Community Development Director, the Allen Drive Site was formerly the Manning Pit, which has been remediated. Filling of the Site was completed in 2019 and the Site is currently owned by the Irwindale Housing Authority.

Avenue to the site's immediate east. The Foothill Freeway (I-210) was constructed in 1964, generally along the Santa Fe Railway line, to the south of Site 4. The site appeared to be undeveloped by the 1948 historic aerial photograph, through to about the mid-1970s. The site operated as a quarry, opening in 1972 and operating under the name "Reliance II Quarry."³² The 1977 and 1979 historic aerial photographs indicate extensive grading activities at the site by this period. The quarry ceased operation around 1988 and was later used as an inert debris landfill, known as "Reliance II Landfill."³³ The property appears to have served as the Irwindale Landfill through the mid-2010s, and recent landfill activities were expected to be completed by 2021.^{34 35}

Potential Housing Site 5: Irwindale/Padilla Site

The 19.8-acre Site 5 sits in the City's northeastern extent. Review of the 1897 topographic map indicates that the Atchison, Topeka and Santa Fe Railway ran along the northern extent of Site 5, with what would become Irwindale Avenue to the site's immediate west, and with what would become Adelane Street to the site's immediate south. A 1948 historic aerial photograph indicates that Site 5 was largely undeveloped with limited small residential and/or agricultural buildings in the general vicinity. The Foothill Freeway (I-210) was constructed in 1964, generally along the Santa Fe Railway line, to the immediate north of Site 5. Mid-sized 1- and 2-story warehouse and light industrial use appeared on the property by the 1964 historic aerial photograph. By 1977, several additional larger-scaled 1- and 2-story industrial buildings appeared on Site 5, along with landscaping along Avenida Padilla at the northern extent of the site. Roughly 10 years later in 1987, the site appeared to be fully developed similar to how it appears today.

Project Impact Analysis

Adversely Affect Significance of a Historical Resource

Threshold CUL-1: The Project would have a significant impact if future development allowed by the General Plan Update would cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

Impact CUL-1: The Project would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Impacts to historic resources would be significant and unavoidable.

Future development proposals initiated under the proposed Project that include construction, demolition, or alteration of buildings/structures/objects/landscape features (hereafter referred to as "historic resources" or "properties") have the potential to cause a substantial adverse change to historical resources as defined by CEQA Guidelines Section 15064.5. Anticipated development under the proposed Project and redevelopment or revitalization of underutilized properties could result in a substantial adverse change in the significance of a historical resource through physical demolition, destruction, relocation, or alteration of the resource. New construction through infill development on vacant property could result in a substantial

³² City of Irwindale. 2017. *Reliance II Specific Plan*. September 2017.

³³ City of Irwindale. 2017. *Reliance II Specific Plan*. September 2017.

³⁴ City of Irwindale. 2017. *Reliance II Specific Plan*. September 2017.

³⁵ Per information from Marilyn Simpson, Community Development Director, reclamation of the Gold Line Reliance II Site was completed in 2021. The Reliance II Specific Plan was adopted by an Initiative Measure in 2017. The specific plan allows for the development of a business park.

adverse change in the significance of a historical resource through alteration of the resource's immediate surroundings. The CEQA Guidelines note that generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties is considered as mitigated to a level of less than significant impact on the historical resource. Projects that propose alteration of a historical resource and that do not adhere to these standards have the potential to result in a substantial adverse change in the significance of a historical resource. Other projects that propose demolition or alteration of, or construction adjacent to, existing historic resources over 45 years in age (the California Office of Historic Preservation's age threshold for consideration as historical resources), could also result in a substantial adverse change in the significance of a historical resource. Changes in the setting of historic buildings and structures can result from the introduction of new visible features, significant landscape changes, or other alterations that change the historic integrity of the setting of a significant resource.

The results of the SCCIC cultural resources records search indicated that a total of 91 cultural resource studies have been conducted within the one-half mile radius of the Housing Sites. Of these 91 studies, 42 have been conducted within the city's limits (Project Area). The results also indicated that a total of 27 cultural resources have been recorded within the one-half mile radius of the city. Of the 27 cultural resources previously recorded, 15 are located within the city's limits (Project Area) (see Table 4.4-1, *Previously Recorded Cultural Resources*). The 15 resources consist of 4 historic archaeological sites and 11 historic architectural resources.

The SLF records search revealed indicating that the results of the SLF search were positive and to contact the Gabrieleño Band of Mission Indians – Kizh Nation. Any property that is or becomes of historic age may be a potential historical resource. A review of historic aerials indicates that there are numerous properties within the city that are more than 45 years in age. Any project that proposes the demolition, destruction, relocation, or alteration of property more than 45 years of age could result in a significant impact on historical resources.

Mitigation is required to ensure that historical resources are properly identified and that impacts on any identified historical resources are reduced. However, impacts on historical resources that are demolished or altered in an adverse manner such that they are no longer able to convey their historical significance and such that they are no longer eligible for inclusion in the California Register typically cannot be mitigated to a level of less than significant.^{36,37}

³⁶ CEQA Guidelines Section 15126.4(b)(2) states that in some circumstances, documentation of an historical resource, by the way of narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to the point where clearly no significant effect on the environment would occur.

³⁷ In *League of Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) the appellate court found that "Documentation of the historical features of the building and exhibition of a plaque do not reasonably begin to alleviate the impacts of its destruction. A large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers. Nor, we think, are the effects of the demolition reduced to a level of insignificance by a proposed new building with unspecified design elements which may incorporate features of the original architecture into an entirely different shopping center. This is so particularly where, as here, the plans for the substitute building remain tentative and vague. We conclude that the stated mitigation measures do not reduce the effects of the demolition to less than a level of significance."

Mitigation Measures

MM CUL-1. Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and within areas that contain properties more than 45 years old, the project proponent shall retain a qualified architectural historian and, defined as meeting the Secretary of the Interior's Professional Qualification Standards for architectural history, to conduct a historic resources assessment including: a records search at the South Central Coastal Information Center; a review of pertinent archives, databases, and sources; a pedestrian field survey; recordation of all identified historic resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the assessment. All identified historic resources will be assessed for the project's potential to result in direct and/or indirect effects on those resources and any historic resource that may be affected shall be evaluated for its potential significance under national and State criteria prior to the City's approval of project plans and publication of subsequent CEQA documents. The qualified architectural historian shall provide recommendations regarding additional work, treatment, or mitigation for affected historical resources to be implemented prior to their demolition or alteration. Impacts on historical resources shall be analyzed using CEQA thresholds to determine if a project would result in a substantial adverse change in the significance of a historical resource. If a potentially significant impact would occur, the City shall require appropriate mitigation to lessen the impact to the degree feasible.

Significance After Mitigation: It is impossible to know if future development will avoid substantial adverse impacts on historical resources without information on specific future projects. As a result, it is reasonable to assume that some historical resources would be demolished or altered in an adverse manner over the lifetime of the proposed Project. Implementation of MM CUL-1 would help to reduce the severity of the impact. However, even with the implementation of this measure, this impact would remain significant and unavoidable.

Adversely Affect Significance of an Archaeological Resource

Threshold CUL-2: The Project would not have a significant impact if future development allowed by the Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA guidelines Section 15064.5.

Impact CUL-2: The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. Impacts would be less than significant.

As discussed above in Impact CUL-1, the cultural resources records search indicated that a total of 91 cultural resource studies have been conducted within the one-half mile radius of the Housing Sites. Of these 91 studies, 42 have been conducted within the Project Area. The results of the cultural resources records search also indicated that a total of 27 cultural resources have been recorded within the one-half mile radius of the city. Of the 27 cultural resources previously recorded, 15 are located within the city limits (see Table 4.4-1). The 15 resources consist of 4 historic archaeological sites and 11 historic architectural resources. Future development proposals that could occur as a result of the Project that include construction-related ground disturbance (e.g., grubbing/clearing, grading, excavation, trenching, and boring) are activities that have potential to impact, or cause a substantial adverse change to, archaeological resources. Future development that does not require ground-disturbing activities would cause no impacts on archaeological resources.

Anticipated development in the City would occur through infill development on vacant property, and through redevelopment or revitalization of underutilized properties, which could result in damage to prehistoric and historic archaeological resources as a result of construction-related ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of archaeological resources buried below the ground surface.

The NAHC SLF search for the City yielded positive results, along with a recommendation to contact the Gabrieleño Band of Mission Indians – Kizh Nation. The records search information has confirmed that archaeological resources exist within the City. As a result of all these findings, the potential for encountering archaeological resources in the City is considered significant. Significant archaeological sites are those that have the potential to contain intact deposits of artifacts, associated features, and dietary remains that could contribute to the regional prehistoric or historic record, or that may be of cultural or religious importance to Native American groups. Any project that proposes ground disturbance could result in a significant impact on archaeological resources.

Projects that identify significant archaeological resources (i.e., those resources that qualify as historical or unique archaeological resources pursuant to CEQA Guidelines Section 15064.5 and Public Resources Code Section 21083.2, respectively) and preserve them through avoidance, permanent conservation easements, capping, or incorporation into open space, would reduce impacts on archaeological resources to a level that is less than significant. If preservation in place is not feasible, projects that conduct data recovery to recover the scientifically consequential information contained in the archaeological resource would also reduce impacts to less than significant. In addition, the City's General Plan includes a policy to ensure the protection of archaeological and paleontological resources encountered during excavation and grading activities. If such resources are found during ground disturbance for a project, all activity shall cease until the find has been evaluated a qualified professional archaeologist. Finally, mitigation is required to ensure that significant archaeological resources are properly identified and that the impact on any identified significant resources is reduced.

Resource Management Element Programs of the City of Irwindale's General Plan

The Resource Management Element Plan of the City's General Plan provides programs for the management of cultural resources, and it is listed above under the City of Irwindale General Plan.

Mitigation Measures

MM CUL-2. Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and involve ground disturbance, the project proponent shall retain a qualified archaeologist, defined as meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, to conduct an archaeological resources assessment including: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the Native American Heritage Commission; a pedestrian field survey; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; an assessment of the project area's archaeological sensitivity and the potential to encounter subsurface archaeological resources and human remains; subsurface investigation to define the horizontal and vertical extents of any identified archaeological resources; and preparation of a technical report documenting the methods and results of the study. All identified archaeological resources shall be assessed for the project's potential to result in direct and/or indirect effects on those resources and any archaeological resource that cannot be avoided shall be evaluated for its potential significance prior to the City's approval of project plans. The

qualified archaeologist shall provide recommendations regarding protection of avoided resources and/or recommendations for additional work, treatment, or mitigation of significant resources that will be affected by the project.

Significance After Mitigation: The Project could result in a potentially significant impact with respect to archaeological resources during construction due to the high potential for archaeological resources to be encountered. However, implementation of MM CUL-2 would reduce this impact to a less than significant level.

Disturb Human Remains

Threshold CUL-3: The Project would have a significant impact if future development allowed by the General Plan Update would disturb any human remains, including those interred outside of formal cemeteries.

Impact CUL-3: The Project would not disturb any human remains, including those interred outside of formal cemeteries. Project impacts would be less than significant.

Impacts on human remains, including those interred outside of dedicated cemeteries, could occur as a result of future development proposals initiated under the Project that include ground disturbance (e.g., grubbing/clearing, grading, excavation, trenching, and boring), as described above under Impact CUL-2. Future development that does not require ground-disturbing activities would cause no impact on human remains.

The SLF search through the NAHC yielded positive results, the SCCIC records search did not identify prehistoric archaeological sites with burials in the city. As such, future development in the City has the potential to encounter human remains within the City during ground-disturbing activities. The treatment of human remains is regulated by California Health and Safety Code Section 7050.5 and the treatment of Native American human remains is further prescribed by Public Resources Code Section 5097.98.

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98 provides procedures in the event human remains of Native American origin are discovered during project implementation. Public Resources Code Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. Public Resources Code Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods. In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the landowner rejects the recommendation of the descendant, the landowner may, with

appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

These regulations are applicable to all projects within the City. Adherence to existing regulations would ensure that the Project's impact associated with the disturbance of human remains would be less than significant.

Resource Management Element Programs of the City of Irwindale's General Plan

The Resource Management Element Plan of the City's General Plan provides policies listed under the Resource Management Element Programs Section of the City of Irwindale General Plan listed above.

Mitigation Measures

None required.

4.4.5 Cumulative Impact Analysis

The cumulative analysis for impacts on cultural resources considers a broad regional system of which the resources are a part. The geographic context for the analysis of cumulative impacts associated with cultural resources is the Los Angeles Basin, including Los Angeles counties and San Gabriel Valley, where common patterns of prehistoric and historic development have occurred.

Historical Resources

Future development in the City and adjacent cities, including growth anticipated under the Project, could result in a substantial adverse change in the significance of historical resources, thus resulting in a potentially significant cumulative impact. There are no federally or State-designated or listed properties within the City. However, the City has not been subject to a comprehensive citywide historic resources survey and all historic-age structures are potential historical resources. Therefore, there is the possibility that growth anticipated as a result of the Project could adversely affect historical resources. The City cannot be sure that all impacts on historical resources can be mitigated to less than significant levels. Even with implementation of proposed General Plan policies, as well as applicable local, State, and federal laws and MM-CUL-1, the Project's contribution to this potentially significant cumulative impact would be cumulatively considerable.

Archaeological Resources

Future development in the City and adjacent cities, including growth anticipated under the Project, could result in a substantial adverse change in the significance of cultural resources, thus resulting in a potentially significant cumulative impact. There are a total of 15 archaeological resources consisting of 4 historic archaeological sites and 11 historic architectural sites within the City. Additional unrecorded archaeological resources may also exist. Future development projects allowed under the Project may involve grading, excavation, or other ground-disturbing activities, which could disturb or damage unknown archaeological resources. Consequently, the Project may have the potential to contribute to cumulative impacts on archaeological resources. However, with implementation of City's General Plan policies, as well as applicable local, State, and federal laws and MM-CUL-2, the Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.

Human Remains

Future development in the City and adjacent cities, including growth anticipated under the Project, could disturb human remains, including those interred outside of formal cemeteries, thus resulting in a potentially significant cumulative impact. All future development would be required to comply with State laws pertaining to the discovery of human remains. Accordingly, if human remains of Native American origin are discovered during project construction, the project proponent and/or the City would be required to comply with State laws relating to the disposition of Native American burials (e.g., California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98). For these reasons, the Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.

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4.5 Energy

4.5.1 Introduction

This section provides an analysis of the potential local and regional environmental impacts on energy from future development allowed under the Project, including potential impacts related to consumption of energy resources and conflict with State or local renewable energy plans. The section provides context regarding the Planning Area's existing conditions, as well as relevant federal, State, regional, and local regulations and programs.

4.5.2 Environmental Setting

Regional Context

Electricity

Electricity, a consumptive utility, is a human-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is 1 billion Wh.

Southern California Edison (SCE) provides electrical services to approximately 15 million people, 15 counties, and 180 incorporated cities (including a majority of the City of Irwindale), throughout its 50,000-square-mile service area, across central, coastal and southern California, an area bounded by Mono County to the north, Ventura County to the west, San Bernardino County to the east, and Orange County to the south.¹ SCE produces and purchases energy from a mix of conventional and renewable generating sources.

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW), coal, gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. In 2023, the SCE power system experienced a peak demand of 21,254 MW (the most recent year for which data are available).² The annual electricity sale to customers in 2023 was approximately 79,256,000 MWh.³

¹ Southern California Edison (SCE). 2024. "About Us: Who We Are" [webpage]. <https://www.sce.com/about-us/who-we-are>. Accessed February 2025.

² Southern California Edison (SCE). 2024. *2023 Annual Report*, p. 2.

³ Southern California Edison (SCE). 2022. *2021 Annual Report*, p. 2.

SCE produces and purchases its energy from a mix of conventional and renewable generating sources. **Table 4.5-1, *Electric Power Mix Delivered to Retail Customers in 2022***, displays the electric power mix that was delivered to retail customers for SCE compared to the statewide power mix for 2022, the most recent year for which data is available.

**TABLE 4.5-1
ELECTRIC POWER MIX DELIVERED TO RETAIL CUSTOMERS IN 2022**

Energy Resource	2022 SCE Power Mix	2022 SCE Green Rate 50% Option	2022 SCE Green Rate 100% Option	2022 Statewide Power Mix (for comparison) ^a
Eligible Renewable	33.2%	66.7%	100%	35.8%
Biomass & bio-waste	0.1%	0.0%	0%	2.1%
Geothermal	5.7%	2.9%	0%	4.7%
Small hydroelectric	0.5%	0.3%	0%	1.1%
Solar	17.0%	58.6%	100%	17.0%
Wind	9.8%	4.9%	0%	10.8%
Coal	0%	0%	0%	2.1%
Large Hydroelectric	3.4%	1.7%	0%	9.2%
Natural Gas	24.7%	12.3%	0%	36.4%
Nuclear	8.3%	4.2%	0%	9.2%
Other	0.1%	0%	0%	0.1%
Unspecified sources of power^b	30.3%	15.1%	0%	7.1%
Total	100%^c	100%	100%	100%^c

NOTES:

- a. Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year. The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.
- b. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.
- c. Totals may not add up exactly due to rounding.

SOURCES: Southern California Edison (SCE). n.d. 2022 Power Content Label. Accessed February 2025.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs but relies upon out-of-state imports for nearly 90 percent of its natural gas supply.⁴ A majority of natural gas consumed in California is for electricity generation (45 percent), along with the industrial (25 percent), residential (21 percent), and commercial (9 percent) sectors.⁵ Among energy commodities consumed in

⁴ California Energy Commission (CEC). 2024. "Supply and Demand of Natural Gas in California" [webpage]. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>. Accessed February 2025.

⁵ California Energy Commission (CEC). 2024. "Supply and Demand of Natural Gas in California" [webpage]. <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>. Accessed February 2025.

California, natural gas accounts for approximately 31 percent of total energy consumption.⁶ Natural gas is typically measured in terms of cubic feet (cf) or British thermal units (BTU).

Natural gas is provided to the City by Southern California Gas (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.1 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout Central and Southern California, from the city of Visalia to the Mexican border.⁷

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.⁸ The traditional, southwestern U.S. sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.⁹ The annual natural gas sale to customers in 2023 was approximately 886,220 million cf.¹⁰¹¹

Transportation Energy

According to the California Energy Commission (CEC), transportation and fuel production accounted for approximately 31 percent of California's total energy consumption in 2022 based on a carbon dioxide equivalent basis.¹² In 2023 (the most recent year for which data are available), California consumed 13.6 billion gallons of gasoline and 3.6 billion gallons of diesel fuel.¹³¹⁴ Petroleum-based fuels account for 89 percent of California's transportation fuel use.¹⁵ California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gases (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Additionally, California is transitioning to zero-carbon, renewable sources of power while rapidly electrifying large segments of the economy. The CEC predicts that the demand for gasoline and transportation fossil fuels in general will continue to decline as the sales of electric vehicles increases. New zero-emission vehicle sales grew from less than 8 percent in 2020 to more than 25 percent in the third

⁶ California Energy Commission (CEC). 2024. *Adopted 2023 Integrated Energy Policy Report with Errata*. February 14, 2024, p. A-1.

⁷ Southern California Gas Company (SoCalGas). 2024. "Company Profile" [webpage]. <https://www.socalgas.com/about-us/company-profile>. Accessed February 2025.

⁸ California Gas and Electric Utilities. 2023. *2022 California Gas Report*, p. 135.

⁹ California Gas and Electric Utilities. 2023. *2022 California Gas Report*, p. 135.

¹⁰ Daily natural gas usage in 2023 was 2,428 million cf, annual value derived by multiplying daily values by 365 days.

¹¹ California Gas and Electric Utilities. 2024. *2024 California Gas Report*, p. 30.

¹² California Energy Commission (CEC). 2024. *Adopted 2023 Integrated Energy Policy Report with Errata*. February 14, 2024, p.A-1.

¹³ Diesel is adjusted to account for retail (63.6%) and non-retail (36.4%) diesel sales.

¹⁴ California Energy Commission (CEC). 2024. "2023 California Annual Retail Fuel Outlet Report (CEC-A15) Results" [Excel spreadsheet data]. Energy Assessment Division. <https://www.energy.ca.gov/media/3874>. Accessed February 2025.

¹⁵ California Energy Commission (CEC). 2021. *2021–2023 Investment Plan Update for the Clean Transportation Program*. December 17, 2021.

quarter of 2023.¹⁶ According to fuel sales data from the CEC, fuel consumption in Los Angeles County (County) was approximately 3.0 billion gallons of gasoline and 0.5 billion gallons of diesel fuel¹⁷ in 2023.¹⁸

Existing Conditions

The City of Irwindale is a mix of residential communities, commercial/retail shopping centers, manufacturing, and industrial developments, including mining and mine reclamation. Proposed future development under the Project would allow for construction of 124 new dwelling units on five separate development sites within the City. Two of these five sites are vacant while the other three sites are developed with industrial/business park uses. Everyday operational activities at these residences and businesses result in the energy demand associated with building electricity and natural gas consumption and transportation fuel consumption. However, some of the on-site buildings on the developed sites have recent periods of vacancy and/or have insignificant operational activity. Therefore, for the purposes of this analysis, existing operational energy consumption was not calculated and the Project's energy consumption would be considered net new.

4.5.3 Regulatory Framework

This section provides the relevant federal, State, regional, and local regulations applicable to the Project.

Federal

Energy Policy Act of 1992

The Energy Policy Act set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. It established regulations requiring certain federal, State, and alternative fuel provider fleets to build an inventory of alternative fuel vehicles. It was amended several times, including via the Energy Conservation and Reauthorization Act of 1998 and via the Energy Policy Act in 2005, which emphasized alternative fuel use and infrastructure development.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy. The Renewable Fuel Standard (RFS) program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States.

¹⁶ California Energy Commission (CEC). 2024. *Adopted 2023 Integrated Energy Policy Report with Errata*. February 14, 2024, p.A-1.

¹⁷ Diesel is adjusted to account for retail (63.6%) and non-retail (36.4%) diesel sales.

¹⁸ California Energy Commission (CEC). 2024. "2023 California Annual Retail Fuel Outlet Report (CEC-A15) Results" [Excel spreadsheet data]. Energy Assessment Division. <https://www.energy.ca.gov/media/3874>. Accessed February 2025.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting mandatory Renewable Fuel Standards (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the United States Environmental Protection Agency (USEPA) and the National Highway Traffic Safety Administration (NHTSA) actions described above (refer to United States Department of Transportation, United States Department of Energy, and United States Environmental Protection Agency, above) (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”¹⁹

Federal Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 (EPCA) is a United States Act of Congress that responded to the 1973 oil crisis by creating a comprehensive approach to federal energy policy. The primary goals of EPCA are to increase energy production and supply, reduce energy demand, provide energy efficiency, and give the executive branch additional powers to respond to disruptions in energy supply. Most notably, EPCA established the Strategic Petroleum Reserve, the Energy Conservation Program for Consumer Products, and Corporate Average Fuel Economy (CAFE) regulations.

United States Department of Transportation, United States Department of Energy, and United States Environmental Protection Agency

On the federal level, the United States Department of Transportation (USDOT), United States Department of Energy (USDOE), and United States Environmental Protection Agency (USEPA) are three agencies with substantial influence over energy policies related to transportation fuels consumption. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks through funding energy-related research and development projects, and through funding for transportation infrastructure projects.

Established by the United States Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards (49 CFR Parts 531 and 533) reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA), an agency within the USDOT, and

¹⁹ A “green job,” as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

the USEPA jointly administered the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given to: (1) technological feasibility; (2) economic practicality; (3) effects of other standards on fuel economy; and (4) need for the nation to conserve energy. In 2012, NHTSA established final passenger car and light truck CAFE standards for model years 2017 through 2021, which the agency projects will require in model year 2021, on average, a combined fleet-wide fuel economy of 40.3 to 41.0 miles per gallons (mpg). Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.²⁰ USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.²¹

In March 2020, USDOT and USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026.²² These standards set a combined fleet wide average of 36.9 to 37 miles per gallon (mpg) for the model years affected.²³ On January 20, 2021, President Biden issued Executive Order 13990 “Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis” directing USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the SAFE Vehicles Rule for Model Years 2021–2026. In February 2022, USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.²⁴ This final rule revises current GHG standards beginning for vehicles in model year 2023 through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles.²⁵

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for carbon dioxide (CO₂) emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles.

²⁰ United States Environmental Protection Agency (USEPA). n.d. Detailed Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles.

²¹ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2016. “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2” [Final rule]. *Federal Register* 81(206):73478. October 25, 2016.

²² United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2020. “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks” [Final rule]. *Federal Register* 85(84):24174. April 30, 2020.

²³ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2020. “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks” [Final rule]. *Federal Register* 85(84):24174. April 30, 2020.

²⁴ United States Environmental Protection Agency (USEPA). 2021. “Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards” [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

²⁵ United States Environmental Protection Agency (USEPA). 2021. “Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards” [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

According to USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines. Building on the first phase of standards, in August 2016, USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The Phase 2 standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons.

On July 28, 2023, the NHTSA proposed new CAFE standards for passenger cars and light trucks for model years 2027 through 2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans for model years 2030 through 2035. The proposed rule would require an industry fleet-wide average of approximately 58 mpg for passenger cars and light trucks in model year 2032, by increasing fuel economy by two percent year over year for passenger cars and four percent year over year for light trucks.²⁶ For heavy-duty pickup trucks and vans, the proposed rule would increase fuel efficiency by 10 percent year over year.²⁷

State

California Building Standards Code (Title 24, Parts 6 and 11)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Building Energy Efficiency Standards (Title 24 standards) are typically updated every three years. The 2022 Title 24 standards became effective January 1, 2023. The 2022 Title 24 standards include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2019 national standards.²⁸ The 2025 Title 24 standards become effective January 1, 2026 and focuses on expanding the use of heat pumps for space conditioning and water heating in newly constructed single-family, multifamily, and select nonresidential buildings and allowing for flexibility for alternative but equally efficient approaches; updating photovoltaic and battery energy storage system standards for high-rise multifamily and nonresidential buildings to achieve cost effective installations; updating space conditioning system control standards for nonresidential buildings; and updating ventilation requirements in multifamily buildings to improve indoor air quality.²⁹

The California Green Building Standards Code (CCR, Title 24, Part 11) is commonly referred to as the CALGreen Code. The 2022 CALGreen Code became effective on January 1, 2023 and includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation; material conservation and resource efficiency; and environmental quality.³⁰ For example,

²⁶ National Highway Traffic Safety Administration (NHTSA). 2024. "Corporate Average Fuel Economy" [webpage]. <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed February 2025.

²⁷ National Highway Traffic Safety Administration (NHTSA). 2024. "Corporate Average Fuel Economy" [webpage]. <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed February 2025.

²⁸ California Energy Commission (CEC). 2022. *2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*. Report No. CEC-400-2022-010-CMF. August 2022.

²⁹ CEC, 2025. California Energy Code, December 2024. https://www.energy.ca.gov/sites/default/files/2024-12/2025_Energy_Code_Summary_ADA.pdf. Accessed February 2025.

³⁰ California Building Standards Commission. 2022. *Guide to the 2022 California Green Building Standards Code Nonresidential*. July 2022.

the 2022 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The 2025 CALGreen Code becomes effective on January 1, 2026 and includes performance targets that focus on more efficient hot water and HVAC systems for single-family homes, outdoor lighting standards, a new section for alterations to existing buildings, new standards for altered space conditioning systems, and new standards for altered pool and/or spa heating.³¹ Refer to Section 4.7, *Greenhouse Gas Emissions*, of this PEIR, for additional details regarding these standards.

California Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations (CCR, Title 20, Sections 1601 through 1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

Renewables Portfolio Standard

The State has adopted regulations to increase the proportion of electricity from renewable sources. In 2008, Executive Order S-14-08 expanded the State's Renewable Portfolio Standard (RPS) goal to 33 percent renewable power by 2020. In 2009, Executive Order S-21-09 directed CARB (under its Assembly Bill [AB] 32 authority) to enact regulations to help the State meet the 2020 goal of 33 percent renewable energy. The 33 percent by 2020 RPS goal was codified with the passage of Senate Bill (SB) X1-2. This new RPS applied to all electricity retailers in the State, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. SB 350 (Chapter 547, Statutes of 2015) further increased the RPS to 50 percent by 2030, including interim targets of 40 percent by 2024 and 45 percent by 2027. In 2018, SB 100 further increased California's RPS and requires retail sellers and local publicly-owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and requires that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

California Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323; SB 1389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code Section 25301(a)). The Integrated Energy Policy Report provides the results of the CEC's assessments related to energy sector trends, building decarbonization and energy efficiency, zero-emissions vehicles, energy equity, climate change adaptation,

³¹ CEC, 2025 California Energy Code, December 2024. https://www.energy.ca.gov/sites/default/files/2024-12/2025_Energy_Code_Summary_ADA.pdf. Accessed February 2025.

electricity reliability in the Southern California region, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts.

California Assembly Bill 1493 (AB 1493, Pavley)

In response to the transportation sector's large share of California's CO₂ emissions, AB 1493 (commonly referred to as the Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emission standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025.^{32,33} As discussed above, in September 2019, USEPA published the SAFE Vehicles Rule in the federal register (Federal Register, Vol. 84, No. 188, Friday, September 27, 2019, Rules and Regulations, Sections 51310–51363) that maintains the vehicle miles per gallon standards applicable in model year 2020 for model years 2021 through 2026. In February 2022, USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.³⁴ This final rule revises current GHG standards beginning for vehicles in model year 2023 and through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles.³⁵

California Air Resources Board

Advanced Clean Car Program

In 2012, CARB adopted the Advanced Clean Cars emissions-control program, which is closely associated with the emissions standards for passenger vehicles and light-duty trucks discussed above.³⁶ The program requires an increase in the number of zero-emissions vehicle (ZEV) models for years 2015 through 2025 to control smog, soot, and GHG emissions. By 2025, ZEVs must be 22 percent of large volume manufacturers overall production.³⁷ This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. Implementation of the ZEV and PHEV regulations reduce transportation fuel consumption by increasing the number of vehicles that are partially or fully electric-powered. Effective November 26, 2019, the federal

³² California Air Resources Board (CARB). 2024. "California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)" [webpage]. <https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley>. Accessed February 2025.

³³ United States Environmental Protection Agency (USEPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks. Report No. EPA-420-F-12-051. August 2012.

³⁴ United States Environmental Protection Agency (USEPA). 2021. "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards" [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

³⁵ United States Environmental Protection Agency (USEPA). 2021. "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards" [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

³⁶ California Air Resources Board (CARB). 2024. "California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)" [webpage]. <https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley>. Accessed February 2025.

³⁷ California Air Resources Board (CARB). 2024. "Current Zero-Emissions Vehicle Regulation" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/zev-program/current-zero-emission-vehicle-regulation>. Accessed February 2025.

SAFE Vehicles Rule Part One: One National Program withdraws the California waiver for the GHG and ZEV programs under section 209 of the Clean Air Act, which revokes California's authority to implement the Advanced Clean Cars and ZEV mandates. On March 9, 2022, USEPA issued a notice of decision to reinstate California's Clean Air Act waiver for its Advanced Clean Car regulations.³⁸

In addition, Governor Gavin Newsom signed an executive order (Executive Order No. N-79-20) on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles. In accordance with the Executive Order, CARB is developing a 2020 Mobile Source Strategy, a comprehensive analysis that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The strategies will provide important information for numerous regulations and incentive programs going forward by conveying what is necessary to address the aggressive emission reduction requirements.

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program. The ACC II regulations will focus on post-2025 model year light-duty vehicles, as requirements are already in place for new vehicles through the 2025 model year. The regulation applies to light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035 and amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards.³⁹

Advanced Clean Trucks Program

The Advanced Clean Trucks (ACT) regulations were approved on June 25, 2020, and require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, "Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, SB 350, and AB 32."⁴⁰

The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

³⁸ United States Environmental Protection Agency (USEPA). 2022. "California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption" [Notice of decision]. *Federal Register* 84(49):14332. March 14, 2022.

³⁹ California Air Resources Board (CARB). 2024. "Advanced Clean Cars II" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed February 2025.

⁴⁰ California Air Resources Board (CARB). 2024. "Advanced Clean Trucks Program" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks/about>. Accessed February 2025.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 CCR Section 2485 and Title 17 CCR Section 93115). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles

Because off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of an older fleet that do not have emission controls. In 2007, CARB approved the “In-Use Off-Road Diesel Fueled Fleets Regulation” to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation sets an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. It also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. Revised in October 2016, the regulation enforced off-road restrictions on fleets adding vehicles with older tier engines and started enforcing beginning July 1, 2014. By each annual compliance deadline, a fleet must demonstrate that it has either met the fleet average target for that year or has completed the Best Available Control Technology requirements (BACT). Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028. While the goal of this regulation is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from the use of more fuel-efficient engines.

Sustainable Communities Strategy

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG, was adopted by the State on September 30, 2008. Under SB 375, CARB is required, in consultation with the State’s metropolitan planning organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for the Southern California Association of Governments (SCAG), which is the MPO for the region in which the city is located.⁴¹ Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the Low Carbon Fuel Standard regulations.

Under SB 375, the reduction target must be incorporated within each region’s Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides

⁴¹ Southern California Association of Governments (SCAG). 2023. “Greenhouse Gases” [webpage]. <https://scag.ca.gov/greenhouse-gases>. Accessed February 2025.

that local land use plans and policies (e.g., general plans and zoning codes) are not required to be consistent with either the RTP or SCS. See detailed discussion of SCAG's latest RTP/SCS below.

California Environmental Quality Act

In accordance with CEQA and CEQA Guidelines Appendix F, Energy Conservation, and to assure that energy implications are considered in project analysis and decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. CEQA Guidelines Appendix F provides a list of energy-related topics that should be analyzed in an EIR. In addition, Appendix F provides the following topics for consideration in the discussion of energy use in an EIR, to the extent the topics are applicable or relevant to the project:

- 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, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.⁴²

Regional

Southern California Association of Governments

The City of Irwindale is located within the planning jurisdiction of SCAG. SB 375 requires each Metropolitan Planning Organization (MPO) to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plan. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

For the SCAG region, the 2024–2050 RTP/SCS (Connect SoCal 2024) adopted on April 4, 2024, is the current RTP/SCS and is an update to the 2020–2045 RTP/SCS.⁴³ Connect SoCal 2024 focuses on the continued efforts of the previous RTP/SCS plans for an integrated approach in transportation and land use strategies in development of the SCAG region through horizon year 2050. Connect SoCal 2024 projects that the SCAG region will meet the GHG per capita reduction target established for the SCAG region of 19 percent by 2035. SCAG achieved the 8 percent GHG emissions reduction from 2005 levels by 2020; however, decreased travel during the COVID-19 shutdown most likely helped achievement of the 2020

⁴² Association of Environmental Professionals. 2024. *2024 CEQA California Environmental Quality Act Statutes and Guidelines*, Appendix F: Energy Conservation.

⁴³ Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

target.⁴⁴ Additionally, its implementation is projected to reduce VMT per capita for the year 2050 by 6.3 percent compared to baseline conditions. As in the 2020–2045 RTP/SCS, Connect SoCal 2024’s overall land use pattern reinforces the trend of focusing new housing and employment in the region’s Priority Development Areas (PDAs). PDAs are a development pattern that demonstrates how the region can sustainably accommodate needed housing by supporting transportation and land use strategies that achieve California’s GHG emission reduction goals. Connect SoCal 2024 strives to increase housing production, improve equity and resilience, preserve natural lands, improve public health, increase transportation safety, support the goods movement industries, and use resources more efficiently. In addition, refer to Section 4.7, *Greenhouse Gas Emissions*, of this PEIR for additional details regarding these requirements.

South Coast Air Quality Management District

As discussed in Section 4.2, *Air Quality*, of this PEIR, the South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the South Coast Air Basin (Air Basin), where the city is located, and developing rules and regulations to bring the Air Basin into attainment of the ambient air quality standards. As part of its efforts to reduce local air pollution, SCAQMD has promoted a number of programs to promote energy conservation, low-carbon fuel technologies (natural gas vehicles, electric-hybrids, hydraulic-hybrids, and battery-electric vehicles), renewable energy, VMT reduction programs, and market incentive programs.

Local

City of Irwindale Municipal Code

Title 15 – Buildings and Construction of the City’s Municipal code discusses the adopted Los Angeles County Building Code, 2023 Edition (Title 26 of the Los Angeles County Code), which incorporates and amends the 2022 California Building Code. Additionally, Title 31, 2023 Edition Green Building Standards Code, of the Los Angeles County Code, as amended and in effect on January 1, 2023 which incorporates and amends the California Green Building Standards Code, 2022 Edition (Part 11 of Title 24 of the California Code of Regulations).⁴⁵ The adopted California Building Code, as well as California Green Building Standards Code include provisions to help the City reduce its criteria pollutant emissions from buildings and construction.⁴⁶

City of Irwindale General Plan

The Irwindale General Plan⁴⁷ serves as the blueprint for future planning and development in the City and indicates the City’s vision for the future through policies and plans that are designed to shape the physical

⁴⁴ Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments’ 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

⁴⁵ City of Irwindale. 2024. Irwindale Municipal Code, Title 15: Buildings and Construction. Website last updated June 5, 2024. https://library.municode.com/ca/irwindale/codes/code_of_ordinances?nodeId=TIT15BUCO.

⁴⁶ The City of Irwindale Municipal Code was last updated in June 5, 2024. Future development under the Irwindale Housing Element and Project would have to conform with the most recent building codes and green building codes in effect at the time of construction. Currently, the applicable Los Angeles County Building Codes in effect are the 2023 California Building Code and 2023 California Green Standards Building Code.

⁴⁷ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

development of the community. The following policy in the Resource Management Element pertains to the Project.

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

The Draft Irwindale Housing Element⁴⁸ has policies and programs that will promote sustainability, energy efficiency, and a healthy community as outlined below:

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Program 31: Biannual trash and hazardous item pick-up (motor oil, paint, cleaners with acid/lye, household batteries).

Program 32: Priority water and sewer connections for affordable housing development.

City of Irwindale Active Transportation Plan

The Irwindale Active Transportation Plan (ATP)⁴⁹ will guide the development of pedestrian and bicycle infrastructure and programs in the City. The ATP ultimately supports and implements a fully integrated network accommodating all transportation modes, with a specific focus on improving pedestrian connections to key destinations citywide and seeks to make walking and bicycling in the City safe, pleasant, and convenient for all. The ATP includes primary criteria which:

- Provides direct access to key destinations in Irwindale.
- Implements recommendations in adjacent and/ or regional pedestrian and bicycle plans.
- Improves safety and access for all.
- Incorporates multi-modal infrastructure in growth areas.
- Connects to regional infrastructure (bicycle criteria only).
- Connects to bikeways in adjacent jurisdictions (bicycle criteria only).

⁴⁸ City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

⁴⁹ City of Irwindale. 2021. *City of Irwindale Active Transportation Plan*. January 2021.

4.5.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to energy if the project would:

Threshold ENG-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Threshold ENG-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Methodology

Construction

Construction of new development that could occur from the Project would have the potential to increase energy consumption through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites.

The Project is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified. Therefore, quantification of energy consumption associated with buildout cannot be specifically determined at this time. Therefore, the analysis will be based on the potential for construction energy consumption to exceed threshold values in the context of development intensity and compliance with regulatory standards.

Operation

Operation of new development that could occur from adoption of the proposed Project would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to, from, and within the city. Detailed emissions calculations are provided in Appendix D of this PEIR.

Electricity

The estimated electricity demand that would occur from new developments that could occur under the Project is analyzed relative to SCE's existing energy supplies available to serve the City. Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from operations was calculated using demand factors provided in CalEEMod. While the Title 24 standards are typically revised every three years with more stringent energy efficiency requirements, it is not known to what extent future revisions to the Title 24 standards would reduce energy demand from new buildings. Therefore, it is not possible to accurately quantify the effects of future revisions to the Title 24 standards on energy demand from new buildings. Energy usage from water demand (e.g., electricity used to supply, convey, treat, and distribute) are estimated based on the new development that could occur under the Project. The assessment also includes a discussion of the proposed Project's compliance with relevant

energy-related regulatory measures, that would minimize the amount of energy usage from new development under the Project. These measures are also discussed in Section 4.2, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*, of this PEIR.

Natural Gas

The estimated natural gas demand that would occur from new development under the Project is analyzed relative to SoCalGas' existing and planned energy supplies in 2029 (i.e., the buildout year). Natural gas demand from new development under the Project would be generated primarily by building heating and appliances. Natural gas consumption is compared to both supply and infrastructure availability.

Transportation Fuels

Energy for transportation from visitors and residents traveling to and from new development that could occur under the Project is estimated based on transportation fuel consumption factors from EMFAC along with VMT data, which considers mode and trip lengths, developed for the transportation analysis. Fuel consumption from motor vehicles is dependent on vehicle type. Thus, the factors were calculated using a representative motor vehicle fleet mix based on the CARB EMFAC2021 model and default fuel types. EMFAC2021 incorporates the SAFE Vehicles Rule as well as the Advanced Clean Truck Program. However, traffic reduction policies within the 2008 Project Infrastructure Element, to which the regional travel demand model may not be fully sensitive (such as connectivity in neighborhoods, presence of bicycle and pedestrian facilities, and transportation demand management measures), may not be fully reflected in the VMT and transportation fuel consumption estimates. Therefore, estimated mobile source transportation fuel consumption is conservatively higher. Transportation fuel consumption is compared to both supply and infrastructure availability.

Project Impact Analysis

Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources

Threshold ENG-1: The Project would have a significant impact if future development allowed by the Project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Impact Statement ENG-1: The Project would result in a less than significant impact related to the wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation.

Construction

During construction of new development that could occur from adoption of the proposed Project, energy would be consumed in the form of electricity on a limited basis for powering lights, electronic equipment, or other construction activities necessitating electrical power. Construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment, construction workers travel to and from development sites, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

Electricity

Construction electricity would be consumed, on a limited basis, to power lighting, electric equipment, and supply and convey water for dust control. During construction of new development, the electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities. When not in use, electric equipment would be powered off to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related energy use from more traditional construction-related energy such as diesel fuel. Therefore, the impact from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would generally not be supplied to support construction activities; thus, there would be no expected demand generated by future construction under the proposed Project. If natural gas is used during construction, it would be in limited amounts and on a temporary basis and would specifically be used to replace or offset diesel-fueled equipment and as such would not result in substantial on-going demand. Therefore, the impact from construction natural gas demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Transportation Energy

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.⁵⁰

Construction of new development that could occur from adoption of the proposed Project would utilize fuel-efficient equipment consistent with State and federal regulations, such as the fuel efficiency regulations in accordance with the SAFE Vehicle Rule and Advanced Clean Truck Program, which would result in more efficient use of transportation fuels (lower consumption). Construction equipment and vehicles would also be required to comply with anti-idling regulations in accordance with Section 2485 in Title 13 of the CCR, and fuel requirements in accordance with Section 93115 in Title 17 of the CCR. As such, construction of new development would comply with regulatory measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While some of these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Based on the analysis above, construction would utilize energy only for necessary on-site activities and to transport construction materials and demolition debris to, from, and within the City. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment and fuels would result in less fuel combustion and energy consumption, and thus minimize construction-related energy use. Therefore, construction of new development that could occur with the adoption of the proposed Project would not

⁵⁰ BP Global. 2021. *Statistical Review of World Energy 2021*, 70th edition.

result in the wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

Operation

During operation of new development that could occur from adoption of the proposed amendments, energy would be consumed for multiple purposes, including, but not limited to, heating, ventilation, and air conditioning; refrigeration; lighting; and the use of electronics, equipment, and appliances. Energy would also be consumed by new development under the proposed Project during operations related to water usage, solid waste disposal, and vehicle trips. **Table 4.5-2, *Estimated Operational Energy Demand***, shows estimated energy demand from electricity, natural gas, gasoline, and diesel as a result of the Project.

**TABLE 4.5-2
ESTIMATED OPERATIONAL ENERGY DEMAND¹**

Energy Type	Annual Quantity ^{2,3}
Electricity	
New Development (2029)	
Building Energy	1,410 MWh
Water Conveyance and Treatment	90 MWh
Total Electricity	1,500 MWh
Natural Gas	
New Development (2029)	
Building Energy	6,150,948 cf
Mobile Sources	534,885 cf
Total Natural Gas	6,685,833 cf
Transportation	
New Development (2029)	
Gasoline	190,978 gallons
Diesel	34,163 gallons

NOTES: MWh = megawatt-hours; cf = cubic feet

1. Detailed calculations are provided in Appendix D of this Draft PEIR.

2. Totals may not add up due to rounding of decimals.

SOURCE: ESA 2025; CalEEMod 2022; EMFAC 2021.

Electricity

Operation of new development that could occur from adoption of the proposed Project would result in demand for electricity resources including for water supply, conveyance, distribution, and treatment. The estimated operational electricity demand, including from water demand, is provided in Table 4.5-2. As shown in Table 4.5-2, the operation of new development under the proposed Project would result in an electricity demand of approximately 1,500 MWh per year.

New development under the proposed Project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance. Since the standards are updated every three years, future new development under the proposed Project would be designed to include energy saving

features to comply with future Title 24 standards and CALGreen Code requirements that are not reflected in the quantified values in Table 4.5-2, which may include greater use of energy and water efficient fixtures and fittings, energy efficient mechanical systems, light pollution reduction, site development best practices, sub metering, water efficient landscapes, recycling, and superior weather resistance and moisture management. Further, implementation of policies and programs of the Housing Element, such Policy 6 (see section 2.0, Table 2-3), in the proposed Project would reduce the electricity demand from new development in the City by promoting energy efficiency designs and strategies beyond regulatory requirements and policies for renewable energy. Therefore, operations would not result in the wasteful, inefficient, and unnecessary consumption of electricity.

For the 2029 fiscal year, SCE has an estimated annual electric sale to customers of approximately 118,170,000 MWh.⁵¹ The net increase in future electricity demand new development that could occur from the Project would represent approximately 0.001 percent of the SCE forecast network sales for 2029. Under peak conditions, the net increase of 1,500 MWh on an annual basis would generally be equivalent to a peak of 0.1 to 0.2 MW (assuming 8,760 hours or 4,380 hours per year of active electricity demand). In comparison to the SCE power grid forecasted 2029 base peak load of 23,084 MW for 2029, the net increase would represent approximately 0.000004 to 0.00001 percent of the SCE base peak load conditions. Thus, it is likely that the net increase in electricity would generally be served by existing infrastructure capacity and the impact related to electrical supply and infrastructure capacity would be less than significant.

Natural Gas

The new development that could occur from adoption of the proposed Project would result in demand for natural gas resources, as shown in Table 4.5-2. As would be the case with electricity, the new development would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. Since the standards are updated every three years, future new development with adoption of the Project would be designed to include energy saving features to comply with future Title 24 standards and CALGreen Code requirements that are not reflected in the quantified values in Table 4.5-2, which could include improvements to water heating efficiency or reduced natural gas-fueled systems in buildings. Further, implementation of policies in the proposed Project would reduce the demand for natural gas from new development in the City by promoting energy efficiency designs and strategies beyond regulatory requirements and policies for renewable energy. Therefore, operations would not result in the wasteful, inefficient, and unnecessary combustion of natural gas.

According to SoCalGas data, natural gas demand has been relatively stable over the past three years ranging from 2,443 million cubic feet (MMcf) per day or 891,695 MMcf total in 2020 to 2,428 MMcf per day or 886,220 MMcf total in 2023.⁵² Based on the estimated natural gas consumption as shown in Table 4.5-2, the net increase in future natural gas demand from new development that could occur from adoption of the proposed Project would account for approximately 0.0003 percent of forecast SoCalGas' 2029 sales. According to the 2024 California Gas Report, SoCalGas is forecasted to require 815,616 MMcf in the year 2029, the buildout year of the Project. The estimated increase in natural gas demand of 6,685,432 cf per year would account for approximately 0.0008 percent of SoCalGas' projected natural gas demand for the

⁵¹ CEC, 2024. California Energy Demand, 2023-2040. CED 2023 Baseline Forecast – Southern California Edison. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=254247&DocumentContentId=89615>. Accessed February 2025.

⁵² California Gas and Electric Utilities. 2024. *2024 California Gas Report*.

year 2029.⁵³ Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the demand for natural gas at full buildout conditions of the Project. Thus, it is likely that the net increase in natural gas would generally be served by existing infrastructure capacity and the impact related to natural gas would be less than significant.

Transportation Energy

As discussed above, transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world, and based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.⁵⁴

The estimated operational transportation fuel demand from new development that could occur from the development that would occur under the Project is provided in Table 4.5-2. As discussed previously, traffic reduction policies within the General Plan Infrastructure element may not be fully reflected in the VMT and transportation fuel consumption estimates. Therefore, estimated mobile source transportation fuel consumption is conservatively higher. The location, design, and land uses of the growth anticipated with adoption of the Project would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing residential density at vacant and infill locations and near public transit and community infrastructure. As discussed in Section 4.12, *Transportation*, of this Draft PEIR, several transit agencies provide local and regional transit service to the residents of the City of Irwindale, including Metro and Foothill Transit (refer to Section 4.12, *Transportation*, of this Draft PEIR).

As discussed in detail in Section 4.7, *Greenhouse Gas Emissions*, the Project would not conflict with the Connect SoCal 2024's goals and benefits and would not preclude attainment of its primary objectives. The Project is a Project that could result in infill projects that would develop affordable new housing in compliance with the City's 6th cycle RHNA by providing a mix of residential uses on vacant or infill sites that are well served by an existing transportation network, including public transportation options to provide an alternative to private automobiles. Therefore, the Project would not conflict with Connect SoCal 2024 or the attainment of its objectives. Additionally, the Project would meet the applicable Building Energy Efficiency Standards and CALGreen Code (Title 24, Parts 6 and 11) at the time of building permit issuance for future proposed buildings.

In addition, with the adoption of the Project, municipal solid waste would continue to provide mixed waste collection and organic recycling services as well as other programs to its residents and business community. Diversion of solid waste would reduce truck trips to landfills, which are typically located some distance away from city centers and would increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. As discussed in Section 4.14, *Utilities and Service Systems*, of this Draft PEIR, AB 341, adopted in 2012, requires that commercial enterprises that generate four cubic yards or more of solid waste and multi-family housing complexes of five units or more participate in recycling programs in order to meet California's goal to recycle 75 percent of its solid waste by 2020. SB 1383, adopted in 2016, establishes goals of 50 percent organics waste reduction by 2020 and 75 percent reduction by 2025. Regionally, the Los Angeles County Board of Supervisors adopted the Zero Waste Plan on September 13, 2022, which outlines strategies and initiatives to reduce the amount of waste going to landfills and the greenhouse gas emissions created by

⁵³ California Gas and Electric Utilities. 2024. *2024 California Gas Report*.

⁵⁴ BP Global. 2021. *Statistical Review of World Energy 2021*, 70th edition.

landfill waste (see Section 4.14, *Utilities and Service Systems*).⁵⁵ Development of future land uses, as projected in the Project, would be required to comply with federal, State, and local statutes and regulations related to solid waste. Furthermore, the policies provided in the Project regarding solid waste disposal and associated public facilities would further ensure compliance with applicable regulations. Therefore, compliance with federal, State, and local waste management and reduction statutes and regulations related to solid waste would reduce waste-related transportation energy.

Based on the above, future development under the Project would minimize operational transportation fuel demand in line with State, regional, and County goals. Therefore, the Project would not lead to wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

General Plan Policies that Address the Impact

Resource Management Element

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

Draft Housing Element

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Program 31: Biannual trash and hazardous item pick-up (motor oil, paint, cleaners with acid/lye, household batteries).

Program 32: Priority water and sewer connections for affordable housing development.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation and impacts would be less than significant.

⁵⁵ Los Angeles County Board of Supervisors, 2022. Los Angeles County Zero Waste Plan. September 13. <https://zerowaste.lacounty.gov/wp-content/uploads/sites/2/2022/08/ZWP-Final-Draft-August16-2022-WEB-1.pdf>. Accessed February 2025.

Conflict with State or Local Renewable Energy Plan

Threshold ENG-2: The Project would have a significant impact if future development allowed by the Project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Impact Statement ENG-2: The Project would result in a less than significant impact related to conflicting or obstructing a State or local plan for renewable energy or energy efficiency during construction and/or operation.

Construction

The construction of new development that could occur from the Project would utilize construction contractors who must demonstrate compliance with applicable regulations. Construction equipment would be required to comply with federal, State, and regional requirements where applicable. With respect to truck fleet operators, the EPA and NHTSA have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.⁵⁶ The EPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.⁵⁷ These regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes per occurrence and location. Additionally, CARB regulations regarding in-use off-road equipment require older, less efficient equipment to be replaced or repowered with newer, more efficient models or engines. These regulations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction of new development under the proposed Project would comply with existing energy standards and the impact would be less than significant.

Operations

The operation of new development that could occur from adoption of the Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. New development would comply with Title 24 requirements and CALGreen to reduce energy consumption by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, implementing solar-ready rooftops, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment.

⁵⁶ United States Environmental Protection Agency (USEPA). n.d. Detailed Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles.

⁵⁷ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2016. "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2" [Final rule]. *Federal Register* 81(206):73478. October 25, 2016.

With respect to operational transportation-related fuel usage, future development under the Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. Vehicles associated with new development would be required to comply with CAFE fuel economy standards, which are designed to result in more efficient use of transportation fuels. Furthermore, adoption of the proposed Project would not conflict with the Connect SoCal 2024 goals and benefits intended to improve mobility and access to diverse destinations, provide better “placemaking,” provide more transportation choices, and reduce vehicular demand and associated emissions. The Connect SoCal 2024 includes land use and transportation strategies that are intended to reduce VMT and resulting fuel consumption such as infill locations and building close to transit. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

As discussed in Section 4.12, *Transportation*, of this Draft PEIR, the Project would include policies in-line with Connect SoCal 2024 such as encouraging local government and employers to implement TDM policies that promote VMT reductions, promoting bike-sharing, car-sharing and other electrified modes as options to reduce traffic congestion, and focusing truck traffic onto appropriate arterial corridors in the City. Further, the location, design, and land uses from growth anticipated by the Project would implement land use and transportation strategies related to reducing vehicle trips for residents of the City by increasing residential density with at infill locations and near public transit. Several transit agencies provide local and regional transit service to the residents of Irwindale, including Metro and Foothill Transit. Refer to Section 4.12, *Transportation*, of this Draft PEIR, for a summary of transit service in the City of Irwindale.

The Project outlines strategies for residential in different parts of the City and a better connection between employment and residential uses. Higher densities increase capacity for residential development near community-serving commercial, retail, and office uses as well as schools, parks, and recreational facilities. Therefore, the Project would not conflict with Connect SoCal 2024 land use and transportation strategies that are intended to reduce VMT and resulting fuel consumption.

The Project would comply with the CALGreen, Title 24, and policies from the City of Irwindale General Plan and Connect SoCal 2024. Overall, the Project’s features would support and promote the use of renewable energy and energy efficiency and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, the Project impacts would be less than significant.

General Plan Policies that Address the Impact

Resource Management Element

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

Draft Housing Element

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Program 31: Biannual trash and hazardous item pick-up (motor oil, paint, cleaners with acid/lye, household batteries).

Program 32: Priority water and sewer connections for affordable housing development.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

4.5.5 Cumulative Impacts Analysis

Future development and population growth associated with the Project would result in the increased use of electricity and natural gas resources and associated infrastructure. SCE, the electricity service provider for the Planning Area, has determined that the use of such resources would be minor compared to existing supply and infrastructure within the SCE service area and would be consistent with growth expectations. Similarly, the use of natural gas resources would be on a relatively small scale and would be consistent with the growth expectations for the Planning Area's natural gas service provider, SoCal Gas. Development projects anticipated by the Project would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including the CALGreen Code and State energy standards under Title 24. Therefore, the impact with respect to electricity and natural gas consumption from new development under the Project would be less than cumulatively considerable.

While growth within the City as well as the San Gabriel Valley is anticipated to increase the demand for transportation and total VMT, development projects anticipated by the Project would be required to demonstrate consistency with federal and State fuel efficiency goals and incorporate mitigation measures as required under CEQA. Siting land use development projects at infill sites is consistent with the State's overall goals to reduce VMT pursuant to SB 375, and VMT per capita would decrease compared to existing conditions. Therefore, the impact of development anticipated by the Project would be less than cumulatively considerable with respect to transportation energy.

All development projects anticipated by the Project would be required to comply with the CALGreen Code and Title 24 energy efficiency requirements and other regulations, which would reduce energy consumption by promoting energy efficiency and the use of renewable energy. The Project would include policies designed to reduce VMT and prioritizes infill developments that would support development of compact communities in existing urban areas and reuse developed land served by high quality transit. Therefore, the Project would be consistent with the guidance provided in the Connect SoCal 2024. Proposed General Plan

policies and mitigation would further reduce emissions associated with new development through increased energy efficiency, renewable energy generation, improved transit, and reduced consumption and waste. Therefore, the impact on the implementation of a State or local plan for renewable energy or energy efficiency would be less than cumulatively considerable.

The Project would result in less than significant cumulative impacts related to wasteful and inefficient uses of energy and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

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4.6 Geology and Soils

This section provides an analysis of potential impacts on paleontological resources and unique geologic features from future development allowed under the implementation of the City's Housing Element and General Plan Update (proposed Project or Project). Proposed future development under the Project would result in up to 279 new dwelling units on five sites (Housing Sites 1 through 5) within the City. Two of these five sites are vacant while the other three sites are developed with active industrial/business park uses.

4.6.1 Environmental Setting

Geological and Paleontological Setting

The City encompasses approximately 9.5 miles (6,080 acres) and is located roughly 21 miles east of downtown Los Angeles. The City is also situated near the intersection of the Transverse Ranges and the Peninsular Ranges physiographic provinces of southern California. These two physiographic provinces face constant seismic movement associated with the lateral movement of the North American and Pacific tectonic plates. The San Andreas Fault system, the boundary zone between these two major tectonic blocks, is located approximately 31 miles northeast of the City.

The City is located on the alluvial fan of the San Gabriel River situated approximately 1 to 5 miles south of the San Gabriel Mountain front. In the preceding several million years, uplift in the mountains has stimulated streams and debris flows to shift sand, gravel, cobbles, and boulders into the valley. Surface and groundwater moves freely through these deposits supplying the potable water aquifers and creating standing water where mine excavations have reached below the local water table elevations. Beneath these basin deposits and at varying depths of 100 to approximately 1,000 feet, crystalline granitic and metamorphic rocks (comprising granite, granodiorite, diorite, quartz diorite, gneiss, schist, pegmatite, gabbro, anorthosite, and vein quartz) can be found. Less significant amounts of Cretaceous to Miocene age sedimentary rock, composed primarily of sandstone, conglomerate, and shale, also comprise the bedrock.^{1,2,3}

As shown in **Figure 4.6-1, Geologic Map**, the City is underlain by Holocene (Qa, Qg) alluvial gravel, sand, and silt; Late Holocene (Qf, Qw) alluvial fan and wash deposits, and artificial fill (af).^{4,5}

Paleontological Resources and Unique Geologic Features

Paleontological resources potential is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant

¹ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

² City of Irwindale. 2014. *Irwindale Materials Recovery Facility and Transfer Station Project Environmental Impact Report*. Draft. State Clearinghouse No. 2013051029. Prepared by the City of Irwindale.

³ City of Irwindale. 2014. *Olive Pit Mine and Reclamation Plan Environmental Impact Report*. Draft. State Clearinghouse No. 2014031051.

⁴ Bedrossian TL, Roffers P, Hayhurst CA, Lancaster JT, Short WR. 2012. "Geologic compilation of Quaternary surficial deposits in southern California" [map]. Scale: 1:100,000. Plate 13: San Bernardino 30'X60'. Special Report 217. California Geological Survey. 2012 Revision.

⁵ Tan SS. 2000. "Geologic map of the El Monte 7.5-minute quadrangle, Los Angeles County, California" [map]. Scale 1:24,000. Open-File Report OFR-98-29. California Division of Mines and Geology .

fossils, and fossil localities recorded from that unit. Paleontological potential is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its “Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources,” the Society of Vertebrate Paleontology (SVP)⁶ defines four categories of paleontological potential for rock units: high, low, undetermined, and no potential:

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcanoclastic formations (e.g., ashes or tephra), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e.g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones). For excavations in rock units of known high potential, a Qualified Professional Paleontologist or Paleontological Resources Monitor (as defined by the SVP Guidelines) should be present initially during 100 percent of the earth-moving activities. After 50 percent of excavations are complete in either an area or rock unit and no fossils of any kind have been discovered, the level of monitoring can be reduced or suspended entirely at the Qualified Professional Paleontologist’s discretion. For geologic units with high or undetermined potential, field surveys by a Qualified Professional Paleontologist should be conducted to specifically determine the paleontological resource potential of the rock units present within the study area.
- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule (e.g. basalt flows or Recent colluvium). Rock units with low potential typically will not require impact mitigation measures to protect fossils. If potential paleontological resources are discovered during excavations in a rock unit with low potential, all ground disturbance in the vicinity of the find should stop immediately until a Qualified Professional Paleontologist can assess the nature and importance of the find and recommend appropriate salvage, treatment, and future monitoring and mitigation.
- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy. For geologic units with high or undetermined potential, field surveys by a Qualified Professional Paleontologist should be conducted to specifically determine the paleontological resource potential of the rock units present within the study area.
- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such

⁶ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

Natural History Museum of Los Angeles County (LACM) Database Search

A database search for records of fossil localities within the City was conducted by the Natural History Museum of Los Angeles County (LACM) on July 30, 2023.⁷ The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the area; (2) assess the potential for disturbance of these localities during construction; and (3) assist in evaluating the paleontological sensitivity of the area.

The results of the paleontological records search indicated that several vertebrate localities in Pleistocene through Miocene-aged deposits (LACM IP 1292; LACM VP 6166, 6167, 6172, 6173, 7471; LACM VP 6350-6362/LACM IP 16968-16991; LACM VP 1031; LACM VP 3363; and LACM VP 7702) have been recorded outside the City's limits, but in the general vicinity. LACM IP 1292 yielded a fossil specimen of mantis shrimp (*Squilla*) within the Topanga Formation at an unknown depth and within a roadcut. Fossil localities LACM VP 6166, 6167, 6172, 6173, and 7471 produced fossil specimens of sturgeonfish (*Prionurus*), mako shark (*Isurus planus*), extinct bony fish (*Etrungus*), mola (*Molidae*), and other fish (*Osteichthyes*) within the Puente Formation at surface. Fossil localities LACM VP 6350-6362/LACM IP 16968-16991 yielded fossil specimens of herring (*Ganolytes*), hake (*Merluccius*), rattail (*Coelorhynchus*), lanternfish (*Lampanyctus*, *Diaphus*), white shark (*Charcharodon carcharias*), marine mammals (*Cetacea*), and invertebrates (unspecified) within the Repetto Member of the Fernando Formation, at an unknown depth. Fossil locality LACM VP 1031 produced fossil specimens of great pipefish (*Syngnathus avus*); *Ellima elmodenae*; herring (*Clupea hadleyi*) within the Modelo Formation at an unknown depth. LACM VP 3363 yielded a fossil specimen of horse (*Equus*) within Pleistocene deposits (unknown formation) at an unknown depth. Lastly, LACM VP 7702 produced fossil specimens of fish (*Gasterosteus*), snake (*Colubridae*), rodents (*Thomomys*, *Microtus*, *Reithrodontomys*), and rabbit (*Sylvilagus*) within Pleistocene deposits (unknown formation) at 30 feet below ground surface.⁸

4.6.2 Regulatory Framework

There are no federal regulations specifically related to paleontological resources which would apply to the Project.

State

Paleontological Resources

Public Resources Code Section 5097.5 and Section 30244

Requirements for paleontological resource management are included in Public Resources Code (PRC) Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological

⁷ Bell A. 2023. "Paleontological Resources for the Irwindale 2021–2029 Housing Element GPU & EIR Project." Letter report from Bell A (Natural History Museum of Los Angeles County) to Dietler S (ESA). July 30, 2023.

⁸ Bell A. 2023. "Paleontological Resources for the Irwindale 2021–2029 Housing Element GPU & EIR Project." Letter report from Bell A (Natural History Museum of Los Angeles County) to Dietler S (ESA). July 30, 2023.

sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts on paleontological resources from developments on public (State, county, city, district) lands.

Society of Vertebrate Paleontology Guidelines

The SVP has established standard guidelines that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation.⁹ Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most State regulatory agencies with paleontological resource-specific Laws, Ordinances, Regulations, and Standards (LORS) accept and use the professional standards set forth by the SVP.

Paleontological Resources Significance Criteria

As defined by the SVP, significant nonrenewable paleontological resources are:¹⁰

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).

As defined by the SVP, significant fossiliferous deposits are:¹¹

A rock unit or formation which contains significant nonrenewable paleontological resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontological resources are considered to be older than recorded history and/or older than 5,000 years BP [before present].

Based on the significance definitions of the SVP, all identifiable vertebrate fossils are considered to have significant scientific value.¹² This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

⁹ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

¹⁰ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

¹¹ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

¹² Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

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A geologic unit known to contain significant fossils is considered “sensitive” to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb or destroy fossil remains. Paleontological sites indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case.¹³

Fossils are contained within surficial sediments or bedrock and are therefore not observable or detectable unless exposed by erosion or human activity. In summary, paleontologists cannot know either the quality or quantity of fossils prior to natural erosion or human-caused exposure. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken in order to prevent adverse impacts on these resources.

Local

City of Irwindale General Plan Amendment

Implementation Element

The Implementation Element of the City’s General Plan Amendment indicates that “Should archaeological or paleontological resources be encountered during excavation and grading activities, all work would cease until appropriate salvage measures are established. Appendix K of the California Environmental Quality Act”.¹⁴

4.6.3 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA Guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project’s environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G questions regarding geology and soils, a project would have a significant impact if the Project would:

¹³ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

¹⁴ City of Irwindale 2020. City of Irwindale 2020 General Plan. Section 7 Implementation Element. Available online at: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.irwindaleca.gov/DocumentCenter/View/38/General-Plan?bidId=>

- Threshold GEO-1:** 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 ground shaking;
 - iii. Seismic-related ground failure, including liquefaction;
 - iv. Landslides.
- Threshold GEO-2:** Result in substantial soil erosion or the loss of topsoil.
- Threshold GEO-3:** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Threshold GEO-4:** 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.
- Threshold GEO-5:** 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.
- Threshold GEO-6:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The Initial Study (Appendix A) found that no potentially significant impacts related to the following geologic and soils issues would occur as a result of the Project: Threshold GEO-1: creating a substantial adverse effect including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, seismic related ground failure including liquefaction, or landslides; Threshold GEO-2: soil erosion or loss of topsoil ; Threshold GEO-3: being located on a geologic unit or soil that is unstable that could result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; Threshold GEO-4: located on expansive soils, creating substantial direct or indirect risks to life or property; or having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available (Threshold GEO-5). Therefore, these issues are not studied further in this PEIR.

Methodology

Paleontological Resources

The analysis of paleontological resources is based on a review of geologic maps and the LACM paleontological records search results for the Project. The purpose of the records search is to determine whether there are previously recorded fossil localities or paleontologically sensitive formations within the City or vicinity that require inclusion in the current analysis. The results also provide a basis for assessing

the sensitivity of the City in regard to the potential for surface and subsurface paleontological resources to exist.

Project Impact Analysis

Paleontological Resources

Threshold GEO-6: The Project would have a significant impact if future development allowed by the Project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact GEO-6: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature and impacts would be significant. However, with implementation of mitigation measures, impacts would be less-than-significant.

As previously discussed, the LACM has indicated that several vertebrate localities have been recorded outside the City, but in the general vicinity. These fossil localities have yielded specimens of mantis shrimp, sturgeon fish, mako shark, extinct bony fish, mola, herring, hake, rattail, lanternfish, white shark, marine mammals (*Cetacea*), and invertebrates (unspecified), great pipefish, horse, snake, rodents, and rabbit. These localities were recovered from Pleistocene deposits (unknown formation), the Topanga, Puente, Fernando, and Modelo Formations and from varying depths (at surface, unknown surface, and at 30 feet below ground surface).

Based on the review of the bedrock and surficial geological maps, coupled with the LACM records, it is not likely that shallow (~less than 20 feet below ground surface [bgs]) excavations in the Project boundary would impact fossiliferous bedrock. The various alluvial facies seen at the surface (e.g., fans, wash, and alluvial gravels) suggest a complex and thick sequence of young, Holocene fill. Specific developments that would require deep excavations may impact older, fossiliferous strata and should be reviewed independently. Significant or unique paleontological resources have the potential to contribute to the geological and paleontological record of the region and may be of scientific importance to researchers. Any project that proposes ground disturbance below 20 feet bgs could result in a significant impact on unique paleontological resources.

Future development proposals initiated under the Project that include construction-related shallow ground disturbance (e.g., grubbing/clearing, grading, excavation, shallow trenching and boring) into previously undisturbed soils are activities that are unlikely to impact paleontological resources. Future development that does not require ground-disturbing activities would cause no impacts on paleontological resources. Other development activities that include ground disturbance of heavily disturbed soils or engineered artificial fill would also cause no impact on significant paleontological resources since they have likely been displaced from previous disturbances (such as the original/previous construction), and there is very limited to no potential to encounter intact and significant resources in disturbed soils. However, intact significant resources may be encountered beneath the depth of previous disturbances at depths estimated to exceed 20 feet bgs.

Anticipated development at the five separate development sites (Housing Sites 1 through 5) within the City would occur through infill development on vacant property and through redevelopment of non-vacant

property (with active industrial/business park uses), which could result in damage to paleontological resources located at or near previously undisturbed ground surfaces as a result of construction-related ground disturbance at depth. In addition, infrastructure and other improvements requiring deep ground disturbance could result in damage to or destruction of paleontological resources buried below the ground surface. Future projects would be required to comply with existing State and local regulations that protect paleontological resources, where applicable, including completion of subsequent project-level planning and environmental review under CEQA. Such projects could nonetheless result in significant impacts to unique paleontological resources or sites under CEQA. It is unlikely that unique geologic features would be impacted by projects within the City. Implementation of MMs GEO-1 through GEO-3 would ensure impacts would be reduced to less-than-significant.

Mitigation Measures

MM GEO-1: Paleontological Resources Assessment and Monitoring. For projects that involve ground disturbance, the project proponent shall retain a paleontologist who meets the Society of Vertebrate Paleontology's¹⁵ definition for qualified professional paleontologist (Qualified Paleontologist) to prepare a paleontological resources assessment report prior to the start of construction activities. The report shall include methods and results of the paleontological resources assessment, monitoring requirements (including depths, frequency, and reporting), and maps that outline where monitoring is required. Monitoring shall follow SVP Guidelines: no monitoring of ground-disturbing activities within units of Low Sensitivity or No Potential; monitoring of all ground-disturbing activities (with depths specified) in units of Low to High Significance; and at all depths within units of High Significance unless the Qualified Paleontologist's report identifies previous disturbances or the use of construction methods which do not warrant monitoring; and monitoring at the initiation of excavation in units of Undetermined Significance. The report also shall stipulate whether screen washing is necessary to recover small specimens following SVP Guidelines and determine whether unique geologic features are present onsite. If monitoring is conducted, then the Qualified Paleontologist shall prepare a final report summarizing monitoring results and submit it to the project proponent and the City.

MM GEO-2: Paleontological Resources Sensitivity Training. Prior to the start of ground-disturbing activities for projects facilitated by the City with potentially significant impacts on paleontological resources, the Qualified Paleontologist or its designee shall conduct construction worker paleontological resources sensitivity training (or may be provided via digital recording) for all construction workers. Construction workers shall be informed on how to identify the types of paleontological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The project proponent shall ensure that construction workers are made available for and attend the training. The project proponent shall retain documentation demonstrating attendance and provide it to the City.

MM GEO-3: Paleontological Discoveries. If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area determined by the paleontological monitor shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading/excavation contractor shall assist, where feasible, in removing rock/sediment samples for initial processing

¹⁵ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP.¹⁶ Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, nonprofit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. Accompanying notes, maps, and photographs shall also be filed at the repository. If no institution accepts the fossil collection, it may be donated to a local school or other interested organization in the area for educational purposes.

If construction workers discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.

Any salvage reports resulting from implementation of this measure shall be filed with the Natural History Museum of Los Angeles County.

Significance After Mitigation: While the Project could result in significant impacts to paleontological resources, with implementation of MM GEO-1 through GEO-3 impacts would be less than significant.

4.6.4 Cumulative Impact Analysis

The five separate development sites (Sites 1 through 5) within the City could convert undeveloped areas that may contain paleontological resources. The future projects could include subsurface development that could potentially result in the possibility that cumulative development would result in the demolition or destruction of significant paleontological resources. The potential loss of resources is considered a significant cumulative impact. The project could contribute to this impact if paleontological resources are located beneath the development sites and damaged or destroyed during the excavation process. In that event, the project contribution to the significant cumulative impact would be cumulatively considerable and impacts would be potentially significant. Potential impacts to paleontological resources would be mitigated to a less than significant level with MMs GEO-1 through GEO-3 and the project's cumulative geologic resource impacts would be less than significant with implementation of mitigation measures. Therefore, the project's contribution to cumulative geology and soils impacts would be less than cumulatively considerable.

¹⁶ Society of Vertebrate Paleontology (SVP). 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology, Impact Mitigation Guidelines Revision Committee.

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4.7 Greenhouse Gas Emissions

4.7.1 Introduction

This section assesses potential environmental impacts related to greenhouse gas (GHG) emissions of the City's Housing Element and General Plan Update Project (proposed Project or Project). This section describes the existing GHG emissions and sources of GHGs in the Planning Area as well as the relevant federal, State, regional, and local regulations and programs. Energy usage is evaluated in Chapter 4.5, *Energy*, of this Draft PEIR.

4.7.2 Environmental Setting

Regional Context

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. Global climate change attributable to anthropogenic (human) GHG emissions is currently one of the most important and widely debated scientific, economic and political issues in the United States and the world as a whole. The extent to which increased concentrations of GHGs have caused or will cause climate change and the appropriate actions to limit and/or respond to climate change are the subject of significant and rapidly evolving regulatory efforts at the federal and State levels of government.

GHGs are those compounds in the Earth's atmosphere that play a critical role in determining temperature near the Earth's surface. GHGs include Carbon Dioxide (CO₂), Methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).¹ More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy, which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Not all GHGs possess the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the units of equivalent mass of carbon dioxide (CO₂e). Mass emissions are calculated by converting pollutant specific emissions to CO₂e emissions by applying the proper global warming potential (GWP) value.² These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR).³ The IPCC updated the GWP values based on the science in its Fourth Assessment Report (AR4).⁴ The California Air Resources

¹ As defined by California Assembly Bill (AB) 32 and Senate Bill (SB) 104.

² Global Warming Potential (GWP) is a metric used to compare the ability of different greenhouse gases (e.g. CO₂, CH₄, NO₂) to trap heat in the atmosphere over a specified time, usually 100 years. It helps policymakers at the state level assess the relative impact of various emissions on climate change, guiding emissions reduction strategies.

³ Intergovernmental Panel on Climate Change (IPCC). 1995. *Climate Change 1995: The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Houghton JT, Filho LGM, Callander BA, Harris N, Kattenberg A, Maskell K. Cambridge, United Kingdom: Press Syndicate of the University of Cambridge.

⁴ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

Board (CARB) reports GHG emission inventories for California using the GWP values from the IPCC AR4. Although the IPCC has released its Fifth Assessment Report (AR5) with updated GWPs, CARB reports the statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards. Therefore, the analysis in this PEIR reflects the GWP values from IPCC AR4. Compounds that are regulated as GHGs are discussed below.⁵

Carbon Dioxide (CO₂): CO₂ is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO₂ is the reference gas (GWP of 1) for determining the GWPs of other GHGs.⁶

Methane (CH₄): CH₄ is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH₄ is 21 in the IPCC SAR and 25 in the IPCC AR4.⁷

Nitrous Oxide (N₂O): N₂O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N₂O is 310 in the IPCC SAR and 298 in the IPCC AR4.⁸

Hydrofluorocarbons (HFCs): HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWP of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR and 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4.⁹

Nitrogen Trifluoride (NF₃): NF₃ is an inorganic, non-flammable, non-toxic odorless gas. NF₃ is used as an oxidizer of high energy fuels, for the preparation of tetrafluorohydrazine, as a fluorine source in high

⁵ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

⁶ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

⁷ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

⁸ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

⁹ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

power chemical lasers, in semi-conductor manufacturing, and as an etchant gas in the electronic industry. The GWP of NF_3 is 17,200 in the IPCC AR4.¹⁰

Perfluorocarbons (PFCs): PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR and 7,390 to 17,700 in the IPCC AR4.¹¹

Sulfur Hexafluoride (SF_6): SF_6 is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF_6 has a GWP of 23,900 in the IPCC SAR and 22,800 in the IPCC AR4.¹²

Global GHG emissions due to human activities have grown since pre-industrial times. As reported by the U.S. Environmental Protection Agency (USEPA), global carbon emissions from fossil fuels increased by over 16 times between 1900 and 2008 and by about 43 percent between 1990 and 2015. In addition, in the Global Carbon Budget 2022 report, published in November 2022, atmospheric CO_2 concentrations in 2022 were found to be more than 50 percent above the concentration at the start of the Industrial Revolution, and the present concentration is the highest during at least the last 800,000 years.¹³ Global increases in CO_2 concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. Regarding emissions of non- CO_2 GHGs, these have also increased significantly since 1990.¹⁴ In particular, studies have concluded that it is very likely that the observed increase in methane (CH_4) concentration is predominantly due to agriculture and fossil fuel use.¹⁵

Existing Statewide Greenhouse Gas Emissions

CARB compiles GHG inventories for California. Based on the year 2021 GHG inventory data (the latest year for which data are available), California emitted 381.3 million metric tons of CO_2e (MMT CO_2e) which includes emissions resulting from imported electrical power.¹⁶ Between 1990 and 2023, the population of

¹⁰ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

¹¹ Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

¹² Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis – Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Solomon S, Qin D, Manning M, Marquis M, Averyt K, Tignor MMB, Leroy Miller H, Chen Z. Cambridge, United Kingdom and New York: Cambridge University Press.

¹³ Friedlingstein P, O’Sullivan M, Jones MW, Andrew RM, Hauck J, Olsen A, Peters GP, Peters W, Pongratz J, Sitch S, et al. 2020. “Global Carbon Budget 2020.” *Earth System Science Data* 12(4):3269–3340. DOI: <https://doi.org/10.5194/essd-12-3269-2020>.

¹⁴ United States Environmental Protection Agency (USEPA). 2024. “Global Greenhouse Gas Emissions” [webpage]. Last updated on February 7, 2024. www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data. Accessed March 2024.

¹⁵ United States Environmental Protection Agency (USEPA). 2023. “Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gas” [webpage]. Last updated November 1, 2023. <https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases>. Accessed March 2024.

¹⁶ California Air Resources Board (CARB). 2024. “Current California GHG Emission Inventory Data – 2000–2021 GHG Inventory (2023 Edition)” [webpage]. <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed March 2024.

California grew by approximately 32 percent (from 29.8 to 38.9 million).^{17,18} In addition, the California economy, measured as gross State product, grew from approximately \$733 billion in 1990 to \$3.6 trillion in 2022, representing an increase of approximately five times the 1990 gross State product.^{19,20} Despite the population and economic growth, California's net GHG emissions were reduced to below 1990 levels in 2016 and has continued to decline. According to CARB, the declining trend coupled with the State's GHG reduction programs (such as the Renewables Portfolio Standard [RPS], Low Carbon Fuel Standard [LCFS], vehicle efficiency standards, and declining caps under the Cap-and-Trade Program) demonstrate that California is on track to meet the 2030 GHG reduction target of 40 percent below 1990 levels codified in Executive Order B-30-15.

Table 4.7-1, *State of California Greenhouse Gas Emissions*, identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2020 (i.e., the most recent year in which data are available from CARB). As shown in Table 4.7-1, the transportation sector is the largest contributor to statewide GHG emissions at approximately 40 percent in 2019.

Urban Heat Island

According to the California Environmental Protection Agency (CalEPA), the urban heat island effect refers to large, urbanized areas that experience higher temperatures, greater pollution and more negative health impacts during hot summer months when compared to more rural communities.²¹ Heat islands are created by a combination of heat-absorptive surfaces (such as dark pavement and roofing), heat-generating activities (such as engines and generators) and the absence of vegetation (which provides evaporative cooling). Daytime temperatures in urban areas are on average 1 to 6 degrees Fahrenheit (F) higher than in rural areas, while nighttime temperatures can be as much as 22 degrees F higher as the heat is gradually released from buildings and pavement.²²

¹⁷ Byerly ER, Deardorff K. 1995. *National and State Population Estimates: 1990 to 1994*. United States Bureau of Census Current Population Reports No. P25-1127. Washington, DC: U.S. Government Printing Office.

¹⁸ California Department of Finance. 2024. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020–2023" [Excel spreadsheet data]. https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Demographics/Documents/E-5_2023_InternetVersion.xlsx. Accessed February 2024.

¹⁹ California Department of Finance. 2024. "California State Gross Domestic Product (GDP), 1963 to 2023" [Excel spreadsheet data]. Last updated May 2024.

²⁰ Amounts are based on current dollars as of the date of the report (June 2023).

²¹ California Environmental Protection Agency (CalEPA). 2024. "Understanding the Urban Heat Island Index" [webpage]. <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>. Accessed March 2024.

²² California Environmental Protection Agency (CalEPA). 2024. "Understanding the Urban Heat Island Index" [webpage]. <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>. Accessed March 2024.

**TABLE 4.7-1
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS**

Category	Total 1990 Emissions using IPCC SAR (MMTCO ₂ e)	Percent of Total 1990 Emissions	Total 2021 Emissions using IPCC AR4 (MMTCO ₂ e)	Percent of Total 2021 Emissions
Transportation	150.7	35%	145.6	38%
Electric Power	110.6	26%	62.4	16%
Commercial	14.4	3%	13.3	4%
Residential	29.7	7%	25.5	7%
Industrial	103.0	24%	73.9	19%
Recycling and Waste ^a	—	—	8.4	2%
High GWP/Non-Specified ^b	1.3	<1%	21.3	6%
Agriculture/Forestry	23.6	6%	30.9	8%
Forestry Sinks	-6.7	—	— ^c	—
Net Total (IPCC SAR)	426.6	100%	—	—
Net Total (IPCC AR4)^d	431	100%	381.3	100%

NOTES: IPCC = Intergovernmental Panel on Climate Change; SAR = Second Assessment Report; AR4 = Fourth Assessment Report; MMTCO₂e = million metric tons of carbon dioxide equivalent; GWP = global warming potential

Totals may not add up exactly due to rounding.

a. Included in other categories for the 1990 emissions inventory.

b. High GWP gases are not specifically called out in the 1990 emissions inventory.

c. Revised methodology under development (not reported for 2019).

d. CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

SOURCE: California Air Resources Board (CARB). 2023. California Greenhouse Gas Inventory for 2000 to 2021 by Category as Defined in the 2008 Scoping Plan. December 13, 2023.

Assembly Bill (AB) 296 (Chapter 667, Statutes of 2012) required that CalEPA develop an Urban Heat Island Index (UHII) to quantify the extent and severity of an urban heat island for individual cities to map where and how intensely they manifest at a local scale.²³ In 2015, CalEPA released maps that show the scientifically assigned UHII scores based on atmospheric modeling for each census tract in and around most urban areas throughout the State. The urban area in which the City is located has an approximate UHII range of 18,001 to 20,000 degree-hours per 182 days or 98.9 to 109.9 degree-hours per day (Celsius scale).^{24,25} The UHII range is equivalent to an average temperature difference between rural and urban areas of approximately 7.4 to 8.2 degrees F.²⁶ It is important to note that the UHII does not measure the temperatures of an area, but rather it measures the average temperature difference between rural and urban areas within a region.

²³ California Environmental Protection Agency (CalEPA). 2024. "Understanding the Urban Heat Island Index" [webpage]. <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>. Accessed March 2024.

²⁴ California Environmental Protection Agency (CalEPA). 2015. *Creating and Mapping an Urban Heat Island Index for California*, Appendix C: UHII and CalEnviroScreen maps. April 24, 2015, Figure C41.

²⁵ According to CalEPA, the degree-hour combines both the intensity of the heat and the duration of the heat into a single numerical measure.

²⁶ According to CalEPA, to perform an approximate conversion to a total number of degrees Fahrenheit per day, divide the Index by 24 hours and multiply the result by 1.8 degrees. For example, if the Index is 104 degree-hours per day, then the approximate average temperature difference between rural and urban in that area is 7.5 degrees F (i.e., 98.9 / 24 * 1.8 = 7.4).

Effects of Global Climate Change

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, for example, in 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. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report: Summary for Policy Makers* (dated 2013) states that, "it is *extremely likely* that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forces [sic] together."²⁷ In addition, a report from the National Academy of Sciences published in 2010 concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.²⁸

According to the California EPA, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more frequent and a greater spatial extent of forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.²⁹ The California Energy Commission (CEC) has a geospatial data tool (Cal-Adapt) that provides a view of how the State could be impacted by climate change. Below is a summary of some of the potential climate change effects and relevant Cal-Adapt data, reported by an array of studies that could be experienced in California as a result of global warming and climate change.

Air Quality

Higher temperatures have been determined to be conducive to air pollution formation and, therefore, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone; however, the magnitude of the effect is uncertain. If higher temperatures resulting from climate change are accompanied by drier conditions, the potential for large wildfires could increase within the Los Angeles region, which, in turn, would further worsen air quality. However, if higher temperatures resulting from climate change are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating some of the pollution associated with wildfires, although it would not eliminate all effects of increased temperatures.

²⁷ Intergovernmental Panel on Climate Change (IPCC). 2013. *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Stocker TF, Qin D, Plattner G-K, Tignor M, Allen SK, Boschung J, Nauels A, Xia Y, Bex V, Midgley PM. Cambridge, United Kingdom and New York: Cambridge University Press, page 5.

²⁸ Anderegg WRL, Prall JW, Harold J, Schneider SH. 2010. "Expert Credibility in Climate Change." *Proceedings of the National Academy of Sciences of the United States of America* 107:12107–12109. <https://www.pnas.org/doi/10.1073/pnas.1003187107>.

²⁹ Climate Action Team (CAT). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March 2006. California Environmental Protection Agency, Climate Action Team.

Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State.³⁰

According to the Cal-Adapt website’s “Local Climate Change Snapshot” database, the City could see an average annual increase in maximum temperature to 83.4 to 84.3°F in the mid-century (2035–2064) and 84.5 to 87.7°F at the end of the century (2070–2099) compared to 79.0°F for the baseline period (1961–1990).³¹ The average annual number of extreme heat days also could increase to 19 to 23 days in the mid-century (2035–2064) and 25 to 47 days at the end of the century (2070–2099) compared to 4 days for the baseline period (1961–1990).³²

Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, “Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change.”³³ For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.³⁴ Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full.³⁵ Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.³⁶

In California, the spring snowpack runoff accounts for approximately 70 percent of the total water supply in the Colorado River Basin, which supplies approximately 55 percent of Southern California’s water. Since the 1950s, the snow water storage measurements on April 1 have declined by about 10 percent. Models predict that the mean snow water equivalent declines to less than two-thirds of its historical average by 2050, and by less than half by 2100. Unfortunately, the decline in the spring snowpack occurs even if precipitation amounts remain relatively stable; the snow loss results from a warmer climate.³⁷ The loss of snowpack would reduce the amount of water available.

³⁰ Climate Action Team (CAT). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March 2006. California Environmental Protection Agency, Climate Action Team.

³¹ CalAdapt. 2024. “Local Climate Change Snapshot Irwindale, California” [online tool]. <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed March 2024.

³² CalAdapt. 2024. “Local Climate Change Snapshot Irwindale, California” [online tool]. <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed March 2024.

³³ Kiparsky M, Gleick PH. 2003. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. Oakland, California: Pacific Institute for Studies in Development, Environment and Security. July 2003.

³⁴ Kiparsky M, Gleick PH. 2003. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. Oakland, California: Pacific Institute for Studies in Development, Environment and Security. July 2003.

³⁵ Kiparsky M, Gleick PH. 2003. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. Oakland, California: Pacific Institute for Studies in Development, Environment and Security. July 2003.

³⁶ Kiparsky M, Gleick PH. 2003. *Climate Change and California Water Resources: A Survey and Summary of the Literature*. Oakland, California: Pacific Institute for Studies in Development, Environment and Security. July 2003.

³⁷ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California’s Climate Adaptation Strategy*. January 2018.

The California Natural Resources Agency (CNRA) and California Energy Commission (CEC) report dated 2018³⁸ on climate change and effects on the State Water Project (SWP), the Central Valley Project (CVP), and the Sacramento-San Joaquin Delta, concluded that “climate change poses an ever-growing threat to the well-being, public health, natural resources, economy, and environment of California. Even under the best scenario for global emission reductions, additional climate change impacts are inevitable. ...[C]limate change would bring significant negative impacts on current SWP and CVP operations due to the [global] warming.” By the middle of the century, climate change would cause negative effects on the water supply, including south of Delta exports being reduced by a half million-acre feet, north Delta carryover storage being diminished by 1.5-million-acre feet, with worsening water quality.³⁹ In its *Fifth Assessment Report*, the IPCC states “Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions”.⁴⁰ The *Sixth Assessment Report* further states, “Continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation and the severity of wet and dry events”.⁴¹

According to the Cal-Adapt website’s “Local Climate Change Snapshot” database, the City could see an average annual length of dry spells of 137 to 138 days in the mid-century (2035–2064) and 137 to 145 days at the end of the century (2070–2099), compared to 130 days for the baseline period (1961–1990).⁴² The average annual precipitation could decrease to 18.8 to 19.0 inches in the mid-century (2035–2064) and potentially increase or decrease to 19.4 to 19.0 inches at the end of the century (2070–2099), compared to 19.3 inches for the baseline period (1961–1990).⁴³

Hydrology and Sea Level Rise

The central and southern coast has experienced a sea level rise of more than 5.9 inches over the 20th century and sea levels will continue to rise substantially over the 21st century. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. Flooding from sea level rise and coastal wave events leads to bluff, cliff, and beach erosion, which could affect large geographic areas. Future modeling simulations estimate that 31–67 percent of Southern California beaches may become completely eroded to the landward limit of coastal infrastructure

³⁸ California Natural Resources Agency and California Energy Commission (CNRA and CEC). 2018. *Mean and Extreme Climate Change Impacts on the State Water Project – A Report for California’s Fourth Climate Change Assessment*. Prepared by Wang J, Yin H, Anderson J, Reyes E, Smith T, Chung F. August 2018.

³⁹ California Natural Resources Agency and California Energy Commission (CNRA and CEC). 2018. *Mean and Extreme Climate Change Impacts on the State Water Project – A Report for California’s Fourth Climate Change Assessment*. Prepared by Wang J, Yin H, Anderson J, Reyes E, Smith T, Chung F. August 2018.

⁴⁰ Intergovernmental Panel on Climate Change (IPCC). 2013. *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Stocker TF, Qin D, Plattner G-K, Tignor M, Allen SK, Boschung J, Nauels A, Xia Y, Bex V, Midgley PM. Cambridge, United Kingdom and New York: Cambridge University Press.

⁴¹ Intergovernmental Panel on Climate Change (IPCC). 2021. *Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Masson-Delmotte V, Zhai P, Pirani A, Connors SL, Péan C, Berger S, Caud N, Chen Y, Goldfarb L, Gomis MI, Huang M, Leitzell K, Lonnoy E, Matthews JBR, Maycock TK, Waterfield T, Yelekçi O, Yu R, Zhou B. Cambridge, United Kingdom and New York: Cambridge University Press.

⁴² CalAdapt. 2024. “Local Climate Change Snapshot Irwindale, California” [online tool]. <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed March 2024.

⁴³ CalAdapt. 2024. “Local Climate Change Snapshot Irwindale, California” [online tool]. <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed March 2024.

or cliffs by the end of the century, assuming sea level rise scenarios from 3 to 6.6 feet and limited human intervention.⁴⁴ The rise in sea levels could jeopardize California's water supply. Increased storm intensity and frequency could also affect the ability of flood-control facilities, including levees, to handle storm events.

California historically has experienced multi-year droughts and has been able to support agricultural water demands through groundwater reserves, winter snowpack, reservoir storage, and conveyance of water throughout the State in canals. However, the higher temperatures that come with climate change will likely decrease snow storage and cause more frequent and severe droughts and will require additional preparedness for more frequent surface water shortages and reliance on sustainable groundwater management.⁴⁵

Agriculture

California has a \$59 billion agricultural industry that produces over a third of the country's vegetables and nearly three-quarters of the country's fruits and nuts.⁴⁶ Many of California's important crops, including fruit and nut trees, are particularly vulnerable to climate change impacts like changing temperature regimes and water-induced stress. Under changing climate conditions, agriculture is projected to experience lower crop yields due to extreme heat waves, heat stress and increased water needs of crops and livestock (particularly during dry and warm years), and new and changing pest and disease threats.⁴⁷ Higher CO₂ levels can stimulate plant production and increase plant water use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks and interfere with plant growth. In addition, temperature increases could change the time of year crops are harvested, and thus affect their quality.⁴⁸

Ecosystems and Wildlife

Changes in temperature, precipitation, food sources, competition for prey, and other physical or biological features of the habitat may force changes in the timing of key life-cycle events for plants and animals and shift the ranges where these plants and animals live.⁴⁹ Range shifts have been observed in approximately 75 percent of small animal species and over 80 percent of bird species in the Sierra Nevada. High-elevation mammals moved upslope, while birds and low-elevation mammals moved downslope as frequently as upslope. The varied responses reflect the species' intrinsic sensitivity to temperature, precipitation, or other physical factors, such as changes in food sources, vegetation, and interactions with competitors. Additionally, range shifts have been noted in wintering bird species and time shifts of arriving species have been noted in butterflies and migratory birds. Furthermore, ocean acidification has affected many marine

⁴⁴ California Natural Resources Agency and California Energy Commission (CNRA and CEC). 2018. *Mean and Extreme Climate Change Impacts on the State Water Project – A Report for California's Fourth Climate Change Assessment*. Prepared by Wang J, Yin H, Anderson J, Reyes E, Smith T, Chung F. August 2018.

⁴⁵ California Natural Resources Agency and California Energy Commission (CNRA and CEC). 2018. *Mean and Extreme Climate Change Impacts on the State Water Project – A Report for California's Fourth Climate Change Assessment*. Prepared by Wang J, Yin H, Anderson J, Reyes E, Smith T, Chung F. August 2018.

⁴⁶ California Department of Food and Agriculture. 2024. "California Agricultural Production Statistics" [webpage]. <https://www.cdffa.ca.gov/Statistics/>. Accessed March 2024.

⁴⁷ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California's Climate Adaptation Strategy*. January 2018.

⁴⁸ California Climate Change Center (CCCC). 2006. *Our Changing Climate: Assessing the Risks to California*.

⁴⁹ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California's Climate Adaptation Strategy*. January 2018.

organisms and their food chain. Chinook salmon have been affected by climate change by both the number of adults returning to spawn and the increased mortality rate among juvenile salmon. Finally, during years of warmer sea temperature, California sea lions have had fewer birth rates, higher pup mortality, and increased numbers of pups having poor conditions.⁵⁰

Wildfire

Wildfires in California over the past two decades are shown to be increasing in size, severity, and adverse impacts.⁵¹ Warming temperatures as a result of climate change influences the length of both the fire and growing seasons and consequently affects the amount of time and intensity fires burn at and the amount of available fuels. Higher temperatures lead to drought, which decreases the fuel moisture and increases the likelihood of ignitions.⁵²

According to the Cal-Adapt website's "Local Climate Change Snapshot" database, the Project location could see an increase in the average annual area burned of approximately 136.5 to 136.7 acres in the mid-century (2035–2064) and 139.4 to 130.2 acres at the end of the century (2070–2099) compared to 120.5 to 115.6 acres for the baseline period (1961–1990).⁵³ Increased wildfire activity leads to more GHG emissions from sources that would otherwise be carbon sinks. Between 2000 and 2019, emissions from wildfires ranged from a low of 1.2 MMTCO₂e in 2010 to a high of 39 MMTCO₂e in 2018, with an annual average of 14 MMTCO₂e.⁵⁴ Further, CARB estimates that wildfire emissions increased dramatically in 2020, totaling 112 MMTCO₂e.⁵⁵

Human Adaptation

Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Temperature increases cause heat-related deaths and illnesses. Average temperatures have increased by about 1.8 degrees Fahrenheit in California over the past century.⁵⁶ Increases in minimum and maximum temperatures were 2.2°F and 1.3°F, respectively.⁵⁷ In 2006, reported heat-related deaths and illness were much higher than in any other year because of a prolonged heat wave.⁵⁸ Nineteen heat-related events that had significant impacts on human health occurred from 1999 to 2009,

⁵⁰ Office of Environmental Health Hazard Assessment (OEHHA). 2023. California sea lion pup demography. August 23, 2023.

⁵¹ California Air Resources Board (CARB). 2020. *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*. December 2020.

⁵² California Air Resources Board (CARB). 2020. *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*. December 2020.

⁵³ CalAdapt. 2024. "Local Climate Change Snapshot Irwindale, California" [online tool]. <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed March 2024.

⁵⁴ California Air Resources Board (CARB). 2020. *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*. December 2020.

⁵⁵ California Air Resources Board (CARB). 2020. *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*. December 2020.

⁵⁶ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California's Climate Adaption Strategy*. January 2018.

⁵⁷ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California's Climate Adaption Strategy*. January 2018.

⁵⁸ Office of Environmental Health Hazard Assessment (OEHHA). 2018. *Indicators of Climate Change in California*. May 2018.

resulting in about 11,000 excess hospitalizations.⁵⁹ Additionally, indicators of the impacts of climate change on human health show that warming temperatures and changes in precipitation also can affect vector-borne pathogen transmission and disease patterns in California.

Existing Conditions

Proposed future development under the Project would result in the construction of 279 new dwelling units on five separate development sites within the City. Two of these five sites are vacant while the other three sites are developed with industrial/business park uses. However, some of the on-site buildings on the developed sites have recent periods of vacancy or have insignificant operational GHG emissions. Therefore, for the purposes of this analysis, existing operational GHG emissions are not required to be calculated and the Project's GHG emissions would be considered net new.

4.7.3 Regulatory Framework

This section provides the relevant federal, State, regional, and local regulations applicable to the Project.

Federal

The USEPA is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO₂ gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Energy Star labeling system for energy-efficient products) encourage voluntary reductions by large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

Federal Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the U.S. Supreme Court held that USEPA has statutory authority under Section 202 of the federal Clean Air Act (CAA) to regulate GHGs. The court did not hold that USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. USEPA adopted a Final Endangerment Finding for the six defined GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Clean Air Act Section 202(a)(1) consistently with the U.S. Supreme Court decision. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

⁵⁹ California Natural Resources Agency (CNRA). 2018. *Safeguarding California Plan: 2018 Update – California's Climate Adaption Strategy*. January 2018.

Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision.⁶⁰ Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Act signed on March 11, 2009.⁶¹ The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

Corporate Average Fuel Economy Standards

Executive Order 13432 directed the USEPA, the U.S. Department of Transportation (USDOT), and the U.S. Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. The National Highway Traffic Safety Administration (NHTSA) subsequently issued multiple final rules regulating fuel efficiency for, and GHG emissions from, cars and light-duty trucks for model year 2011 and later for model years 2012–2016 and 2017–2021. In April 2020, the USDOT and the USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026.⁶² These standards set a combined fleet wide average of 33.2 miles per gallon (mpg) to 37.1 mpg for the model years affected.⁶³

In February 2022, the USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.⁶⁴ This final rule revises current GHG standards beginning for vehicles in model year 2023 and through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles.⁶⁵

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected

⁶⁰ Executive Order 13432. Strengthening Federal Environmental, Energy, and Transportation Management. Federal Register, vol. 72, no. 94, 14 May 2007, p. 28701.

⁶¹ Public Law 111-8. Omnibus Appropriations Act, 2009, 17 Feb. 2009, 123 Stat. 524.

⁶² United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2020. "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks" [Final rule]. *Federal Register* 85(84):24174. April 30, 2020.

⁶³ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2020. "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks" [Final rule]. *Federal Register* 85(84):24174. April 30, 2020.

⁶⁴ United States Environmental Protection Agency (USEPA). 2021. "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards" [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

⁶⁵ United States Environmental Protection Agency (USEPA). 2021. "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards" [Final rule]. *Federal Register* 86(248):74434. December 30, 2021.

vehicles by 6 to 23 percent over the 2010 baselines. Building on the first phase of standards, in August 2016, the USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The Phase 2 standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons.⁶⁶

On July 28, 2023, the NHTSA proposed new CAFE standards for passenger cars and light trucks for model years 2027 through 2032, and new fuel efficiency standards for heavy-duty pickup trucks and vans for model years 2030 through 2035. The proposed rule would require an industry fleet-wide average of approximately 58 mpg for passenger cars and light trucks in model year 2032, by increasing fuel economy by two percent year over year for passenger cars and four percent year over year for light trucks.⁶⁷ For heavy-duty pickup trucks and vans, the proposed rule would increase fuel efficiency by 10 percent year over year.⁶⁸

Heavy-Duty Engines and Vehicle Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018.⁶⁹ On April 12, 2023, the NHTSA proposed Phase 3 of the GHG Emissions Standards for heavy-duty vehicles beginning in model year 2027 which would set new, more stringent standards for model years 2028 through 2032.⁷⁰ The Phase 3 greenhouse gas standards would apply to heavy-duty vocational vehicles (such as delivery trucks, refuse haulers, public utility trucks, transit, shuttle, school buses, etc.) and tractors (such as day cabs and sleeper cabs on tractor-trailer trucks). Specifically, the Phase 3 rule proposes stronger CO₂ standards for model year 2027 heavy-duty vehicles that go beyond the current Phase 2 standards and is proposing an additional set of CO₂ standards that would begin to apply in model year 2028, with progressively lower standards each model year through 2032.⁷¹

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (Clean Air Act Section 211[c][4][B]) facilitates the reduction of national GHG emissions by resulting in the following actions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of renewable in 2022.⁷²

⁶⁶ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2016. “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2” [Final rule]. *Federal Register* 81(206):73478. October 25, 2016.

⁶⁷ National Highway Traffic Safety Administration (NHTSA). 2024. “Corporate Average Fuel Economy” [webpage]. <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed March 2024.

⁶⁸ National Highway Traffic Safety Administration (NHTSA). 2024. “Corporate Average Fuel Economy” [webpage]. <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed March 2024.

⁶⁹ United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2011. “Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles” [Final rule]. *Federal Register* 76(179):57106. September 15, 2011.

⁷⁰ United States Environmental Protection Agency (USEPA). 2023. “Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3” [Notice of proposed rulemaking]. *Federal Register* 88(81):25926. April 27, 2023.

⁷¹ United States Environmental Protection Agency (USEPA). 2023. “Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3” [Notice of proposed rulemaking]. *Federal Register* 88(81):25926. April 27, 2023.

⁷² 42 U.S.C. § 7545(o)

- Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.⁷³
- Require approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; and require approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020.⁷⁴
- While superseded by the USEPA and NHTSA actions described above, (i) establish miles-per-gallon targets for cars and light trucks and (ii) direct NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.⁷⁵

Additional provisions of the Energy Independence and Security Act address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.⁷⁶

Paris Agreement

During the Leaders Summit on Climate in April 2021, President Biden fulfilled his promise to rejoin the Paris Agreement and set a course for the United States to tackle the climate crisis at home and abroad, reaching net zero emissions economy-wide by no later than 2050. Additionally, as part of reentering the Paris Agreement, the United States established a new 2030 GHG emissions target, known as the “nationally determined contribution,” which is a formal submission to the United Nations Framework Convention on Climate Change. The United States’ nationally determined contribution target aims for a 50–52 percent reduction in GHG emissions from 2005 levels by 2030.⁷⁷ To achieve these goals, the United States has committed to all the following actions:

- Achieve 100 percent carbon pollution-free electricity by 2035.
- Support efficiency upgrades and electrification in buildings.
- Reduce carbon pollution from the transportation sector.
- Reduce emissions from forests and agriculture and enhance carbon sinks.
- Address carbon pollution from industrial process.
- Reduce non-CO₂ GHGs, including methane, hydrofluorocarbons, and other potent short-lived climate pollutants.

At the UNFCCC’s 26th Conference of Parties (COP26) held in Glasgow, the United States and 190 other countries reiterated their pledge to the Paris Agreement and formed a global pact to limit global warming to less than 1.5 degrees Celsius.⁷⁸ As part of the pledge, the United States and China, the world’s two largest

⁷³ 42 U.S.C. § 6291 et seq.

⁷⁴ 42 U.S.C. § 6201 et seq.

⁷⁵ 49 U.S.C. § 32902

⁷⁶ A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

⁷⁷ United Nations Framework Convention on Climate Change (UNFCCC). 2024. “The Paris Agreement” [webpage]. <https://unfccc.int/process-and-meetings/the-paris-agreement>. Accessed March 2024.

⁷⁸ United Nations Framework Convention on Climate Change (UNFCCC). 2024. “The Paris Agreement” [webpage]. <https://unfccc.int/process-and-meetings/the-paris-agreement>. Accessed March 2024.

GHG emitters, committed to a joint declaration to collaborate on limiting global warming to the 1.5 degrees Celsius threshold through reducing methane emissions, phasing down coal as an energy source, increasing renewable energy generation, and decarbonization. COP26 also saw the United States and 100 other countries sign a Global Methane Pledge in an effort to reduce methane emissions domestically and worldwide. President Biden also announced the launch of the President’s Emergency Plan for Adaptation and Resilience (PREPARE), which serves as a guide for the United States’ response to global climate crises.⁷⁹

State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State.

California Greenhouse Gas Reduction Targets

Executive Order S-1-07

Executive Order (EO) S-1-07 proclaims that the transportation sector is California’s main source of GHG emissions, generating more than 40 percent of statewide emissions.⁸⁰ It established a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020.⁸¹ This order also directed CARB to determine whether the Low Carbon Fuel Standard could be adopted as a discrete early-action measure, as part of the effort to meet AB 32 mandates.

Executive Order S-3-05

EO S-3-05 set forth the following targets for progressively reducing statewide GHG emissions:⁸²

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of the CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is also mandating that biannual reports be submitted to the California Governor and Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California’s resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various State agencies and commissions. The first CAT Report to the Governor and the Legislature in 2006 contained recommendations and strategies to help meet the targets in EO S-3-05. The most recent 2022 State Agency Greenhouse Gas Reduction Report Card documents the effectiveness of measures to reduce GHG emissions in California and GHG emissions from State agencies’ operations.⁸³ This report card documents State operations GHG emissions of 1.157

⁷⁹ The White House. 2022. *PREPARE Action Plan*. September 2022.

⁸⁰ Office of the Governor of California. 2007. Executive Order S-01-07. Filed January 18, 2007.

⁸¹ Office of the Governor of California. 2007. Executive Order S-01-07. Filed January 18, 2007.

⁸² Office of the Governor of California. 2005. Executive Order S-3-05. Filed June 2, 2005.

⁸³ California Environmental Protection Agency (CalEPA). 2023. 2022 State Agency Greenhouse Gas Reduction Report Card.

MMTCO₂e that occurred in 2021. In 2016, GHG emissions were 429 MMTCO₂e,⁸⁴ showing that California reached its 2020 emissions target (431 MMTCO₂e) four years early, and emissions are continuing to decline.

Executive Order B-30-15

In 2015, EO B-30-15 promulgated the following targets and measures:⁸⁵

- 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 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Assembly Bill 32

In 2006, the California Legislature adopted Assembly Bill (AB) 32 (codified in the Health and Safety Code Division [HSC] 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. This act defines GHGs as carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. The California Global Warming Solutions Act assigned CARB the primary responsibility for reducing GHG emissions, by adopting rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

CARB approved the initial AB 32 Scoping Plan in 2008 and set the 1990 GHG emissions inventory at 427 MMTCO₂e, using the GWP values from the IPCC SAR, thereby establishing the emissions limit for 2020.⁸⁶ It approved the *First Update to the Climate Change Scoping Plan* (2014 Scoping Plan) in May 2014 and built upon the 2008 Scoping Plan with new strategies and recommendations.⁸⁷ In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 MMTCO₂e. CARB also updated the State's 2020 business-as-usual (BAU) emissions estimate to account for the impact of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO₂e.

Therefore, under the 2014 Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 MMTCO₂e would be 78.4 MMTCO₂e, or a reduction of GHG emissions by approximately 15.4 percent.

⁸⁴ California Air Resources Board (CARB). 2020. California Greenhouse Gas Inventory for 2000-2018 – by Category as Defined in the 2008 Scoping Plan. October 15, 2020.

⁸⁵ Office of the Governor of California. 2015. Executive Order B-30-15. Filed April 29, 2015.

⁸⁶ California Air Resources Board (CARB). 2009. *Climate Change Scoping Plan a Framework for Change*. December 2009.

⁸⁷ California Air Resources Board (CARB). 2014. *First Update to the Climate Change Scoping Plan – Building on the Framework*. May 2014.

Senate Bill 32 and Assembly Bill 197

In 2016, the California Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197. SB 32 and AB 197 amended Health and Safety Code Division 25.5 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030, with provisions included to ensure that the benefits of State climate policies reach into vulnerable communities. In response to the 2030 GHG reduction target, CARB adopted the 2017 Scoping Plan.⁸⁸ The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG emissions reduction target, which build on the Cap-and-Trade Program; the Low Carbon Fuel Standard; improved vehicle, truck, and freight movement emissions standards; increasing renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. CARB's projected statewide 2030 emissions take into account 2020 GHG reduction policies and programs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and the continuation of the Cap-and-Trade Program. This Scoping Plan Scenario was modified from the January 2017 Proposed Scoping Plan to reflect AB 398,⁸⁹ including removal of the 20 percent refinery measure.

The 2017 Scoping Plan outlines the strategies the State of California will implement to achieve the 2030 GHG emissions reduction target. The 2017 Scoping Plan includes the Scoping Plan Scenario, which CARB stated "is the best choice to achieve the State's climate and clean air goals".⁹⁰ Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34–79 MMTCO₂ of the 2030 reduction obligation.⁹¹ The short-lived GHG strategy is expected to cover approximately 17–35 MMTCO₂e.⁹² The Renewables Portfolio Standard with 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO₂.⁹³ The mobile-source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of ZEVs, and improving the efficiency of the freight system, and is expected to cover approximately 11–13 MMTCO₂.⁹⁴ Under the Scoping Plan Scenario, CARB expects that the doubling of the energy efficiency savings by 2030 would cover approximately 7–9 MMTCO₂ of the 2030 reduction obligation.⁹⁵ The other strategies would be expected to cover the remaining 2030 reduction obligations.

The 2017 Scoping Plan also discusses the role of local governments in meeting the State's GHG reductions goals because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures.⁹⁶ The 2017 Scoping Plan encourages local governments to adopt climate action plans (CAPs) to address local GHG emissions sources. For individual

⁸⁸ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁸⁹ AB 398 was enacted in 2017 to extend and clarify the role of the State's Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

⁹⁰ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹¹ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹² California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹³ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹⁴ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹⁵ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

⁹⁶ California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November 2017.

projects under the California Environmental Quality Act (CEQA), the 2017 Scoping Plan states that local governments can support climate action when considering discretionary approvals and entitlements. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the 2017 Scoping Plan, the State’s long-term goals, and climate change science.⁹⁷

Cap-and-Trade Program

The 2017 Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB will employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under HSC Division 25.5, CARB designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve the State’s emission-reduction mandate of returning to 1990 levels of emissions by 2020 and 40 percent below 1990 levels by 2030 (17 CCR 95800–96023). Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO₂e per year), caps decline over time, and facilities subject to the cap can trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program’s duration (17 CCR 95800–96023). On July 17, 2017, the California legislature passed AB 398, extending the Cap-and-Trade program through 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a statewide basis.

If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In other words, the Cap-and-Trade Program functions similarly to an insurance policy for meeting California’s GHG emissions reduction mandates.

Senate Bill 1383

This bill (Chapter 395, Statutes of 2016) creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. In 2017, CARB adopted a SLCP Reduction Strategy to implement SB 1383.

⁹⁷ California Air Resources Board (CARB). 2017. *California’s 2017 Climate Change Scoping Plan*. November 2017.

Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan

There have been numerous climate legislation bills and Executive Orders enacted since the 2017 Scoping Plan. Among these are Executive Order B-55-18 and AB 1279 (The California Climate Crisis Act), which identify the 2045 carbon neutrality and GHG reduction targets. **Table 4.7-2, Major Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan**, provides a summary of major climate legislation and executive orders issued since the adoption of the 2017 Scoping Plan.

TABLE 4.7-2
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Assembly Bill 1279 (AB 1279) (Muratsuchi, Chapter 337, Statutes of 2022) <i>The California Climate Crisis Act</i>	AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO ₂ removal solutions and carbon capture, utilization, and storage (CCUS) technologies. This bill is reflected directly in 2022 Scoping Plan Update.
Senate Bill 905 (SB 905) (Caballero, Chapter 359, Statutes of 2022) <i>Carbon Capture, Removal, Utilization, and Storage Program</i>	SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology. The bill requires CARB, on or before January 1, 2025, to adopt regulations creating a unified state permitting application for approval of CCUS and CDR projects. The bill also requires the Secretary of the Natural Resources Agency to publish a framework for governing agreements for two or more tracts of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project. The 2022 Scoping Plan Update modeling reflects both CCUS and CDR contributions to achieve carbon neutrality.
Senate Bill 846 (SB 846) (Dodd, Chapter 239, Statutes of 2022) <i>Diablo Canyon Powerplant: Extension of Operations</i>	SB 846 extends the Diablo Canyon Power Plant's sunset date by up to five additional years for each of its two units and seeks to make the nuclear power plant eligible for federal loans. The bill requires that the CPUC not include and disallow a load-serving entity from including in their adopted resource plan, the energy, capacity, or any attribute from the Diablo Canyon power plant. The 2022 Scoping Plan Update explains the emissions impact of this legislation.
Senate Bill 1020 (SB 1020) (Laird, Chapter 361, Statutes of 2022) <i>Clean Energy, Jobs, and Affordability Act of 2022</i>	SB 1020 adds interim renewable energy and zero carbon energy retail sales of electricity targets to California end-use customers set at 90 percent in 2035 and 95 percent in 2040. It accelerates the timeline required to have 100 percent renewable energy and zero carbon energy procured to serve state agencies from the original target year of 2045 to 2035. This bill requires each state agency to individually achieve the 100 percent goal by 2035 with specified requirements. This bill requires the CPUC, CEC, and CARB, on or before December 1, 2023, and annually thereafter, to issue a joint reliability progress report that reviews system and local reliability. The bill also modifies the requirement for CARB to hold a portion of its Scoping Plan workshops in regions of the state with the most significant exposure to air pollutants by further specifying that this includes communities with minority populations or low-income communities in areas designated as being in extreme federal non-attainment. The 2022 Scoping Plan Update describes the implications of this legislation on emissions.
Senate Bill 1137 (SB 1137) (Gonzales, Chapter 365, Statutes of 2022) <i>Oil & Gas Operations: Location Restrictions: Notice of Intention: Health protection zone: Sensitive receptors</i>	SB 1137 prohibits the development of new oil and gas wells or infrastructure in health protection zones, as defined, except for purposes of public health and safety or other limited exceptions. The bill requires operators of existing oil and gas wells or infrastructure within health protection zones to undertake specified monitoring, public notice, and nuisance requirements. The bill requires CARB to consult and concur with the California Geologic Energy Management Division (CalGEM) on leak detection and repair plans for these facilities, adopt regulations as necessary to implement emission detection system standards, and collaborate with CalGEM on public access to emissions detection data.

Bill/Executive Order	Summary
Senate Bill 1075 (SB 1075) (Skinner, Chapter 363, Statutes of 2022) <i>Hydrogen: Green Hydrogen: Emissions of Greenhouse Gases</i>	<p>SB 1075 requires CARB, by June 1, 2024, to prepare an evaluation that includes: policy recommendations regarding the use of hydrogen, and specifically the use of green hydrogen, in California; a description of strategies supporting hydrogen infrastructure, including identifying policies that promote the reduction of GHGs and short-lived climate pollutants; a description of other forms of hydrogen to achieve emission reductions; an analysis of curtailed electricity; an estimate of GHG and emission reductions that could be achieved through deployment of green hydrogen through a variety of scenarios; an analysis of the potential for opportunities to integrate hydrogen production and applications with drinking water supply treatment needs; policy recommendations for regulatory and permitting processes associated with transmitting and distributing hydrogen from production sites to end uses; an analysis of the life-cycle GHG emissions from various forms of hydrogen production; and an analysis of air pollution and other environmental impacts from hydrogen distribution and end uses.</p> <p>This bill would inform the production of hydrogen at the scale called for in the 2022 Scoping Plan Update.</p>
Assembly Bill 1757 (AB 1757) (Garcia, Chapter 341, Statutes of 2022) <i>California Global Warming Solutions Act of 2006: Climate Goal: Natural and Working Lands</i>	<p>AB 1757 requires the California Natural Resources Agency (CNRA), in collaboration with CARB, other State agencies, and an expert advisory committee, to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions in 2030, 2038, and 2045 by January 1, 2024. These targets must support state goals to achieve carbon neutrality and foster climate adaptation and resilience.</p> <p>This bill also requires CARB to develop standard methods for state agencies to consistently track GHG emissions and reductions, carbon sequestration, and additional benefits from natural and working lands over time. These methods will account for GHG emissions reductions of carbon dioxide, methane, and nitrous oxide related to natural and working lands and the potential impacts of climate change on the ability to reduce GHG emissions and sequester carbon from natural and working lands, where feasible.</p> <p>This 2022 Scoping Plan Update describes the next steps and implications of this legislation for the natural and working lands sector.</p>
Senate Bill 1206 (SB 1206) (Skinner, Chapter 884, Statutes of 2022) <i>Hydrofluorocarbon gases: sale or distribution</i>	<p>SB 1206 mandates a stepped sales prohibition on newly produced high-global warming potential (GWP) hydrofluorocarbons (HFCs) to transition California's economy toward recycled and reclaimed HFCs for servicing existing HFC-based equipment. Additionally, SB 1206 also requires CARB to develop regulations to increase the adoption of very low-, i.e., GWP < 10, and no-GWP technologies in sectors that currently rely on higher-GWP HFCs.</p>
Senate Bill 27 (SB 27) (Skinner, Chapter 237, Statutes of 2021) <i>Carbon Sequestration: State Goals: Natural and Working Lands: Registry of Projects</i>	<p>SB 27 requires CNRA, in coordination with other state agencies, to establish the Natural and Working Lands Climate Smart Strategy by July 1, 2023. This bill also requires CARB to establish specified CO₂ removal targets for 2030 and beyond as part of its Scoping Plan. Under SB 27, CNRA is to establish and maintain a registry to identify projects in the state that drive climate action on natural and working lands and are seeking funding.</p> <p>CNRA also must track carbon removal and GHG emission reduction benefits derived from projects funded through the registry.</p> <p>This bill is reflected directly in 2022 Scoping Plan Update as CO₂ removal targets for 2030 and 2045 in support of carbon neutrality.</p>
Senate Bill 596 (SB 596) (Becker, Chapter 246, Statutes of 2021) <i>Greenhouse Gases: Cement Sector: Net-Zero Emissions Strategy</i>	<p>SB 596 requires CARB, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero emissions of GHGs associated with cement used within the state as soon as possible, but no later than December 31, 2045. The bill establishes an interim target of 40 percent below the 2019 average GHG intensity of cement by December 31, 2035. Under SB 596, CARB must:</p> <p>Define a metric for GHG intensity and establish a baseline from which to measure GHG intensity reductions.</p> <ul style="list-style-type: none"> • Evaluate the feasibility of the 2035 interim target (40 percent reduction in GHG intensity) by July 1, 2028. • Coordinate and consult with other state agencies. • Prioritize actions that leverage state and federal incentives. • Evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low GHG intensity. <p>The 2022 Scoping Plan Update modeling is designed to achieve these outcomes.</p>

Bill/Executive Order	Summary
Executive Order N-82-20	<p>Governor Newsom signed Executive Order N-82-20 in October 2020 to combat the climate and biodiversity crises by setting a statewide goal to conserve at least 30 percent of California's land and coastal waters by 2030. The Executive Order also instructed the CNRA, in consultation with other state agencies, to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the state's carbon neutrality goal and build climate resilience. In addition to setting a statewide conservation goal, the Executive Order directed CARB to update the target for natural and working lands in support of carbon neutrality as part of this Scoping Plan, and to take into consideration the NWL Climate Smart Strategy.</p> <p>CO₂ Executive Order N-82-20 also calls on the CNRA, in consultation with other state agencies, to establish the California Biodiversity Collaborative (Collaborative). The Collaborative shall be made up of governmental partners, California Native American tribes, experts, business and community leaders, and other stakeholders from across the state. State agencies will consult the Collaborative on efforts to:</p> <ul style="list-style-type: none"> • Establish a baseline assessment of California's biodiversity that builds upon existing data and can be updated over time. • Analyze and project the impact of climate change and other stressors in California's biodiversity. • Inventory current biodiversity efforts across all sectors and highlight opportunities for additional action to preserve and enhance biodiversity. <p>CNRA also is tasked with advancing efforts to conserve biodiversity through various actions, such as streamlining the state's process to approve and facilitate projects related to environmental restoration and land management. The California Department of Food and Agriculture (CDFA) is directed to advance efforts to conserve biodiversity through measures such as reinvigorating populations of pollinator insects, which restore biodiversity and improve agricultural production.</p> <p>The Natural and Working Lands Climate Smart Strategy informs 2022 Scoping Plan Update.</p>
Executive Order N-79-20	<p>Governor Newsom signed Executive Order N-79-20 in September 2020 to establish targets for the transportation sector to support the state in its goal to achieve carbon neutrality by 2045. The targets established in this Executive Order are:</p> <ul style="list-style-type: none"> • 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. • 100 percent of medium- and heavy-duty vehicles will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks. • 100 percent of off-road vehicles and equipment will be zero-emission by 2035 where feasible. <p>The Executive Order also tasked CARB to develop and propose regulations that require increasing volumes of zero- electric passenger vehicles, medium- and heavy-duty vehicles, drayage trucks, and off-road vehicles toward their corresponding targets of 100 percent zero-emission by 2035 or 2045, as listed above.</p> <p>The 2022 Scoping Plan Update modeling reflects achieving these targets.</p>
Executive Order N-19-19	<p>Governor Newsom signed Executive Order N-19-19 in September 2019 to direct state government to redouble its efforts to reduce GHG emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy. This Executive Order instructs the Department of Finance to create a Climate Investment Framework that:</p> <ul style="list-style-type: none"> • Includes a proactive strategy for the state's pension funds that reflects the increased risks to the economy and physical environment due to climate change. • Provides a timeline and criteria to shift investments to companies and industry sectors with greater growth potential based on their focus of reducing carbon emissions and adapting to the impacts of climate change. • Aligns with the fiduciary responsibilities of the California Public Employees' Retirement System, California State Teachers' Retirement System, and the University of California Retirement Program. <p>Executive Order N-19-19 directs the State Transportation Agency to leverage more than \$5 billion in annual state transportation spending to help reverse the trend of increased fuel consumption and reduce GHG emissions associated with the transportation sector. It also calls on the Department of General Services to leverage its management and ownership of the state's 19 million square feet in managed buildings, 51,000 vehicles, and other physical</p>

Bill/Executive Order	Summary
	<p>assets and goods to minimize State government's carbon footprint. Finally, it tasks CARB with accelerating progress toward California's goal of five million ZEV sales by 2030 by:</p> <ul style="list-style-type: none"> • Developing new criteria for clean vehicle incentive programs to encourage manufacturers to produce clean, affordable cars. • Proposing new strategies to increase demand in the primary and secondary markets for ZEVs. • Considering strengthening existing regulations or adopting new ones to achieve the necessary GHG reductions from within the transportation sector. <p>The 2022 Scoping Plan Update modeling reflects efforts to accelerate ZEV deployment.</p>
<p>Senate Bill 576 (SB 576) (Umbert, Chapter 374, Statutes of 2019) <i>Coastal Resources: Climate Ready Program and Coastal Climate Change Adaptation, Infrastructure and Readiness Program</i></p>	<p>Sea level rise, combined with storm-driven waves, poses a direct risk to the state's coastal resources, including public and private real property and infrastructure. Rising marine waters threaten sensitive coastal areas, habitats, the survival of threatened and endangered species, beaches, other recreation areas, and urban waterfronts. SB 576 mandates that the Ocean Protection Council develop and implement a coastal climate adaptation, infrastructure, and readiness program to improve the climate change resiliency of California's coastal communities, infrastructure, and habitat. This bill also instructs the State Coastal Conservancy to administer the Climate Ready Program, which addresses the impacts and potential impacts of climate change on resources within the conservancy's jurisdiction.</p>
<p>Assembly Bill 65 (AB 65) (Petrie-Norris, Chapter 347, Statutes of 2019) <i>Coastal Protection: Climate Adaption: Project Prioritization: Natural Infrastructure: Local General Plans</i></p>	<p>This bill requires the State Coastal Conservancy, when it allocates any funding appropriated pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, to prioritize projects that use natural infrastructure in coastal communities to help adapt to climate change. The bill requires the conservancy to provide information to the Office of Planning and Research on any projects funded pursuant to the above provision to be considered for inclusion into the clearinghouse for climate adaption information. The bill authorizes the conservancy to provide technical assistance to coastal communities to better assist them with their projects that use natural infrastructure.</p>
<p>Executive Order B-55-18</p>	<p>Governor Brown signed Executive Order B-55-18 in September 2018 to establish a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. Policies and programs undertaken to achieve this goal shall:</p> <ul style="list-style-type: none"> • Seek to improve air quality and support the health and economic resiliency of urban and rural communities, particularly low-income and disadvantaged communities. • Be implemented in a manner that supports climate adaptation and biodiversity, including protection of the state's water supply, water quality, and native plants and animals. <p>This Executive Order also calls for CARB to:</p> <ul style="list-style-type: none"> • Develop a framework for implementation and accounting that tracks progress toward this goal. • Ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. <p>The 2022 Scoping Plan Update is designed to achieve carbon neutrality no later than 2045 and the modeling includes technology and fuel transitions to achieve that outcome.</p>
<p>Senate Bill 100 (SB 100) (De León, Chapter 312, Statutes of 2018) <i>California Renewables Portfolio Standard Program: emissions of greenhouse gases</i></p>	<p>Under SB 100, the CPUC, CEC, and CARB shall use programs under existing laws to achieve 100 percent clean electricity. The statute requires these agencies to issue a joint policy report on SB 100 every four years. The first of these reports was issued in 2021.</p> <p>The 2022 Scoping Plan Update reflects the SB 100 Core Scenario resource mix with a few minor updates.</p>
<p>Assembly Bill 2127 (AB 2127) (Ting, Chapter 365, Statutes of 2018) <i>Electric Vehicle Charging Infrastructure: Assessment</i></p>	<p>This bill requires the CEC, working with CARB and the CPUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of GHGs to 40 percent below 1990 levels by 2030. The bill requires the CEC to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure.</p> <p>This bill supports the deployment of ZEVs as modeled in 2022 Scoping Plan Update.</p>

Bill/Executive Order	Summary
Senate Bill 30 (SB 30) (Lara, Chapter 614, Statutes of 2018) <i>Insurance: Climate Change</i>	This bill requires the Insurance Commissioner, who oversees that the insurance industry operates fairly, transparently, and in a way that protects consumers, to convene a working group to identify, assess, and recommend risk transfer market mechanisms that, among other things, promote investment in natural infrastructure to reduce the risks of climate change related to catastrophic events, create incentives for investment in natural infrastructure to reduce risks to communities, and provide mitigation incentives for private investment in natural lands to lessen exposure and reduce climate risks to public safety, property, utilities, and infrastructure. The bill requires the policies recommended to address specified questions.

Assembly Bill 1279 and 2022 Scoping Plan

The Legislature enacted AB 1279, The California Climate Crisis Act, on September 16, 2022⁹⁸. AB 1279 establishes the policy of the State to achieve net zero GHG emissions, carbon neutrality⁹⁹, as soon as possible, but no later than 2045 and to achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 ensures that by 2045 Statewide anthropogenic greenhouse gas emissions are reduced at least 85 percent below 1990 levels. SB 1279 also requires CARB to ensure that the Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies for carbon dioxide removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the Scoping Plan’s goals.

The *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), adopted by CARB in December 2022, expands on prior scoping plans.¹⁰⁰ The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. This plan responds to more recent legislation, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State’s climate target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, while also assessing the progress California is making toward the 40 percent below 1990 levels by 2030, and achieving carbon neutrality by 2045 or earlier.¹⁰¹ The 2030 target is an interim but important stepping stone along the critical path to the broader goal of deep decarbonization by 2045. The 2022 Scoping Plan outlines the strategies the State will implement to achieve carbon neutrality by reducing GHG emissions to meet the anthropogenic target, and by expanding actions to capture and store carbon through the State’s natural and working lands and using a variety of mechanical approaches. A summary of the GHG emissions reductions and targets set forth under the 2022 Scoping Plan Update is provided in **Table 4.7-3, Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan**.

The 2022 Scoping Plan Update identifies the need to accelerate AB 32’s 2030 target, from 40 percent to 48 percent below 1990 levels. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update approaches decarbonization from two perspectives, managing a

⁹⁸ California Assembly Bill No. 1279: The California Climate Crisis Act (2012–2022). Approved September 16, 2022.

⁹⁹ *Carbon neutrality* means “net zero” emissions of GHGs. In other words, it means that GHG emissions generated by sources such as transportation, power plants, and industrial processes must be less than or equal to the amount of carbon dioxide that is stored, both in natural sinks and through mechanical sequestration. AB 1279 uses the terminology net zero and the 2022 Scoping Plan uses the terminology carbon neutrality or carbon neutral. These terms mean the same thing and are used interchangeably.

¹⁰⁰ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

¹⁰¹ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology. The Scoping Plan Scenario is summarized in Table 2-1 starting on page 72 of the Scoping Plan.¹⁰² It includes references to relevant statutes and Executive Orders, although it is not comprehensive of all existing new authorities for directing or supporting the actions described. Table 2-1 identifies actions related to a variety of sectors such as: smart growth and reductions in Vehicle Miles Traveled (VMT); light-duty vehicles (LDV) and zero-emission vehicles (ZEV); truck ZEVs; reduce fossil energy, emissions, and GHGs for aviation ocean-going vessels, port operations, freight and passenger rail, oil and gas extraction; and petroleum refining; improvements in electricity generation; electrical appliances in new and existing residential and commercial buildings; electrification and emission reductions across industries such as the for food products, construction equipment, chemicals and allied products, pulp and paper, stone/clay/glass/cement, other industrial manufacturing, and agriculture; retiring of combined heat and power facilities; low carbon fuels for transportation, business, and industry; improvements in non-combustion methane emissions, and introduction of low GWP refrigerants.

TABLE 4.7-3
ESTIMATED STATEWIDE GREENHOUSE GAS EMISSIONS REDUCTIONS IN THE 2022 SCOPING PLAN

Emissions Scenario	GHG Emissions (MMTCO₂e)
2019	
2019 State GHG Emissions	404
2030	
2030 BAU Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by AB 32 (i.e., 1990 level by 2030)	260
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2030	52 (16.7%) ^a
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	(3)
MMTCO ₂ e = million metric tons of carbon dioxide equivalents; parenthetical numbers represent negative values.	
a. $312 - 260 = 52 / 312 = 16.7\%$	
SOURCE: California Air Resources Board (CARB). 2022. <i>2022 Scoping Plan for Achieving Carbon Neutrality</i> . December 2022.	

Achieving the targets described in the 2022 Scoping Plan Update will require continued commitment to and successful implementation of existing policies and programs, and identification of new policy tools and technical solutions to go further, faster. California's Legislature and State agencies will continue to collaborate to achieve the State's climate, clean air, equity, and broader economic and environmental protection goals. It will be necessary to maintain and strengthen this collaborative effort, and to draw upon the assistance of the federal government, regional and local governments, tribes, communities, academic institutions, and the private sector to achieve the State's near-term and longer-term emission reduction goals and a more equitable future for all Californians. The Scoping Plan acknowledges that the path forward is

¹⁰² California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

not dependent on one agency, one State, or even one country. However, the State can lead by engaging Californians and demonstrating how actions at the State, regional, and local levels of governments, as well as action at community and individual levels, can contribute to addressing the challenge.

Appendix D, Local Actions, of the 2022 Scoping Plan Update includes “recommendations intended to build momentum for local government actions that align with the State’s climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA).” Appendix D is intended to provide clarification on challenges local jurisdictions face when implementing GHG reduction strategies or approving much-needed housing projects.¹⁰³

Aligning local jurisdiction action with State-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan Update is critical to achieving the statutory targets for 2030 and 2045. The 2022 Scoping Plan Update discusses the role of local governments in meeting the State’s GHG reductions goals. Local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. They also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhoods that do not force people into cars. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements and play a critical role in facilitating the rollout of ZEV infrastructure. As a result, local government decisions play a critical role in supporting State-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority.

California Environmental Quality Act Guidelines

SB 97, enacted in 2007, directed the Governor’s Office of Planning and Research (OPR) to develop CEQA guidelines “for the mitigation of GHG emissions or the effects of GHG emissions.” In December 2009, OPR adopted amendments to the CEQA Guidelines Appendix G Environmental Checklist. These amendments created a new resource section for GHG emissions and suggested criteria that may be used to establish significance of GHG emissions (California Code of Regulations Title 14, Section 15064.4 [14 CCR Section 15064.4]). However, neither a quantitative threshold of significance nor any specific mitigation measures is included. As amended, the CEQA Guidelines require a lead agency to make a good-faith effort, based on scientific and factual data to the extent possible, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The CEQA Guidelines give discretion to the lead agency to choose whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Furthermore, the CEQA Guidelines identify three factors to be considered in the evaluation of the significance of GHG emissions:

- (1) The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

¹⁰³ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR Section 15064.4(b)).

On December 28, 2018, OPR adopted amendments to the CEQA Guidelines to clarify several points such as cumulative nature of GHG emissions, modeling methodology, and significance evaluation. The administrative record for the CEQA Guidelines amendments also clarifies “that the effects of GHG emissions are cumulative and should be analyzed in the context of California Environmental Quality Act’s requirements for cumulative impact analysis”.¹⁰⁴

California Air Resources Board

CARB, a part of CalEPA, is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. CARB also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California’s State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the CAA. CARB also has primary responsibility for adopting regulations to meet the State’s goal of reducing GHG emissions to 1990 levels by 2020.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (13 CCR, Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

Low Carbon Fuel Standard

In 2007, Executive Order S-01-07 mandated the following: establish a statewide goal to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020; and adopt a LCFS for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. In 2009, the LCFS regulations were approved by CARB and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 beginning in 2011. In 2015, CARB approved the re-adoption of the LCFS, which became effective beginning January 2016, to address procedural deficiencies in the way the original regulation was adopted.

¹⁰⁴ Bryant C. 2009. Letter from C. Bryant, Director (Governor’s Office of Planning and Research), to M. Chrisman, California Secretary for Natural Resources. April 13, 2009.

In-Use Off-Road Diesel-Fueled Fleets Regulation

In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.

CARB approved amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation in November of 2022.¹⁰⁵ The amendment will require fleets to phase-out use of the oldest and highest polluting off-road diesel vehicles, prohibit the addition of high-emitting vehicles to a fleet, and require the use of R99 or R100 renewable diesel in off-road diesel vehicles. The amendments phase-in starting in 2024 through the end of 2046 and include changes to enhance enforceability and encourage the adoption of zero-emission technologies. These amendments aim to further reduce emissions from the off-road sector.

Truck and Bus Regulation

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 205(h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower, such as, bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters, and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

Advanced Clean Car Program

In 2012, CARB adopted the Advanced Clean Cars (ACC) emissions-control program, which is closely associated with the emissions standards for passenger vehicles and light-duty trucks discussed above.¹⁰⁶ The program requires an increase in the number of zero-emissions vehicle models for years 2015 through 2025 to control smog, soot and GHG emissions. By 2025, ZEVs must be 22 percent of large volume manufacturers overall production.¹⁰⁷ This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

Governor Gavin Newsom signed Executive Order No. N-79-20 on September 23, 2020, which would phase out sales of new gas-powered passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles. In accordance with the Executive Order, CARB is developing a 2020 Mobile Source

¹⁰⁵ California Air Resources Board (CARB). 2022. CARB approves amendments to Off-Road Regulation to further reduce emissions. Release No. 22-45. November 17, 2022.

¹⁰⁶ California Air Resources Board (CARB). 2024. "Advanced Clean Cars Program" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>. Accessed: February 2024.

¹⁰⁷ California Air Resources Board (CARB). 2012. *Final Regulation Order – Part 3. Zero-Emission Vehicle Standards For 2018 And Subsequent Model Year Passenger Cars, Light-Duty Trucks, And Medium-Duty Vehicles, Section 1962.2, Title 1, California Code of Regulations*. Adopted March 22, 2012.

Strategy, a comprehensive analysis that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The strategies will provide important information for numerous regulations and incentive programs going forward by conveying what is necessary to address the aggressive emission reduction requirements.

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program.¹⁰⁸ The ACC II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The ACC II regulation amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards which supports Governor Newsom's 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Additionally, the ACC II regulation amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

Advanced Clean Trucks Program

The Advanced Clean Trucks regulations were approved on June 25, 2020, and require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, "Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the SIP, Sustainable Freight Action Plan, SB 350, and AB 32".¹⁰⁹ The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

Land Use and Transportation Planning

In 2008, SB 375 (Chapter 728, Statutes of 2008) established mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's metropolitan planning organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.¹¹⁰ The proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations. Under SB 375, the regional GHG reduction target must be incorporated within the applicable MPO's Regional

¹⁰⁸ California Air Resources Board (CARB). 2024. "Advanced Clean Cars II" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed March 2024.

¹⁰⁹ California Air Resources Board (CARB). 2024. "Sustainable Communities and Climate Protection Program" [webpage]. <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about>. Accessed March 2024.

¹¹⁰ California Senate Bill No. 375: Sustainable Communities and Climate Protection Act of 2008. Approved September 30, 2008.

Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). In 2011, CARB adopted GHG emissions reduction targets for the Southern California Association of Governments (SCAG), the MPO for the region in which the Project is located. In 2018, CARB updated the SB 375 targets to require an 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.¹¹¹

Energy Sector

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods.

The California Building Energy Efficiency Standards (Title 24 standards) are typically updated every three years. The 2022 Title 24 standards became effective January 1, 2023. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 standards.¹¹² The 2025 Title 24 standards become effective January 1, 2026 and focuses on expanding the use of heat pumps for space conditioning and water heating in newly constructed single-family, multifamily, and select nonresidential buildings and allowing for flexibility for alternative but equally efficient approaches; updating photovoltaic and battery energy storage system standards for high-rise multifamily and nonresidential buildings to achieve cost effective installations; updating space conditioning system control standards for nonresidential buildings; and updating ventilation requirements in multifamily buildings to improve indoor air quality.¹¹³

The California Green Building Standards Code (Title 24 CCR Part 11) is commonly referred to as the CALGreen Code. The purpose of the CALGreen Building Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”¹¹⁴ The CALGreen Building Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the

¹¹¹ California Air Resources Board (CARB). 2018. *Updated Final Staff Report – Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets*. February 2018.

¹¹² California Energy Commission (CEC). 2022. *2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*. Report No. CEC-400-2022-010-CMF. August 2022.

¹¹³ CEC, 2025 California Energy Code, December 2024. https://www.energy.ca.gov/sites/default/files/2024-12/2025_Energy_Code_Summary_ADA.pdf. Accessed February 2025.

¹¹⁴ 2022 California Green Building Standards Code (CALGreen), California Code of Regulations, Title 24, Part 11. (January 1, 2023).

California Building Standards Commission. The CALGreen Building Code establishes mandatory measures for new residential and non-residential buildings. The CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation; material conservation and resource efficiency; and environmental quality. The 2022 CALGreen Code became effective on January 1, 2023 and revises standards for electric vehicle charging for new construction, primarily multi-family dwellings and hotels/motels, including increased requirements for EV parking spaces and EVSE Level 2 chargers, establishes heat pumps as a baseline technology, strengthens ventilation standards, establishes electric-ready requirements for new homes, and sets minimum solar photovoltaic and battery energy storage capacity for high-rise multifamily and commercial buildings, including office buildings, grocery stores, and schools, and more. The 2025 CALGreen Code becomes effective on January 1, 2026 and includes performance targets that focus on more efficient hot water and HVAC systems for single-family homes, outdoor lighting standards, a new section for alterations to existing buildings, new standards for altered space conditioning systems, and new standards for altered pool and/or spa heating.¹¹⁵

The 2012 Appliance Efficiency Regulations (Title 20 CCR Sections 1601–1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

The State has adopted regulations to increase the proportion of electricity from renewable sources. In 2008, Executive Order S-14-08 expanded the State’s RPS goal to 33 percent renewable power by 2020. In 2009, Executive Order S-21-09 directed CARB (under its AB 32 authority) to enact regulations to help the State meet the 2020 goal of 33 percent renewable energy. The 33 percent by 2020 RPS goal was codified with the passage of Senate Bill X1-2. This new RPS applied to all electricity retailers in the State, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. SB 350 (Chapter 547, Statutes of 2015) further increased the RPS to 50 percent by 2030, including interim targets of 40 percent by 2024 and 45 percent by 2027. In 2018, SB 100 further increased California’s RPS and requires retail sellers and local publicly-owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and requires that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC’s responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility’s renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) published the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 GHG Handbook) in December of 2021.¹¹⁶ CAPCOA prepared this 2021 GHG

¹¹⁵ CEC, 2025 California Energy Code, December 2024.

¹¹⁶ California Air Pollution Control Officers Association (CAPCOA). 2021. *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. December 2021.

Handbook to provide a common platform of information and tools for evaluating GHG reduction measures, climate vulnerabilities and promoting equity to support sustainable, resilient, and equitable land use planning and project design. The 2021 GHG Handbook was prepared in collaboration with academia, agencies, community organizations and leaders, local governments, nongovernmental organizations, and technical experts. The quantification methods, tools, and recommendations provided in this 2021 GHG Handbook were developed based on the latest science and literature available at the time of publication and have been incorporated into CalEEMod Version 2022.1.

Regional

Southern California Association of Governments

On April 4, 2024, SCAG adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy also known as Connect SoCal 2024¹¹⁷, which is an update to the previous 2020–2045 RTP/SCS.¹¹⁸ Using growth forecasts and economic trends, Connect SoCal 2024 provides a vision for transportation throughout the region for the next 26 years. Connect SoCal 2024 implements the following goals to meet the 2035 target:

- Build and maintain an integrated multimodal transportation network.
- Develop, connect, and sustain livable and thriving communities.
- Create a healthy region for the people of today and tomorrow.
- Support a sustainable, efficient, and productive regional economic environment that provides opportunities for all people in the region.

Implementation of Connect SoCal 2024 is anticipated to achieve a 19 percent reduction in emissions by 2035 relative to 2005, which would meet CARBs GHG reduction targets.

South Coast Air Quality Management District

As discussed in Section 4.2, *Air Quality*, of this Draft EIR, SCAQMD is responsible for air quality planning in the South Coast Air Basin (where the Planning Area is located) and developing rules and regulations to bring the Air Basin into attainment of the ambient air quality standards. As part of its efforts to reduce local air pollution, SCAQMD has promoted a number of programs to combat climate change. For instance, SCAQMD has promoted energy conservation, low-carbon fuel technologies (natural gas vehicles; electric-hybrids, hydraulic-hybrids, and battery-electric vehicles), renewable energy, vehicle miles traveled (VMT) reduction programs, and market incentive programs.

A GHG Significance Threshold Working Group was formed by the SCAQMD to evaluate potential GHG significance thresholds.¹¹⁹ In 2008, the Working Group released draft guidance regarding interim CEQA

¹¹⁷ Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

¹¹⁸ Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association Of Governments*. Adopted September 30, 2020.

¹¹⁹ South Coast Air Quality Management District (SCAQMD). 2024. “Greenhouse Gases CEQA Significance Thresholds” [webpage]. <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>. Accessed March 2024.

GHG significance thresholds.^{120,121,122} Within its October 2008 document, the Working Group proposed the use of a percent emission reduction target compared to business as usual to determine significance for commercial/residential projects that emit greater than 3,000 MTCO₂e per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO₂e per year would be assumed to have a less-than-significant impact on climate change. In addition, on December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO₂e for stationary source/industrial projects where the SCAQMD is the Lead Agency. However, the SCAQMD has not adopted a GHG significance threshold for land use development projects. The aforementioned Working Group has been inactive since 2011 and the SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

Local

City of Irwindale General Plan

The Irwindale General Plan¹²³ will serve as the blueprint for future planning and development in the City and indicates the City's vision for the future through policies and plans that are designed to shape the physical development of the community. The following policy in the Resource Management Element pertains to the Project.

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

The Draft Irwindale Housing Element¹²⁴ has policies that will promote sustainability, energy efficiency, and a healthy community as outlined below:

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

¹²⁰ South Coast Air Quality Management District (SCAQMD). 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008.

¹²¹ South Coast Air Quality Management District (SCAQMD). 2008. Board Letter: Board Meeting, Agenda No. 31 Proposal for Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. December 5, 2008.

¹²² South Coast Air Quality Management District (SCAQMD). 2008. Board Letter: Board Meeting, Agenda No. 31 Proposal for Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. December 5, 2008.

¹²³ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

¹²⁴ City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

The Draft Irwindale Safety Element¹²⁵ has policies that will promote conservation and energy efficiency as outlined below:

Goal SAF4: A sustainable current and long-term supply of water resources that meet domestic, industrial, and recreational needs.

Policy SAF4.2: Potable Water Conservation. Encourage the use of provisions that conserve potable water for domestic uses. Small-scale interventions for conservation of potable water include watershed restoration, resources for sustainable landscaping, and other home-based interventions.

Policy SAF4.4: Water Resource Protection Partnerships. Partner with local organizations, agencies, and water purveyors that service Irwindale to protect groundwater and surface water resources that are vulnerable to climate change and to ensure a safe and reliable supply of water for future generations.

Policy SAF4.5: Compliance with LA County Building Code. Ensure that city's building, zoning, and subdivision ordinances remain in compliance with LA County Building Code.

City of Irwindale Active Transportation Plan

The Irwindale Active Transportation Plan (ATP)¹²⁶ will guide the development of pedestrian and bicycle infrastructure and programs in the City of Irwindale. The ATP ultimately supports and implements a fully integrated network accommodating all transportation modes, with a specific focus on improving pedestrian connections to key destinations citywide and seeks to make walking and bicycling in the City safe, pleasant, and convenient for all. The ATP includes primary criteria which:

- Provides direct access to key destinations in Irwindale.
- Implements recommendations in adjacent and/ or regional pedestrian and bicycle plans.
- Improves safety and access for all.
- Incorporates multi-modal infrastructure in growth areas.
- Connects to regional infrastructure (bicycle criteria only).
- Connects to bikeways in adjacent jurisdictions (bicycle criteria only).

City of Irwindale Municipal Code

Energy

The City has adopted by reference, Title 31, 2023 Edition Green Building Standards Code, of the Los Angeles County Code, as amended and in effect on January 1, 2023, which adopts the California Green Building Standards Code, 2022 Edition (CCR, Title 24, Part 11) and is known and may be cited as the Green Building Code of the City of Irwindale. The provisions of the Building Code, Existing Building Code, Residential Code, and Green Building Code applying to dwellings, lodging houses, congregate residences, motels, apartment houses, or other uses classified by the Building Code as a Group R Occupancy. The Green Building Code increases energy and water efficiency and reduces waste generation. The Green Building Code has co-benefits of reducing criteria pollutant emissions through the increase in

¹²⁵ City of Irwindale. 2024. *General Plan. Safety Element*. Draft. April 2024.

¹²⁶ City of Irwindale. 2021. *City of Irwindale Active Transportation Plan*. January 2021.

energy efficiencies, which reduces building energy demand and the combustion of natural gas within buildings.

Water

As part of State and regional efforts towards water conservation, Chapter 15.30, Water Efficient Landscape Standards and Guidelines, of the City of Irwindale Municipal Code includes requirements for water efficient landscape regulations. The code requires landscapes to be planned, designed, installed, maintained, and managed in a manner that uses water efficiently, encourages water conservation, and prevents water waste.

Solid Waste

Chapter 08.22, Specific Regulations for Organic Waste Disposal Reduction, Recycling, and Solid Waste Collection, of the City of Irwindale Municipal Code contains provisions that implement the source reduction and recycling programs and other measures to achieve per capita waste generation for disposal in accordance with State and county programs.

4.7.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to GHG emissions if the project would:

Threshold GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold GHG-2: Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

CEQA Guidelines Section 15064.4 assists lead agencies in determining the significance of the impacts of GHG emissions and gives them discretion to determine whether to assess emissions quantitatively or qualitatively. If a qualitative and quantification-based approach is used, then Section 15064.4 recommends qualitative factors that may be used in the determination of significance. These factors include the extent to which the project may increase or reduce GHG emissions compared to the existing environment, whether the project exceeds an applicable significance threshold, and the extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs. CEQA Guidelines Section 15064.4 does not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including by looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association, so long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7[c]). The California Natural Resources Agency also has clarified that the CEQA Guidelines

focus on the impacts of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see also CEQA Guidelines Section 15064[h]).^{127,128}

Although GHG emissions can be quantified, CARB, SCAQMD, and the City have not adopted quantitative project-level significance thresholds for GHG emissions that apply to the Project. In 2008, OPR released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment."¹²⁹ Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project."¹³⁰

To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (14 CCR Section 15064(h)(3)). Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" (14 CCR Section 15064(h)(3)).

Even in the absence of clearly defined thresholds for GHG emissions, the law requires that an agency makes a good faith effort to disclose the GHG emissions from a project and mitigate to the extent feasible whenever the lead agency determines that a project contributes to a significant, cumulative climate change impact. Regardless of which threshold(s) are used, the agency must support its analysis and significance determination with substantial evidence (CEQA Guidelines, Section 15064.7). The CEQA Guidelines recommends considering certain factors, among others, when determining the significance of a project's GHG emissions, including the extent to which a project may increase or reduce GHG emissions as compared to the existing environment; whether a project exceeds an applicable significance threshold; and extent to which a project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs.

According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."¹³¹ Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that a single

¹²⁷ See generally: California Natural Resources Agency (CNRA). 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*. December 2009, pp. 11-13, 14, 16.

¹²⁸ See also: Bryant C. 2009. Letter from C. Bryant, Director (Governor's Office of Planning and Research), to M. Chrisman, California Secretary for Natural Resources. April 13, 2009.

¹²⁹ Governor's Office of Planning and Research (OPR). 2008. Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review. June 19, 2008.

¹³⁰ Governor's Office of Planning and Research (OPR). 2008. Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review. June 19, 2008.

¹³¹ California Air Pollution Control Officers Association (CAPCOA). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008.

project's increase in annual GHG emissions would cause a measurable change in global GHG emissions necessary to influence global climate change.

Section 15064.4(b) of the CEQA Guidelines states that “[i]n determining the significance of a project’s greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of a project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national, or global emissions.”

The Project is a planning document, the approval of which would not directly result in the development of land uses and would not directly result in GHG emissions. Future GHG emissions may result from new development that could occur from adoption of the proposed Project. This assessment quantifies GHG emissions from such new development under buildout conditions of the proposed Project. Although GHG emissions have been quantified as discussed under the *Methodology and Assumptions* subsection below, neither CARB, SCAQMD, nor the City of Irwindale has adopted quantitative significance thresholds. In the absence of any adopted quantitative threshold, the determination of whether or not new development that could occur from adoption of the proposed Project would result in a cumulatively considerable contribution to the cumulative impacts of global climate change is based on the following:

- If the Project would conflict with (and thereby be inconsistent with) the applicable GHG emissions reduction plans, policies, and regulations, which include the emissions reduction measures included within CARB’s 2022 Climate Change Scoping Plan; SCAG’s Connect SoCal 2024; and the City of Irwindale’s plans, programs, and policies including policies in the Project established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments under the proposed Project.

Methodology and Assumptions

Greenhouse Gas Emissions

The Climate Action Registry General Reporting Protocol provides procedures and guidelines for calculating and reporting GHG emissions from general and industry-specific activities. Although no numerical thresholds of significance have been adopted, and no specific protocols are available for land use projects, the General Reporting Protocol provides a framework for calculating and reporting GHG emissions. The GHG emissions provided in this report are consistent with the General Reporting Protocol framework. For the purposes of this PEIR, estimated GHG emissions from the operation of new development that could occur with adoption of the proposed Project are quantified to provide information to decision makers and the public regarding the level of the GHG emissions. GHG emissions are typically separated into three categories that reflect different aspects of ownership or control over emissions:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.¹³²

¹³² Embodied energy includes energy required for water pumping and treatment for end-uses.

Direct GHG emissions from new development would result from natural gas combustion and landscaping equipment, and indirectly from electricity demand, water conveyance, wastewater generation, solid waste decomposition, and motor vehicles. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

The quantification of GHGs from any project involves many uncertainties. For example, it is reasonable to assume that some portion of the residents, employees, and visitors that would occupy new development that would occur under the proposed Project would engage in similar activities (working, recreating, and driving) that generate GHG emissions without the Project. However, the Project could result in changing travel behavior that reduces vehicle miles traveled. Additionally, newer construction materials and practices, future energy efficiency requirements, future mobile source emission standards, and advances in technology would likely reduce future levels of emissions. However, the net effect is difficult to quantify due to the difficulty in predicting future behaviors of residents, employees, and visitors and future standards and requirements. As such, the estimated net change in emissions that could result from new development under the Project is likely to be an over-estimation. These same uncertainties and assumptions exist throughout the accepted analytical methodologies for quantifying GHG emissions. Additional details regarding emissions quantification are provided below.

Construction Emissions

Construction of new development that could occur under the Project would have the potential to increase GHG emissions through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites.

The Project is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified. Therefore, quantification of GHG emissions associated with future development under the proposed Project cannot be specifically determined at this time. Therefore, the analysis will be based on the potential for construction to conflict with applicable plans, policies, and regulations to reduce GHG emissions in the context of overall development GHG emissions.

Operational Emissions

Operation of new development that could occur under the proposed Project would generate GHG emissions from on-site operations such as natural gas combustion for heating/cooking, landscaping equipment, and the use of consumer products. GHG emissions would also be generated by vehicle trips, electricity demand, water demand, wastewater generation, and solid waste decomposition. Operational impacts were assessed for the full Project buildout year of 2029.

VMT data, which takes into account mode and trip lengths, was developed for the transportation analysis. Emissions from motor vehicles are dependent on vehicle type. Thus, the emissions were calculated using a representative motor vehicle fleet mix for the region based on the CARB EMFAC2021 model and default fuel type. EMFAC2021 was used to generate emissions factors for operational mobile sources based on fuel type and vehicle class. However, traffic reduction policies within the General Plan Infrastructure Element, to which the regional travel demand model may not be fully sensitive (such as connectivity in neighborhoods, presence of bicycle and pedestrian facilities, and transportation demand management

measures), may not be fully reflected in the VMT and emissions estimates. Therefore, estimated mobile source emissions are conservatively higher.

Emissions of GHGs from buildout of new development that could occur under the Project are estimated using CalEEMod, which is a statewide land use emission computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California and is recommended by SCAQMD. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying GHG emissions from land use development throughout California. For new development, CalEEMod default values were used for area source emissions except that wood stoves and wood fireplaces were removed from the emissions calculations as they are not permitted within SCAQMD's jurisdiction for most new commercial and residential development per SCAQMD Rule 445. Gas fireplaces were assumed to be included in single family homes, however, gas fireplaces are not permitted in multi-family residential units. Future development is assumed to comply with the Title 24 (2022) building energy efficiency standards, which is a conservative assumption since future Title 24 standards, typically adopted every three years, would reduce building energy demand for future development permitted in 2026 and later.

Emissions of GHG from water and wastewater are due to the required energy to supply, distribute and treat. Wastewater also results in emissions of GHGs from wastewater treatment systems. For new development, CalEEMod default water and wastewater related GHG emissions are assumed in the analysis. A municipal solid waste diversion rate of 75 percent is assumed in compliance with AB 341 (refer to Section 4.14, *Utilities and Service Systems*, of this Draft PEIR, for additional information regarding AB 341). For solid waste, the default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery) are statewide averages and are used in this assessment.

Other sources of GHG emissions from operation of the Project include equipment used to maintain landscaping, such as lawnmowers and trimmers. CalEEMod default emission rates were used in calculating GHG emissions from these additional sources. The emissions for landscaping equipment are based on the size of the open space based on the Project's residential and retail land uses, the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted. Refrigerant emissions are based on Project land use type since different types of refrigeration equipment are used by different types of land uses. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing of the refrigeration equipment lifetime, and then derives average annual emissions from the lifetime estimate.

Project Consistency with GHG Reduction Plans

The Project's potential for GHG impacts is also evaluated by assessing the Project's consistency with applicable GHG reduction strategies and local actions adopted by CARB, SCAG, and the City of Irwindale. As there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on whether the Project is not in conflict with, and therefore is consistent with, statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment

consistent with CEQA Guidelines Section 15064.4 and CEQA Guidelines Appendix G. Based on CEQA case law, when no guidance exists, the lead agency may look to and assess general compliance with comparable regulatory schemes.¹³³

A consistency analysis is provided and describes the Project's compliance with performance-based standards included in the regulations outlined in the applicable portions of CARB's 2022 Climate Change Scoping Plan, Connect SoCal 2024, and the City of Irwindale's General Plan.

For this Project, the City serves as the lead agency. OPR encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. The City does not have a programmatic mitigation plan to tier from, such as a GHG Emissions Reduction Plan as recommended in the CEQA Guidelines. The California CAT Report provided recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in HSC Division 25.5. Thus, if the Project is designed and operated in accordance with these policies and regulations, it would result in a less than significant impact, because it would be consistent with the overarching State regulations on GHG reductions.

Appendix D, Local Actions, of the 2022 Scoping Plan Update includes "recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA)." ¹³⁴

The State encourages local governments to adopt a CEQA-qualified CAP addressing the three priority areas (transportation electrification, VMT reduction, and building decarbonization). However, the State recognizes that almost 50% of jurisdictions do not have an adopted CAP, among other reasons because they are costly, requiring technical expertise, staffing, funding. Additionally, CAPs need to be monitored and updated as State targets change and new data is available. Jurisdictions that wish to take meaningful climate action (such as preparing a non-CEQA-qualified CAP or as individual measures) aligned with the State's climate goals in the absence of a CEQA-qualified CAP should also look to the three priority areas when developing local climate plans, measures, policies, and actions. "By prioritizing climate action in these three priority areas, local governments can address the largest sources of GHGs within their jurisdiction."¹³⁵

Appendix D, Local Actions, of the 2022 Scoping Plan Update includes "recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local

¹³³ See *Protect Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1107 [“[A] lead agency’s use of existing environmental standards in determining the significance of a project’s environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution.”]. Lead agencies can, and often do, use regulatory agencies’ performance standards. A project’s compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).

¹³⁴ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*, Appendix D: Local Actions. November 2022.

¹³⁵ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*, Appendix D: Local Actions. November 2022.

GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA).”¹³⁶

The State encourages local governments to adopt a CEQA-qualified CAP addressing the three priority areas (transportation electrification, VMT reduction, and building decarbonization). However, the State recognizes that almost 50% of jurisdictions do not have an adopted CAP, among other reasons because they are costly, requiring technical expertise, staffing, funding. Additionally, CAPs need to be monitored and updated as State targets change and new data is available. Jurisdictions that wish to take meaningful climate action (such as preparing a non-CEQA-qualified CAP or as individual measures) aligned with the State’s climate goals in the absence of a CEQA-qualified CAP should also look to the three priority areas when developing local climate plans, measures, policies, and actions. “By prioritizing climate action in these three priority areas, local governments can address the largest sources of GHGs within their jurisdiction.”¹³⁷

The State also recognizes in Appendix D, Local Actions, of the 2022 Scoping Plan that each community or local area has distinctive situations and local jurisdictions must balance the need for housing while demonstrating that a Project is in alignment with the State’s Climate Goals.¹³⁸ The State calls for the climate crisis and the housing crisis to be confronted simultaneously. Jurisdictions should avoid creating targets that are impossible to meet as a basis to determine significance. Ultimately, targets that make it more difficult to achieve statewide goals by prohibiting or complicating projects that are needed to support the State’s climate goals, like infill development, low-income housing or solar arrays, is not consistent with the State’s goals. The State also recognizes the lead agencies’ discretion to develop evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions.

Project Impact Analysis

Generate GHG Emissions

Threshold GHG-1: The Project would have a significant impact if future development under the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact GHG-1: Development that would occur under the Project would not generate GHG emissions from construction and operation, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts would be less than significant.

Construction

As stated above, the Project is a planning document, the approval of which would not directly result in the development of land uses and would not directly result in GHG emissions. Future GHG emissions may

¹³⁶ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*, Appendix D: Local Actions. November 2022.

¹³⁷ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*, Appendix D: Local Actions. November 2022.

¹³⁸ The State recognizes the need for 2.5 million housing units over the next eight years, with one million being affordable units. See: California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*, Appendix D: Local Actions. November 2022, page 20.

result from new development that could occur from as a result of adoption of the proposed Project. Construction of future development has the potential to generate GHG emissions through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from each specific project site. Construction emissions can vary substantially from day to day, depending on the level of activity and the specific type and amount of equipment. However, as there are no specific projects currently approved or proposed under the Project and there is no knowledge as to timing of construction, location or the exact nature of future projects, analysis of construction emissions would be speculative at best. Information regarding specific development projects, including specific buildings and facilities proposed to be constructed, construction schedules, quantities of grading, and other information would be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible.

Each future development that occurs as a result of the Project would be required to comply with applicable USEPA, CARB and SCAQMD emissions standards, rules, and regulations as well as conduct their own applicable CEQA analysis and would determine significance based on the individual project specifics. Furthermore, future construction activities that occur as a result of the Project would be required to comply with the CARB Air Toxics Control Measure, which limits diesel powered equipment and vehicle idling to no more than five minutes at a location (13 CCR Section 2485), CARB In-Use Off-Road Diesel Vehicle regulation, CARB Truck and Bus regulation, SAFE Vehicle Rule (or its successor rule), and CARB Advanced Clean Car and Advanced Clean Trucks regulations, all of which support the goals of the CARB Climate Change Scoping Plan by requiring construction equipment and vehicle fleet operators to repower or replace higher-emitting equipment with less polluting models, including zero- and near-zero-emissions on-road vehicle and truck technologies as they become developed and commercially available. Mandatory compliance with these rules and regulations would reduce GHG emissions, including fuel combustion emissions of CO₂, CH₄, and N₂O, during future construction activities that would occur as a result of the proposed Project.

Operation

Operation of future development under the proposed Project would generate GHG emissions from vehicle trips traveling within the city, energy sources such as electricity demand and natural gas combustion, area sources such as fireplaces and landscaping equipment, water conveyance and distribution, wastewater treatment, and solid waste decomposition. Projected emissions resulting from operational activities of both existing and future development under the proposed Project are presented in **Table 4.7-4, Unmitigated Net Change in Annual Greenhouse Gas Emissions**.

As shown in Table 4.7-4, the operational emissions at 2029 project buildout of new development under the proposed Project are considered net new. The change in emissions at 2029 buildout would be net new primarily due to the focus of the proposed Project on vacant land and infill development near transit and community infrastructure to help the City achieve an integrated land use mix that accommodates growth while reducing VMT and associated emissions, improvements in vehicle emissions standards and, to a lesser extent, improvements in building energy efficiency standards. Development of future new residential uses would be based on market demand and would be constructed over the buildout duration through 2029. The adopted and proposed General Plan policies, listed below, would reduce potential emissions from future new, as well as existing, development. In addition, future new development under the proposed Project that requires discretionary approval would be required to conduct separate CEQA analysis to

determine significance based on the individual project specifics. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require implementation of mitigation.

**TABLE 4.7-4
UNMITIGATED NET CHANGE IN ANNUAL GREENHOUSE GAS EMISSIONS**

Emissions Sources	CO ₂ e (Metric Tons per Year) ^{a,b}
New Development (2029)	
Area (Fireplaces, Landscaping)	34
Energy (Electricity and Natural Gas)	561
Mobile (Based on 2029 with GPU VMT)	2,055
Solid Waste	81
Water and Wastewater	28
Annual Emissions	2,759

NOTES:

- a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this PEIR.
 - b. CO₂e emissions are calculated using the global warming potential values from the Intergovernmental Panel on Climate Change Fourth Assessment Report.
- SOURCE: ESA 2025; CalEEMod 2022; EMFAC 2021.

General Plan Policies that Address the Impact

Resource Management Element

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

Draft Housing Element

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Draft Safety Element

Goal SAF4: A sustainable current and long-term supply of water resources that meet domestic, industrial, and recreational needs.

Policy SAF4.2: Potable Water Conservation. Encourage the use of provisions that conserve potable water for domestic uses. Small-scale interventions for conservation of potable water include watershed restoration, resources for sustainable landscaping, and other home-based interventions.

Policy SAF4.4: Water Resource Protection Partnerships. Partner with local organizations, agencies, and water purveyors that service Irwindale to protect groundwater and surface water resources that are vulnerable to climate change and to ensure a safe and reliable supply of water for future generations.

Policy SAF4.5: Compliance with LA County Building Code. Ensure that city's building, zoning, and subdivision ordinances remain in compliance with LA County Building Code.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would result in less than significant impacts related to GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Conflict with GHG Reduction Plan, Policy, or Regulation

Threshold GHG-2: The Project would have a significant impact if future development allowed under the Project would conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Impact GHG-2: The Project would result in a less than significant impact related to conflicts with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

In the absence of any adopted quantitative threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted for the purpose of reducing the emissions of GHGs.

The analyses below demonstrate that the Project is consistent with the applicable GHG emission reduction plans and policies included within the 2022 Climate Change Scoping Plan, Connect SoCal 2024, and the City of Irwindale's General Plan. As shown herein, the Project would be consistent with the applicable GHG reduction plans, policies, and regulations.

2022 Climate Change Scoping Plan

The CARB *2022 Scoping Plan For Achieving Carbon Neutrality* was approved in December 2022 and expands on prior scoping plans and recent legislation, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or sooner.¹³⁹ To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG emissions

¹³⁹ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

reductions, technology, and clean energy mandated by statutes; reduction of short-lived climate pollutants; and mechanical CO₂ capture and sequestration actions.

The 2022 Scoping Plan outlines a framework that relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms, such as the Cap-and-Trade program. The 2022 Scoping Plan builds off of a wide array of regulatory requirements that have been promulgated to reduce statewide GHG emissions, particularly from energy demand and mobile sources. While these regulatory requirements are not targeted at specific land use development projects, they would indirectly reduce a development project's GHG emissions.

Certain elements of these regulations must be complied with by all projects that develop urban land uses (e.g., commercial, residential, industrial). This category of regulations can be grouped in terms of the GHG sector that benefit from their implementation. As discussed below, with regard to the energy sector, implementation of the California RPS program and SB 100 and SB 350, would reduce GHG emissions generated by energy consumption. With regard to the mobile sector, implementation of the Advanced Clean Cars Program, LCFS, and SB 375 would reduce GHG emissions generated by motor vehicle travel. In addition, ongoing implementation of the Cap-and-Trade Program would reduce GHG emissions from both energy consumption and the fuels used for motor vehicle travel. With regard to the solid waste sector, implementation of the California Integrated Waste Management Act of 1989 and AB 341 would reduce GHG emissions generated by solid waste disposal in terms of reduced vehicle trips associated with the transport of solid waste materials as well as landfill emissions. Further, Project development would occur in accordance with these regulations and, therefore, would comply with their requirements and would not conflict with the implementation of these regulations.

In addition, as explained above, the CARB 2022 Scoping Plan expands on prior Scoping Plans and recent legislations, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier.¹⁴⁰ To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions.

Table 4.7-5, *Project Compliance with Applicable 2022 Scoping Plan Actions and Strategies*, contains a list of GHG-reducing strategies as they relate to the Project. The analysis describes the consistency of the Project with these strategies that support the State's strategies in the Climate Change Scoping Plan to reduce GHG emissions. The Climate Change Scoping Plan relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program. As shown below, the Project will incorporate characteristics to reduce energy, conserve water, reduce waste generation, and reduce vehicle travel consistent with statewide strategies and regulations. As a result, the Project would not conflict with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

¹⁴⁰ California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

**TABLE 4.7-5
PROJECT COMPLIANCE WITH APPLICABLE
2022 SCOPING PLAN ACTIONS AND STRATEGIES**

Actions and Strategies	Conflict Analysis
Increase in Renewable Energy and Decrease in Oil and Gas Use Actions	Not Applicable. This goal applies to increasing renewable energy and a decrease in oil and gas actions by transitioning to zero emissions technologies, primarily through State and local agencies and does not directly apply to land use development projects. Although this goal isn't applicable to the Project, the standards would apply to all vehicles purchased or used by occupants, vendors, and visitors of the Project. GHG emissions generated by passenger, truck, and bus vehicular travel as a result of the Project would benefit from the above regulations and programs, and mobile source emissions would be reduced with implementation. The Project would also benefit from SCE's compliance with RPS and GHG emissions would decrease as grid-generated electricity reaches a higher percentage of renewable energy.
Low Carbon Fuels Actions	No Conflict. The Project would generate vehicle trips that would travel to and from the Project's uses, similar to existing residential developments in the City. Vehicles accessing the Project, including construction vehicles and trucks, employees, and delivery service trucks would utilize fuels that comply with the State of California low carbon fuel standard. While these actions and strategies apply to State and local agencies, GHG emissions generated by passenger, truck, and bus vehicular travel as a result of the Project would benefit from the above regulations and programs, and mobile source emissions would be reduced with implementation, and mobile source emissions generated by the Project would be reduced with implementation of the wider use of zero-carbon fuels consistent with reduction of GHG emissions under AB 1279. Thus, the Project would not conflict with the State's ability to implement the low carbon fuel standard.
Expansion of Electrical Infrastructure Actions	Not Applicable. Decarbonizing the electricity sector depends on both using energy more efficiently and replacing fossil-fueled generation with renewable and zero carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power. The RPS Program and the Cap-and-Trade Program continue to incentivize dispatch of renewables over fossil generation to serve State demand. This action is not applicable to the Project. Nonetheless, the Project lies within the supply and infrastructure service capabilities of SCE. The Project would not require the expansion of electrical infrastructure that would result in significant environmental impacts.
Climate Ready and Climate-Friendly Buildings	No Conflict. The goal of this action is to expand the number of all-electric and electric-ready homes by 2030 by strengthening building standards to support zero-emission new construction and developing building performance standards for existing buildings and by adopting a zero-emission standard for new space and water heaters beginning in 2030. While these actions and strategies apply to State and local agencies, as stated above, the Project would be required to comply with applicable USEPA, CARB and SCAQMD emissions standards, rules, and regulations regarding fossil fuel use. As such, the Project would not conflict with actions in the Climate Ready and Climate Friendly Buildings action. Therefore, the Project would support this action and would not conflict with the State's ability to produce climate ready and climate friendly buildings.
Expanded Use of Zero-Emission Mobile Source Technology Actions	No Conflict. The Project would support this action by providing EV spaces and EVSE spaces as per the CALGreen code. Further, the Project would benefit from implementation of the Advanced Clean Cars Program that would reduce passenger vehicle GHG emissions, as well as the Advanced Clean Truck Regulation that aims to increase zero-emissions truck sales annually. As such, the Project would support this action and would not conflict with the State's ability to reduce statewide GHG emissions through ZEVs.
Mechanical Carbon Dioxide Removal and Carbon Capture and Sequestration Actions	No Conflict. The Project would result in the future development of residential units on five sites which would include landscaping which may include trees, shrubs, and groundcovers. As such, the Project would increase carbon sequestration as well as provide green space. The Project would support this action and would not conflict with the State's ability to reduce statewide GHG emissions through carbon removal and sequestration actions.
Improvements to Oil and Gas Facilities Actions	Not Applicable. The Project includes residential buildings and does not include improvements to oil and gas facilities. As such, this action does not apply to the Project.
Reduced High-GWP Fluorinated Gases Actions	No Conflict. This action includes expanding use of low-GWP refrigerants within buildings; increasing funding to decarbonize existing buildings and appliance replacements; and

Actions and Strategies	Conflict Analysis
	implementing biomethane procurement targets for investor-owned utilities. The Project has no jurisdiction over this action. However, the Project would utilize refrigerants within the proposed buildings (e.g., air conditioning systems) in compliance with applicable State and local regulations and as such, the Project would not conflict with the State's ability to achieve GHG reductions under this action.
Forest, Shrubland, and Grassland Management Actions	No Conflict. This action involves Increasing the urban forestry investment annually by 200 percent relative to business as usual. No forests, shrublands, or grasslands are currently located on the Project housing sites. The landscaping at the Project Housing Sites would include new trees, shrubs, and ground cover vegetation. The Project will introduce a variety of native species to the outdoor landscaping areas. As such, the Project would increase the amount of vegetation on the Project Housing Sites. The Project would support this action and would not conflict with the State's ability to reduce statewide GHG emissions through urban forestry actions.
Agricultural Actions	Not Applicable. This action involves increasing climate smart forest, shrubland, and grassland management to at least 2.3 million acres a year—an approximately 10x increase from current levels. The Project is in an urban center and would have no agricultural uses. As such, this action does not apply to the Project.
Organic Waste Diversion and Composting Actions	No Conflict. The City is applying California Senate Bill 1383 through its establishment of a food recovery program and mandatory organics recycling for all businesses and residents. As such, the Project would not conflict with this goal.
Afforestation, Urban Forestry Expansion, Urban Greening, Avoided Natural and Working Land Use Conversion, and Wetland Restoration Actions	No Conflict. The Project Housing Sites does not include any natural or working lands. Landscaping at the Project Housing Sites would include new trees, shrubs, and ground cover vegetation. The Project will introduce a variety of native species to the outdoor landscaping areas. As such, the Project would support this action and would not conflict with the State's ability to reduce statewide GHG emissions through urban forestry actions.
Reduced VMT Actions	No Conflict. The Project would support reducing VMT by constructing proposed housing developments in vacant and infill locations next to transit and community infrastructure. As such, the Project would support reduced VMT actions in support of the 2022 Scoping Plan. As discussed under Section 4.12, Transportation, the Project is located in a Transit Priority area and impacts would be less than significant.
SOURCE: ESA, 2025; CARB, 2022.	

As shown in Table 4.7-5, the Project would not conflict with the 2022 Climate Change Scoping Plan and would be supportive of the actions and strategies contained therein. Therefore, GHG impacts would be less than significant with respect to the 2022 Climate Change Scoping Plan.

Connect SoCal 2024

In order to assess the Project's potential to conflict with the Connect SoCal 2024, this section analyzes the proposed Project's consistency with the strategies and policies set forth in the Connect SoCal 2024 to meet GHG emission-reduction targets set by CARB. Generally, projects are considered to not conflict with applicable City and regional land use plans and regulations, such as Connect SoCal 2024, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The Project would not conflict with Connect SoCal 2024 goals as detailed in **Table 4.7-6, Consistency with Applicable Connect SoCal 2024 Actions and Strategies.**

TABLE 4.7-6
CONSISTENCY WITH APPLICABLE CONNECT SoCAL 2024 ACTIONS AND STRATEGIES

Actions and Strategies	Responsible Parties	Compliance/Consistency Analysis
Support investments that are well-maintained and operated, coordinated, resilient and result in improved safety, improved air quality and minimized greenhouse gas emissions.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The location, design, and land uses of the growth anticipated by the Project would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the city by increasing residential density on vacant and infill lands near transit and community infrastructure consistent with building in Priority Development Areas (PDAs), which will improve air quality and minimize GHGs. Several transit agencies provide local and regional transit service to the residents of the City, including Metro and Foothill Transit. Refer to Section 4.12, <i>Transportation</i> , of this Draft PEIR, for a summary of transit service in the City.
Ensure that reliable, accessible, affordable and appealing travel options are readily available, while striving to enhance equity in the offerings in high-need communities.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this action and strategy. The proposed Project focuses on development of five sites within different parts of the City on infill and vacant land development to help the City to meet its RHNA requirements. New land use designations in PDAs that introduce greater flexibility through emphasis on residential density are proposed to facilitate development to achieve Project objectives and respond to the need to accommodate the city's growing housing needs. The proposed General Plan includes housing for all income levels near available transit to ensure appealing travel options are readily available.
Support planning for people of all ages, abilities, and backgrounds.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The proposed Project focuses on development of five sites within different parts of the City on developed and vacant land to help the City meet its RHNA requirements. New land use designations in PDAs that introduce greater flexibility through emphasis on residential density are proposed to facilitate development to achieve Project objectives and respond to the need to accommodate the city's growing housing needs. The proposed Project includes policies for maintaining existing housing quality and affordability, providing new affordable housing, affirming further fair housing and addressing special housing needs, and promoting sustainability, energy efficiency, and a healthy community all of which support planning for people of all ages, abilities, and backgrounds.
Create human-centered communities in urban, suburban and rural settings to increase mobility options and reduce travel distances.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The location, design, and land uses of the growth anticipated by the Project would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the city by increasing residential density on vacant and infill lands near transit and community infrastructure consistent with building in PDAs, which will improve air quality and minimize GHGs. Several transit agencies provide local and regional transit service to the residents of the City, including Metro and Foothill Transit. Refer to Section 4.12, <i>Transportation</i> , of this Draft PEIR, for a summary of transit service in the City. The proposed Project includes policies for maintaining existing housing quality and affordability, providing new affordable housing, affirming further fair housing and addressing special housing needs, and promoting sustainability, energy efficiency, and a healthy community all of which support creating human-centered communities in urban, suburban and rural setting which increase mobility options and reduce travel distances.
Produce and preserve diverse housing types in an effort to improve affordability, accessibility and opportunities for all households.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The proposed Project focuses on development of five sites within different parts of the City on infill and vacant land development to help the City to meet its RHNA requirements. New land use designations in PDAs that introduce greater flexibility through emphasis on residential density are proposed to facilitate development to achieve Project objectives and respond to the need to accommodate the city's growing housing needs. The proposed Project includes policies for maintaining existing housing quality and affordability, providing new affordable housing, affirming further fair housing and addressing special housing needs, and promoting sustainability, energy efficiency, and a healthy community all of which produce and preserve diverse housing types in an effort to improve affordability, accessibility, and opportunities for all households.

Actions and Strategies	Responsible Parties	Compliance/Consistency Analysis
Develop communities that are resilient and can mitigate, adapt to, and respond to chronic and acute stresses and disruptions, such as climate change.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The proposed Project focuses on development of five sites within different parts of the City on infill and vacant land development to help the City to meet its RHNA requirements. New land use designations in PDAs that introduce greater flexibility through emphasis on residential density are proposed to facilitate development to achieve Project objectives and respond to the need to accommodate the city's growing housing needs. Thus, the Project develops communities that are resilient.
Integrate the region's development pattern and transportation network to improve air quality, reduce greenhouse gas emissions and enable more sustainable use of energy and water.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The operation of new development that could occur from adoption of the proposed Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. New development would comply with Title 24 requirements and CALGreen to reduce energy consumption by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, and implementing solar-ready rooftops. Additionally, as discussed above, elements of the Project integrate the regions development pattern in PDAs and transportation network in a way that reduces VMT and enables more sustainable energy and water use, which improves air quality and reduces GHG emissions.
Conserve the region's resources.	Local Jurisdictions, SCAG	No Conflict. The Project would not conflict with this strategy. The proposed Project focuses on development of five sites within different parts of the City on infill and vacant land to help the City to meet its RHNA requirements. Since development would occur at infill or vacant land within the City, it would conserve the region's natural resources.
Improve access to jobs and educational resources.	Local Jurisdictions	No Conflict. The Project would not conflict with this strategy. The proposed Project focuses on development of five sites within different parts of the City on infill and vacant land to help the City to meet its RHNA requirements. the additional housing would improve access to jobs and educational resources as they would be built within PDAs.
Advance a resilient and efficient goods movement system that supports the economic vitality of the region, attainment of clean air and quality of life for our communities.	Local Jurisdictions	No Conflict. The General Plan would not conflict with this strategy. Although the Project does not have any specific strategies aimed at goods movement, it would not conflict with the goods movements strategies in Connect SoCal 2024.
SOURCE: ESA, 2025; SCAG's Connect SoCal 2024.		

As shown in Table 4.7-6, the Project would not conflict with SCAG's Connect SoCal 2024 and would be supportive of the actions and strategies contained therein. Therefore, GHG impacts would be less than significant with respect to the Connect SoCal 2024.

Title 24 and CALGreen Code

The Project would comply with CALGreen requirements, which could include but are not limited to installation of ENERGY STAR[®] compliant appliances to the greatest extent feasible, installation of solar, electric or lower-nitrogen oxides gas-fired water heaters, and installation of water-efficient irrigation systems. Additionally, CALGreen requires designated parking spaces for carpool or alternative fueled vehicles, long- and short-term bike parking, and installation of electrical conduit for electric vehicle charging parking spaces. The Project would comply with CALGreen and Title 24 requirements to reduce energy consumption by implementing energy efficient building designs, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment within all buildings. Additionally, the Project is located close to transit and encourages residents to use public transit, ridesharing, and

alternatively fueled vehicles, including walking and biking to reduce VMTs in support of the 2022 Scoping Plan and Connect SoCal 2024.

General Plan Policies that Address the Impact

Resource Management Element

Resource Management Element Policy 11: The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), greenhouse gas (GHG) emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

Draft Housing Element

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/energy conservation.

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.

Draft Safety Element

Goal SAF4: A sustainable current and long-term supply of water resources that meet domestic, industrial, and recreational needs.

Policy SAF4.2: Potable Water Conservation. Encourage the use of provisions that conserve potable water for domestic uses. Small-scale interventions for conservation of potable water include watershed restoration, resources for sustainable landscaping, and other home-based interventions.

Policy SAF4.4: Water Resource Protection Partnerships. Partner with local organizations, agencies, and water purveyors that service Irwindale to protect groundwater and surface water resources that are vulnerable to climate change and to ensure a safe and reliable supply of water for future generations.

Policy SAF4.5: Compliance with LA County Building Code. Ensure that city's building, zoning, and subdivision ordinances remain in compliance with LA County Building Code.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

4.7.5 Cumulative Impact Analysis

Analysis of GHG emissions is cumulative in nature because impacts are caused by cumulative global emissions and additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as a project is located. The emission of GHGs by a single development project into the

atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to State or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

The State has mandated a GHG emissions target of reducing statewide emissions to 40 percent below 1990 levels by 2030, and net zero GHG emissions no later than 2045, with negative GHG emissions thereafter, even while statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB has established and is implementing regulations to reduce statewide GHG emissions. Currently, there are no adopted CARB, SCAQMD, or City significance thresholds or specific numeric reduction targets applicable to the Project, and no approved policy or guidance to assist in determining significance at the cumulative level. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064(h)(3),¹⁴¹ the City, as lead agency, has determined that the Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions: Climate Change Scoping Plan and SCAG's Connect SoCal 2024. Given that the Project would not conflict with applicable GHG reduction plans, policies, and regulations, emissions associated with future development that could occur under the proposed Project would be less than significant on a cumulative basis.

¹⁴¹ As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a proposed project's incremental contribution to a cumulative impact can be found not cumulatively considerable if a proposed project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of a project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

4.8 Land Use and Planning

This section evaluates the potential for implementation of the City's Housing Element and General Plan Update (proposed Project or Project) to result in substantial adverse effects to land use and planning. This section provides context regarding the existing land uses under the previous General Plan and the existing conditions of the five Housing Sites identified for future development under the General Plan Update. This section also discusses relevant federal, State, regional, and local regulations and programs that are applicable to future development that could occur under implementation of the Project. Future discretionary projects facilitated by the Project would be evaluated for project-specific impacts to land use and planning at the time that they are proposed.

4.8.1 Environmental Setting

Planning Area

The City encompasses approximately 9.5 miles (6,080 acres) and is located approximately 21 miles east of downtown Los Angeles. Regional access to the City is provided by the Foothill Freeway (Interstate 210) which crosses the northerly portion of the City in an east/west orientation, and the San Gabriel River Freeway (Interstate 605) that parallels the San Gabriel River. The regional location of Irwindale is shown in Figure 2-1 in Chapter 2, *Project Description*. The City's population and development is located east of the San Gabriel River. Land uses found in the western portion of the City are dominated by large-scale quarry operations with limited areas of more traditional urban development. The City is located approximately 27 miles north of the Pacific Ocean and is relatively flat with areas of rolling hills. Elevation within the City ranges from approximately 625-feet above mean sea level (amsl) in the northern part of the City to approximately 310-feet amsl in the southern part of the City.

As discussed in Chapter 2, *Project Description*, the existing developed land uses in the City include the Santa Fe Dam (31.58 percent); active and inactive quarries and plants (26.82 percent); truck/equipment storage yards (5.67 percent); industrial uses (7.6 percent); commercial uses (1.27 percent); office and business park uses (1.35 percent); residential uses (0.98 percent); and civic, institutional, and other public uses (15.15 percent). Vacant parcels account for approximately 5.38 percent of the City's total land area. As stated above, residential land uses account for only 0.98 percent of the City's total land area, consisting of approximately 60 acres in the City.

Existing General Plan Land Use Designations

The existing General Plan Land Use Map is included as Figure 2-3, and the Existing Zoning Map is included as Figure 2-4, both included in Chapter 2, *Project Description*. The proposed housing sites inventory as part of the updated 2021-2029 Housing Element (Housing Element) includes five sites: Site 1 – Allen Drive; Site 2 – 12881 Ramona Boulevard; Site 3 – 13201 Ramona Boulevard; Site 4 – Gold Line Reliance II; and Site 5 – Irwindale/Padilla.

The General Plan land use designation and zoning for each of these sites is provided in **Table 4.8-1**, below.

**TABLE 4.8-1
EXISTING LAND USE DESIGNATION AND ZONING OF HOUSING INVENTORY SITES**

Site	Existing General Plan Land Use Designation	Existing Zoning
Site 1 – Allen Drive	Residential	Heavy Manufacturing (M-2)
Site 2 – 12881 Ramona Boulevard	Industrial /Business Park	Heavy Manufacturing (M-2)
Site 3 – 13201 Ramona Boulevard	Quarry Overlay	Agriculture (A-1)
Site 4 – Gold Line Reliance II	Specific Plan	Reliance II Specific Plan
Site 5 – Irwindale/Padilla	Industrial/Business Park	Heavy Manufacturing (M-2)

The descriptions of each land use designation from the City’s adopted General Plan are provided below:

Residential. Land uses within this land use category are characterized by both single-family homes and multiple-family residential development. The corresponding zones include the A-1 (Agriculture), R-1 (Single-Family Residential), R-2 (Light-Multiple Residential), and R-3 (Heavy Multiple Residential). The maximum development intensities range from 1 unit per acre up to 14 units per acre, depending on the lot size and the applicable zone district. At the time of the preparation of the 2008 General Plan, the assumed average household size was 3.96 persons, resulting in a maximum population density of 72 persons per acre.¹

Industrial/Business Park. The Industrial designation corresponds to the CM (Commercial Manufacturing), M-1 (Light Manufacturing), and M-2 (Heavy Manufacturing) zones. The maximum floor area ratio (FAR) for this category is 1.0 to 1.0.

Quarry/Quarry Overlay. This land use designation applies to the quarry uses in the City. The Quarry Overlay designation supports a diverse array of zones including Commercial, Commercial-Recreation, Residential-Business Park, Industrial-Business Park, and Open Space. All new development within the Quarry Overlay Zone will be required to undergo discretionary review in terms of planning and environmental review.

4.8.2 Regulatory Setting

This section provides the relevant State, regional, and local regulations applicable to the Project. There are no federal regulations which apply to the Project in relation to this issue area.

State

General Plan Law (California Government Code Section 65302)

The general plan is required to include the following seven elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. Senate Bill (SB) 1000 and Section 65302 require that since disadvantaged communities have been identified within the city, the General Plan must also address

¹ This information is based on the 2008 Community Development Element; however, as indicated in the Draft Housing Element, the household average size has declined and is 3.61 persons per household.

Environmental Justice (EJ) either as a standalone element or integrating related goals, policies, and objectives throughout other elements.

A general plan must include a statement of development policies and a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. Section 65302 requires that the plan designate the proposed general distribution and general location and extent of the various uses of public and private lands, including land for housing, business, industry, open space, including agriculture, natural resource, recreation and enjoyment of scenic beauty, education, public buildings and grounds, waste disposal facilities, and greenways.

Regional/Local

Southern California Association of Governments – Regional Housing Needs Allocation

Since 1969, the State of California has required each local government to plan for its share of the State's housing needs for people of all income levels. Through the Regional Housing Needs Allocation (RHNA) process, every local jurisdiction is assigned a number of housing units representing its share of the State's housing needs for an eight-year period. State Housing Element Law requires the Southern California Association of Governments (SCAG) to develop a methodology for distributing housing units to all 197 SCAG jurisdictions.

SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS, referred to as Connect SoCal) was adopted in April 2024, by the SCAG Regional Council. Connect SoCal is a long-range plan that guides land use and transportation strategies to increase mobility and achieve more sustainable growth patterns locating housing, jobs, and transit closer together and increasing investment in transit and complete streets. These investments are targeted in Priority Development Areas (PDAs), which are places within the SCAG region where future growth can be located in order to help the region reach mobility or environmental goals.²

Irwindale General Plan

The City's Implementation Element contains policies and implementation programs from the Community Development, Housing, Infrastructure, Resource Management, and Public Safety Elements. Relevant policies and programs include:

Community Development Element

Issue Area – Land Use Planning: The City of Irwindale is committed to the development of a comprehensive land use plan that will enhance the City's livability and economic base for future generations.

Policy 1: The City of Irwindale, through continued comprehensive land use planning, will strive to preserve the overall mix of land uses and development in the community.

² Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

Policy 2: The City of Irwindale will continue to plan for the transition of the quarries located within the City to other land uses.

Policy 3: The City of Irwindale will continue to ensure that the type, location, and intensity of all new development and intensified developments adhere to the requirements that are specified for their particular land use category in the General Plan.

Policy 4: The City of Irwindale will continue to examine future potential opportunities for residential development.

Policy 5: The City of Irwindale will continue to promote comprehensive development consistent with the General Plan as opposed to piecemeal and incremental planning.

Issue Area – Economic Development: The City of Irwindale intends to continue its pursuit and promotion of economic development that will provide jobs and revenue for the community.

Policy 7: The City of Irwindale will continue to promote economic development through the use of redevelopment.

Policy 9: The City of Irwindale will strive to ensure that future development, supported in whole or part through redevelopment, is fiscally sound.

Policy 10: The City of Irwindale will promote economic development that will benefit the community as a whole in terms of both jobs and revenue generation.

Issue Area – Urban Design: The City of Irwindale will continue its efforts in improving the appearance of the community.

Policy 14: The City of Irwindale will continue to promote property maintenance in all areas of the City.

Community Development Element Programs

There are a number of programs which will be effective in implementing the City policy relative to community development. These programs are summarized below:

Nonconforming Section of the Zoning Ordinance. The City shall review, and if required, revise its Nonconforming Ordinance on an ongoing basis to ensure that it meets the current objectives of the community. The initial step will require City staff to review the existing nonconforming ordinance. Staff shall prepare a report that will be submitted to the City Council and Planning Commission describing provisions of the ordinance and any problems that have been experienced related to its implementation. Handouts will be prepared for distribution at the Planning Department counter and/or at reapplication meetings. Information will include a description of the proposed changes to the ordinance and how property owners may bring their property into conformance with new City codes.

Zoning Conformity Program. The City will continue to review the Zoning Ordinance and the Subdivision Ordinance of the Municipal Code to ensure that the development standards are consistent with those identified in this Community Development Element. The City will initiate appropriate changes to the Zoning Map to ensure that it is consistent with the Community Development Element.

Resource Management Element

Issue Area – Natural Resources: The City of Irwindale will continue to cooperate in the maintenance and conservation of the area’s natural resources.

Policy 1: The City of Irwindale will continue to work with the quarries and other regulatory agencies to facilitate their reclamation.

Policy 4: The City of Irwindale will continue to protect the use of the area’s resources through appropriate land use controls and planning.

Issue Area – Mining and Reclamation: The following policies focus on those City policy actions that can be taken to improve environmental compliance, reclamation planning, and long-term economic improvement of the mines and quarries (inactive, active, and reclaimed) in Irwindale.

Policy 17: The City will implement improved reclamation planning at targeted sites to ensure post-mining land uses consistent with the City’s long-term planning and economic development goals.

Policy 19: The City of Irwindale will consider environmental justice issues as they are related to potential health impact associated with air pollution and ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographical location from the health effects of air pollution.

Policy 20: The City of Irwindale will encourage site plan designs to provide the appropriate setbacks and/or design features that reduce toxic air contaminants at the source.

Policy 21: The City of Irwindale will encourage the applicant for sensitive land uses (e.g., residences, schools, daycare facilities, playgrounds, and medical facilities) to incorporate design features (e.g., pollution prevention, pollution reduction, barriers, landscaping, ventilation systems, or other measures) in the planning process to minimize the potential pollution impacts on sensitive receptors.

Resource Management Element Programs

The following programs will be effective in implementing the policies contained in the Resource Management Element:

Air Quality Planning. The City will continue to participate in the regional planning efforts being undertaken by the South Coast Air Quality Management District (SCAQMD) and the SCAG to develop and implement strategies to improve regional air quality. The City will continue to work with SCAQMD and SCAG and the surrounding cities in improving air quality.

Design Guidelines and Review. The City shall continue to implement its current design review procedures. The purpose of the design review process is to ensure that building design, architecture, and site layouts are compatible with surrounding development and consistent with the Commercial and Industrial Development Design Guidelines. The design review process is an important component of development review. This process may be used to consider a potential development’s impact on the architectural integrity of historically significant structures and sites.

Stormwater Pollution Prevention. This program is designed to prevent contaminants from entering the storm drain system. A key element of this program is the National Pollution Discharge Elimination System

(NPDES) requirements, which are administered through a countywide permit. These requirements call for measures to be imposed during construction activities, handouts for residential uses, and best management practices for non-residential uses. The City shall also continue to implement projects to maintain storm water quality, such as street sweeping, catch basins grills, signs, etc.

Irwindale Municipal Code

The Zoning Code and Subdivision Ordinance of the Irwindale Municipal Code (IMC) regulate land use in the City. Irwindale's Zoning Code is contained in Title 17 of the IMC. The purpose of the Zoning Code is to encourage, classify, designate, regulate, and restrict, so as to permit the highest and best use of buildings, structures and land. The Subdivision Ordinance, contained in Title 16 of the IMC, implements the Subdivision Map Act of the State of California by regulating the design and improvement of subdivisions in Irwindale.

City of Irwindale Natural Hazard Mitigation Plan

On February 27, 2013, Irwindale's City Council adopted the Natural Hazard Mitigation Plan (NHMP) in accordance with the Federal Disaster Mitigation Act of 2000. The NHMP is a collection of analyses, policies, and actions that serve as a blueprint for how the City can achieve sustainability and disaster resiliency. The NHMP ensures that the City will be eligible for future pre-disaster and post-disaster mitigation program funds from the Federal Emergency Management Agency to ensure the health, safety, and welfare of its citizens.³

City of Irwindale Emergency Preparedness Plan

The City currently maintains a Multi-Hazard Functional Plan that outlines the responsibilities and procedures the City will follow in the event of an emergency or citywide disaster. Specific emergency functions and operations, available resources (fire stations, emergency shelters, hospitals and clinics, resource persons, etc.), and mutual aid agreements are described in the Multi-Hazard Functional Plan. The City shall regularly update its Multi-Hazard Functional Plan for Emergency Operations.

4.8.3 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

The thresholds of significance for impacts related to land use and planning are based on Appendix G of the CEQA Guidelines. The Project would have a significant impact on the environment if it would:

Threshold LU-1: Physically divide an existing community.

Threshold LU-2: 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.

³ The City is preparing to update the Natural Hazard Mitigation Plan for the 2020-2025 planning period which is expected to be complete by the third quarter of 2027, as mandated by State law.

Methodology

The Housing Element is a policy document that would guide the development of residential units within the City throughout the 6th Cycle RHNA. The Housing Element has identified five Housing Sites throughout the City that can accommodate residential development or redevelopment, as shown in Figure 2-6 in Chapter 2, *Project Description*. The five Housing Sites are parcels already established, where future residential development guided by the Project would be considered infill development. Since the City would not be able to fully accommodate its 6th Cycle RHNA with the identified five Housing Sites' existing zoning, the Housing Element also includes a program to redesignate and rezone the five Housing Sites for residential development via new residential development overlay zones.

The Project has a year 2029 horizon; however, the Project does not speculate when the development projections would occur, as long-range population and housing trends are difficult to predict. The designation within the five Housing Sites does not necessarily mean that the site will be developed or redeveloped with that use during the planning period, as most development will depend on property owner initiative.

As identified in the Initial Study, implementation of the Housing Element update would have a less than significant impact related to the physical division of an existing community (Threshold LU-1), thus no further analysis related to this topic is discussed below.

Additionally, as identified in the Initial Study, implementation of the Safety and Environmental Justice (EJ) Elements would have no impacts related to land use and planning, thus no further analysis of the Safety and EJ Elements related to this topic are discussed below.

Project Impact Analysis

Threshold LU-2: The Project would have a significant impact to land use and planning if it would 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 LU-2: The Project would not 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 and impacts would be less than significant.

This section includes a discussion of potential conflicts between the Project and applicable planning documents. It should be noted that policy conflicts do not, in and of themselves, constitute a significant environmental impact. However, policy inconsistency is considered to be a significant adverse environmental impact when it is related to a policy adopted for the purpose of avoiding or mitigating an environmental effect and it is anticipated that the inconsistency would result in a significant adverse physical impact. Please note that planning documents that pertain to specific technical topics (e.g., Air Quality) are discussed in those technical sections of this Draft PEIR.

General Plan Updates

The Draft 2021–2029 Housing Element (Housing Element) would be adopted as part of the General Plan. The Housing Element would comply with State Planning Law requirements for this General Plan Element,

and the proposed housing opportunity sites identified in the Draft 2021–2029 Housing Element would allow the City to meet its RHNA allocation.

The Project also includes updates to the General Plan Community Development Element and Safety Element (previously named Public Safety Element) as well as the creation of a new Environmental Justice (EJ) Element.

Housing Element Updates

The key policies, programs and goals of the updated Housing Element are provided in detail in Chapter 2, Project Description, Table 2-3, and are identified below:

Policy 1 – Maintain Existing Housing Quality and Affordability: The City will work to maintain the quality of existing housing stock to provide residents with safe, sound, and affordable housing.

Program 1: Proactive residential code enforcement (New)

Goal: Maintain the housing stock in sound condition and eliminate residential blight through a pro-active program that works with property owners to bring housing into compliance with basic health and safety standards.

Program 2: Create a local housing rehabilitation loan fund to assist lower- and moderate-income households (Incorporated 5th Cycle Program 1)

Goal: Improve deteriorated housing and preserve the existing stock of affordable housing. Prioritize use of rehabilitation funds for repairs to housing units housing very low- and extremely low-income households.

Policy 2 – Remove Governmental Constraints: The City will work to remove governmental constraints to the production and maintenance of housing in Irwindale.

Program 3: CEQA Exemptions for Infill Projects (New)

Goal: Utilize allowable CEQA exemptions for qualified urban infill and other qualifying residential projects.

Program 4: Facilitate adaptive reuse of commercial and industrial properties within 1/2 mile of transit to residential (New; Incorporated 5th Cycle Program 7)

Goal: Focus on promoting new law and consider approving conversions even if beyond ½ mile. Create GIS maps⁴ to show transit stations (with specific criteria), amenities etc. Notify owners proactively. Allow buildings that have been vacant for more than 1 year and previously occupied by nonconforming uses or uses incompatible with their surrounding neighborhoods to convert to residential.

Program 5: Efficient Project review – permit streamlining program. (New)

Goal: Minimize the required time for project approvals for qualifying residential projects.

⁴ The goal is as presented in the Draft Housing Element; however, for clarification GIS is a geographic information system that is a tool used for creating maps to visualize data.

Program 6: Zoning Code Amendments. Complete Zoning Code Amendments to address governmental constraints identified in the Housing Needs Assessment. (New)

Goal: Modify the IMC to accommodate new State legislation regarding housing.

Program 7: Mixed-Use Development. Create new standards and add to IMC providing for ministerial approval. (New)**Goal:** Provide zoning and development standards to facilitate residential mixed-use housing opportunities.

Policy 3 – Provide Adequate Housing Sites: The City will ensure that it maintains a supply of land, appropriately zoned, that is sufficient to accommodate the City’s Regional Housing Need Allocation for the 6th Cycle.

Program 8: Rezone Targeted Housing Sites. Apply an affordable housing overlay on sites identified in the Housing Sites Inventory and provide for by-right approval for projects with at least 20% affordable units.

Goal: Minimize the required time for project approvals for qualifying residential projects.

Program 9: Monitor Housing Sites for No Net Loss (New)

Goal: To comply with SB330

Program 10: Arrow Hwy Commercial Corridor Specific Plan. Adopt new Specific Plan with potential mixed use and/or housing development (New)

Goal: Provide new sites for multi-family residential and mixed-use housing development.

Program 11: General Plan Consistency

Goal: To achieve consistency between General Plan designations and zoning designations.

Program 12: Facilitate housing development on large sites. (New)

Goal: To assist the development of housing for lower income households on Housing Sites Inventory sites larger than ten acres, the City will provide technical assistance and strive to streamline the approval process for land divisions, lot line adjustments, and/or specific plan amendments resulting in a parcel size that facilitates affordable housing development. To further incentivize development, the City will grant fee deferrals for projects that include at least 50 percent of the units affordable to lower income households and provide priority to affordable housing projects on large sites for use of funds from proposed new jobs-housing linkage fee.

Policy 4 – Provide New Affordable Housing: The City will utilize existing resources, develop new resources, and leverage the resources of other agencies to provide new housing in Irwindale that addresses needs of households across the socio-economic spectrum.

Program 13: Leverage Allen Drive Site for Affordable Housing Resources.

Goal: Generate resources from development of Allen Drive Site to support affordable housing elsewhere in city. Continue to comply with all aspects of State Surplus Lands Act in the disposition of the site for housing development.

Program 14: Create an affordable housing linkage fee program to generate local funds to support affordable housing, including, but not limited to down payment assistance. (New)

Goal: Create an Affordable Housing fund

Program 15: Outreach for Tenant-based Rental Assistance Programs for Extremely Low-Income Households. Include SFR and ADUs with vouchers and Technical Assistance for ELI and Special Needs Housing Development.

Goal: Facilitate access to housing for Extremely Low-Income and Special Needs households.

Program 16: Affordable ADU Incentive Program (Affirmatively Furthering Fair Housing)

Goal: Provide opportunities for very low- or low-income ADUs.

Program 17: Create ADU Templates and Track and Monitor Accessory Dwelling Units (New)

Goal: Increase housing availability by expediting ADU developments.

Program 18: State Action Ordinances (New)

Goal: Create rapid response to new State legislation regarding housing and affordability regulations.

Policy 5 – Affirmatively Further Fair Housing and Address Special Housing Needs: The City will dedicate specific resources and take active steps to ensure housing opportunities for the community's most vulnerable populations, including traditionally under-represented minority populations and other populations with special housing needs.

Program 19: Senior Housing opportunities (New)

Goal: Provide a range of housing options to address the diverse needs of the senior population with a priority on studio and one-bedroom rental units. Track the number of senior households receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.

Program 20: Housing Opportunities for Persons Living with Disabilities. Ensure equitable housing in the community (New)

Goal: Support a range of housing options for persons with disabilities. Track the number of households with members with disabilities receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.

Program 21: Fair Housing Program/Outreach (Affirmatively Furthering Fair Housing)

Goal: Promote fair housing practices and prevent housing discrimination through active outreach to typically disadvantaged persons/households (e.g., multi-lingual approach, pro-active outreach to make sure these populations are aware of their rights and know how to access available assistance, etc.

Program 22: Provide a variety of housing types per SB 330 and SB 35 for streamlined ministerial approval process. (New)

Goal: Provide opportunities for a variety of housing price, style, and size, and accommodate a diverse income mix. Track the characteristics of households receiving assistance during the 6th Cycle to facilitate evaluation of program effectiveness.

Program 23: Workforce Housing Development (New)

Goal: Create housing opportunities for the many people employed throughout the City. Define Workforce housing, income level, inclusionary requirement.

Program 24: Affordable Housing Development Assistance and Implementation Guide (New)

Goal: Outreach for Affordable Housing Development Assistance

Program 25: Provide housing and reasonable accommodations for seniors and persons with disabilities.

Goal: Provide new senior housing and retain existing senior housing (Las Casitas); Prioritize the projects that want to accommodate special needs (low-income seniors, disabled etc.); Provide reasonable accommodations for persons with disabilities. Publicize available assistance and reasonable accommodations through the Senior Center.

Program 26: Homeless Service Strategy (New)

Goal: Continue to partner with Azusa and Duarte to assist the homeless and persons at-risk of homelessness in obtaining shelter and services.

Program 27: Mixed-Use Zoning for By-Right Emergency Shelters

Goal: Encourage mixed-use development and provide opportunities to develop emergency shelters by-right in a zoning district that also allows residential development.

Program 28: Place-Based Strategies for Neighborhood Improvement

Goal: Address environmental justice concerns throughout the community by prioritizing the City's capital improvement program to make quality of life improvements to residential areas, focusing on mitigating or remediating issues identified in the Environmental Justice Element.

Policy 6 – Promote Sustainability, Energy Efficiency, and a Healthy Community: The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Program 29: Grants for Green appliances, solar, sustainability/ Energy Conservation

Goal: Encourage retrofit of existing homes with energy efficient appliances

Program 30: Promote sustainable community design and reduced dependence on vehicles to create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles. (New)

Goal: Encourage new development that is organized around compact, walkable, mixed-use neighborhoods and districts to conserve open space resources, minimize infrastructure costs, and reduce reliance on the automobile.

Program 31: Bi-annual trash and hazardous item pick-up (motor oil, paint, cleaners with acid/lye, household batteries) (New)

Goal: Remove household hazards/hazardous material

Program 32: Priority Water and Sewer Connections for Affordable Housing Development

Goal: Ensure that water and sewer providers understand their obligation to provide priority to affordable housing developments if water or sewer connection capacity is limited.

Community Development Element Updates

The Community Development Element would be updated to ensure consistency with the Draft 2021–2029 Housing Element. This includes updating the General Plan land use designations to describe the new

overlays allowing residential uses. Additionally, the General Plan Land Use Map will also be updated to reflect the changes in zoning required to support the Housing Element and the Zoning Map will be amended. **Figure 4.8-1**, *Proposed General Plan Land Use Designations*, and **Figure 4.8-2**, *Proposed Zoning Designations*, present the new General Plan Land Use Map and Zoning Designations.

(Public) Safety Element Updates

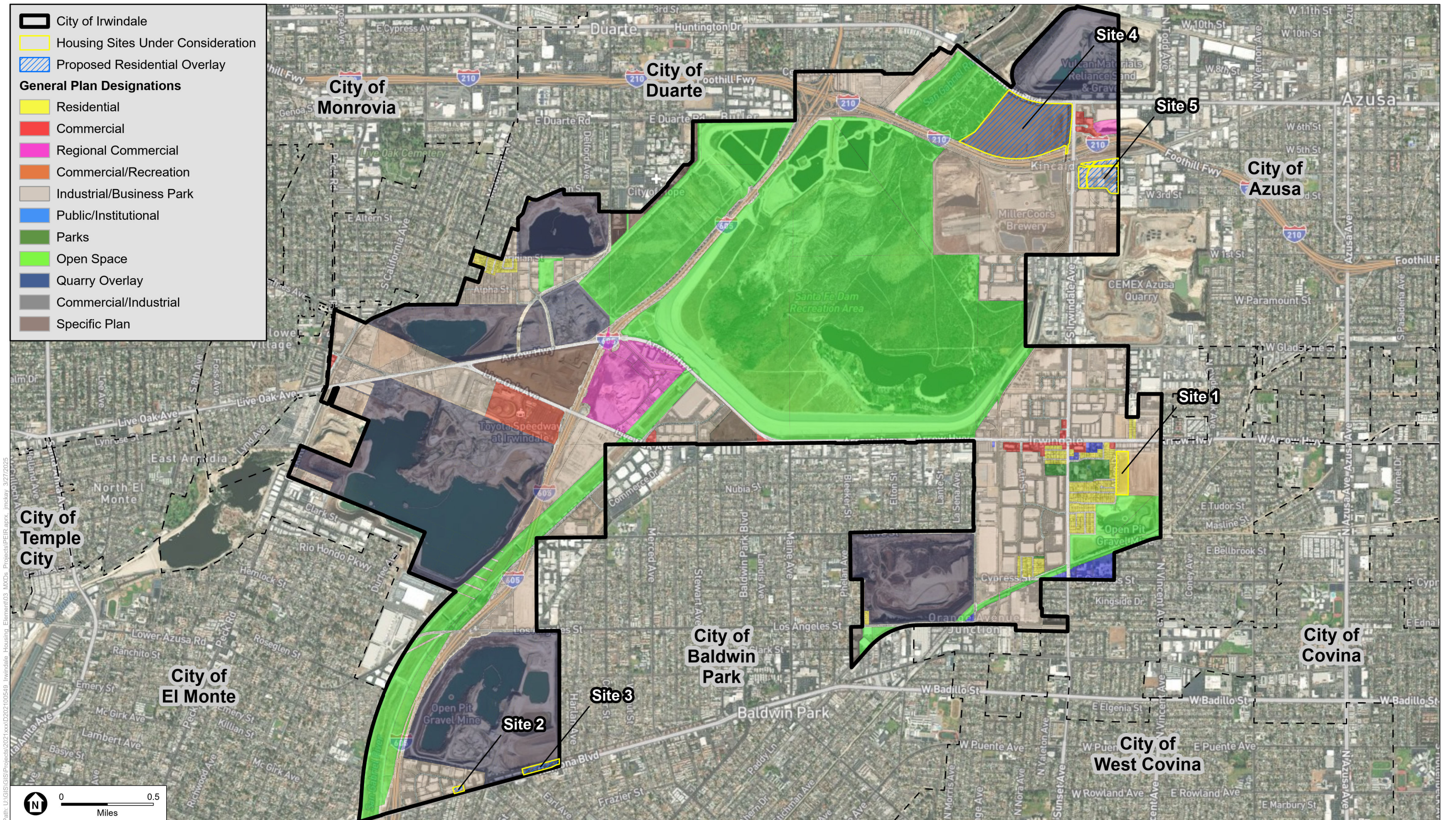
The updated Safety Element identifies locations within the City that may be inappropriate for certain land uses due to potential risks and hazards as well as areas where hazards are present but can be mitigated through special design and site planning measures. The updated Safety Element also considers the economic and social dislocation resulting from natural and human-made hazards, including long-term costs to the City, such as maintenance, liability exposure, and emergency services, where high hazards exist. The updated Safety Element identifies potential environmental hazards that may be exacerbated by implementation of the Housing Element and provides goals and policies to address those hazards such as seismic hazards, geologic hazards, flooding, wildfire, climate change, hazardous materials, aging buildings, and critical facilities.

Analysis

The Project proposes adding residential overlays to five properties identified in the Housing Sites Inventory in order to facilitate the development of housing.

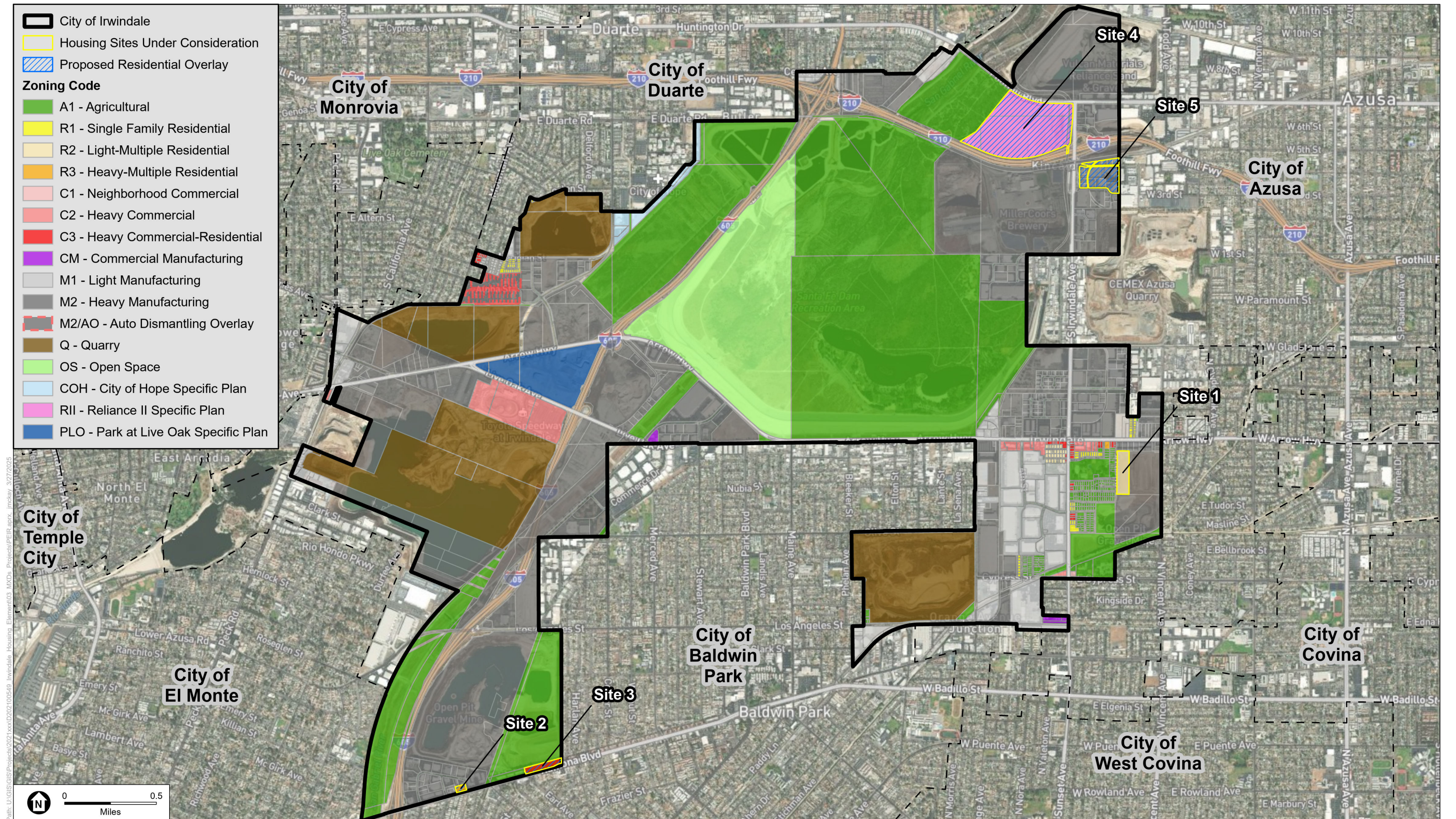
Site 1, located on Allen Drive, is a vacant 10-acre site within a former mining pit owned by the City of Irwindale Housing Authority within the southeast portion of the City. While the General Plan designates Site 1 for residential use, it is currently zoned Heavy Manufacturing (M-2). The Project would add a residential overlay to Site 1, which would permit 8 to 14 dwelling units per acre of townhome (R-2) development. This added overlay would not result in a significant land use impact because the rezoning and zoning overlays of the site would eliminate any potential inconsistency between the existing General Plan designation for residential use and the existing zoning of Heavy Manufacturing (M-2). There are no land use impacts associated with this proposed action.

Site 2, located at 12881 Ramona Boulevard, is a privately-owned, non-vacant 1.18-acre parcel within the Southwestern Planning Area of the City and is not located within a General Plan designated neighborhood. Site 2 is currently designated Industrial/Business Park and is zoned for Heavy Manufacturing (M-2). The Project would add a residential overlay to Site 2, which would allow for higher-density multifamily development (R-4), consisting of 21 to 30 dwelling units per acre. This proposed overlay would not result in a significant land use impact because the overlay would not preclude the existing uses, and would be adding the ability for residential units to be developed on the property. There are no land use impacts associated with this proposed action.



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 4.8-1
Proposed General Plan Land Use Designations



SOURCE: City of Irwindale, 2022; Parcel Map, 2024; ESA, 2025

Figure 4.8-2
Proposed Zoning Designations

Site 3, located at 13201 Ramona Boulevard, is a privately-owned, developed 4.3-acre parcel within the Southwestern Planning Area of the City and within the Park Avenue neighborhood. Site 3 is currently developed with a self-storage facility. The General Plan designates Site 3 for Quarry Overlay and is currently zoned Agriculture (A-1). The site was developed prior to the approval of the Irwindale Commercial and Industrial Design Guidelines, and is currently inconsistent with these guidelines. The Project would apply a residential overlay to the entire site to permit mixed-use development (MXD), and would allow for 21 to 30 dwelling units per acre. This proposed overlay would not result in a significant land use impact because the overlay would not preclude the existing uses of a self-storage facility and would be adding the ability for residential units to be developed on the property. There are no land use impacts associated with this proposed action.

Site 4, located to the west of the intersection of Irwindale Avenue and Interstate 210 (I-210), is a vacant 90-acre site comprised of three parcels. Site 4 is located in the Northeastern Planning Area and is not within a General Plan designated residential neighborhood. Site 4 has a Specific Plan designation in the General Plan and is zoned as the Reliance II Specific Plan, which permits e-commerce fulfillment centers and other commercial activity within close proximity to the Irwindale L Line Metro Station. The Project would apply a residential overlay to allow one acre of the site to develop with MXD at 21 to 30 dwelling units per acre. This proposed overlay would not result in a significant land use impact because the overlay would not preclude the existing uses, and would be adding the ability for the City to add residential units to the site. There are no land use impacts associated with this proposed action.

Site 5, located to the southeast of the intersection of Irwindale Avenue and I-210, is a developed area comprised of 15 adjacent parcels encompassing approximately 20 acres and is currently developed with business park uses. The General Plan designates Site 5 for Industrial/Business Park use and all of the parcels included are currently zoned Heavy Manufacturing (M-2). The Project would apply a residential overlay that would allow one acre within the area to be developed with MXD at densities up to 30 dwelling units per acre and one acre within the area to be developed with medium-density townhouse (R-2) development at 14 to 21 dwelling units per acre. This proposed overlay would not result in a significant land use impact because the overlay would not preclude the existing uses of a business park, and would be adding the ability for the City to add residential units to the site. There are no land use impacts associated with this proposed action.

Conclusion

Future housing projects facilitated by the proposed Project would be reviewed for adherence to the General Plan and applicable zoning regulations. The General Plan contains many policies, some of which may compete with each other. The City Council, in deciding whether to approve a proposed development project, would decide whether, on balance, a project is consistent with the General Plan. For the reasons listed above, the Project would not conflict with General Plan policies adopted for the purpose of avoiding or mitigating environmental effects, and this impact would be less than significant.

Municipal Code Amendments

Amendments to the City's IMC, including the Zoning Code (Title 17 of the IMC), would be initiated to allow for fulfillment of the City's RHNA by creating zoning overlays and modifying existing development standards. The proposed Zoning Code amendments are anticipated to include single-family residential (e.g., in response to SB 9) and multi-family residential and mixed-use categories.

The amendments to Title 17 of the IMC are necessary to implement the Project as these amendments provide the mechanisms to ensure the goals and policies of the Project are implemented through the development that will occur throughout the City over time. Amendments to Title 17 and the Zoning Map are made to comply with California Government Code Section 65300 et seq. that require zoning to be consistent with the General Plan, which would be amended by the Project and amendments to the General Plan Land Use Map. The amendments would primarily consist of the additions of overlays to the five identified sites, which is discussed in detail above. The Project would therefore, not result in a significant environmental impact due to a conflict with the zoning ordinance.

Future development of housing inventory sites with new or redeveloped dwelling units would be required to be consistent with the amended General Plan land use designations and zoning districts, as well as applicable development standards. Where adverse physical effects on the environment could result from the future development of housing on the potential housing sites, those potential impacts are addressed in the appropriate environmental sections of this Draft PEIR. Additionally, potential conflicts with planning documents pertaining to specific environmental topics are identified within those applicable sections of the Draft PEIR.

SCAG Connect SoCal Plan

The Connect SoCal 2024 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), which was adopted in April 2024, presents the land use and transportation vision for the region through the year 2050, providing a long-term investment framework for addressing the region's challenges. The RTP/SCS established goals for the region and identifies transportation investments that address the region's growing population, as well as strategies to reduce traffic congestion and GHG emissions. In addition, the RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the region's vital goods movement industry, and utilize resources more efficiently.⁵ Consistency with the 2024-2050 RTP/SCS goals, demonstrates that the Project would not conflict with the applicable goals in the RTP/SCS adopted for the purpose of avoiding or mitigating an environmental effect. Table 4.7-6 in Section 4.7, *Greenhouse Gas Emissions*, demonstrates how the Project promotes consistency with the guiding principles and policies of the Connect SoCal Plan (SCAG's 2024–2050 RTP/SCS).

The Project would provide opportunities to further new housing development in the City in compliance with SCAG's 6th Cycle RHNA, which is supportive of the Connect SoCal goals and policies. The Project has been developed to show the City can accommodate 279 housing units, which is 155 housing units beyond its RHNA of 119 housing units. Therefore, the Project is consistent with the City's RHNA allocation.

Summary

The proposed Project would update the City's Housing Element according to State law, and update other Elements of the General Plan for internal consistency. The IMC will be updated to reflect the new General Plan Land Use designation and Housing Element policies. The Project would not cause a significant

⁵ Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

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. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would result in a less-than-significant impact related to land use and planning since it would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.8.4 Cumulative Impact Analysis

The geographical context for the cumulative impacts associated with land use issues is the San Gabriel Valley region of eastern Los Angeles County, which assumes full build-out of the Irwindale General Plan, in combination with build-out of neighboring jurisdictions general plans. Future development in the area, including growth anticipated under the proposed Project, would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, as future development in each jurisdiction would be required to be consistent with each jurisdiction's general plan and zoning code. In addition, future development in the San Gabriel Valley region of eastern Los Angeles County would be required to be consistent with regional plans such as Connect SoCal. Finally, future development in the area would be required to undergo planning reviewing in each jurisdiction, which would ensure the future development would not divide an established community. For these reasons, future development in the San Gabriel Valley region of eastern Los Angeles County, including growth anticipated under the proposed Project, would have a less-than-significant cumulative impact with respect to land use and planning.

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4.9 Noise

4.9.1 Introduction

This section provides an analysis of potential environmental impacts related to noise from future development allowed under the City's Housing Element and General Plan Update Project (proposed Project or Project), including those impacts associated with noise standards compliance, groundborne vibration, ambient noise levels, railway noise and airport noise. This section also evaluates the characteristics, measurement, and physiological effects of noise; characteristics of groundborne vibration; and existing sources of noise and vibration in the City, as well as relevant federal, State, and local regulations and programs.

4.9.2 Environmental Setting

Noise

Noise Characteristics and Measurement

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound.¹

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.²

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.³ The typical human ear is not equally sensitive to this frequency range. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to these extremely low and extremely high frequencies. This method of frequency filtering or weighting is referred to as A-weighting, expressed in units of A-weighted decibels

¹ Egan MD. 1988. Chapter 1 in *Architectural Acoustics*.

² Egan MD. 1988. Chapter 1 in *Architectural Acoustics*.

³ Egan MD. 1988. Chapter 1 in *Architectural Acoustics*.

(dBA), which is typically applied to community noise measurements.⁴ Some representative common outdoor and indoor noise sources and their corresponding A-weighted noise levels are shown in **Figure 4.9-1, Decibel Scale and Common Noise Sources**.

An individual's noise exposure is a measure of noise over a period of time; a noise level is a measure of noise at a given instant in time, as presented in Figure 4.9-1. However, noise levels rarely persist at the same level over a long period of time. Rather, community noise varies continuously over a period of time with respect to the sound sources contributing to the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with many of the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources, such as changes in traffic volume. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.⁵

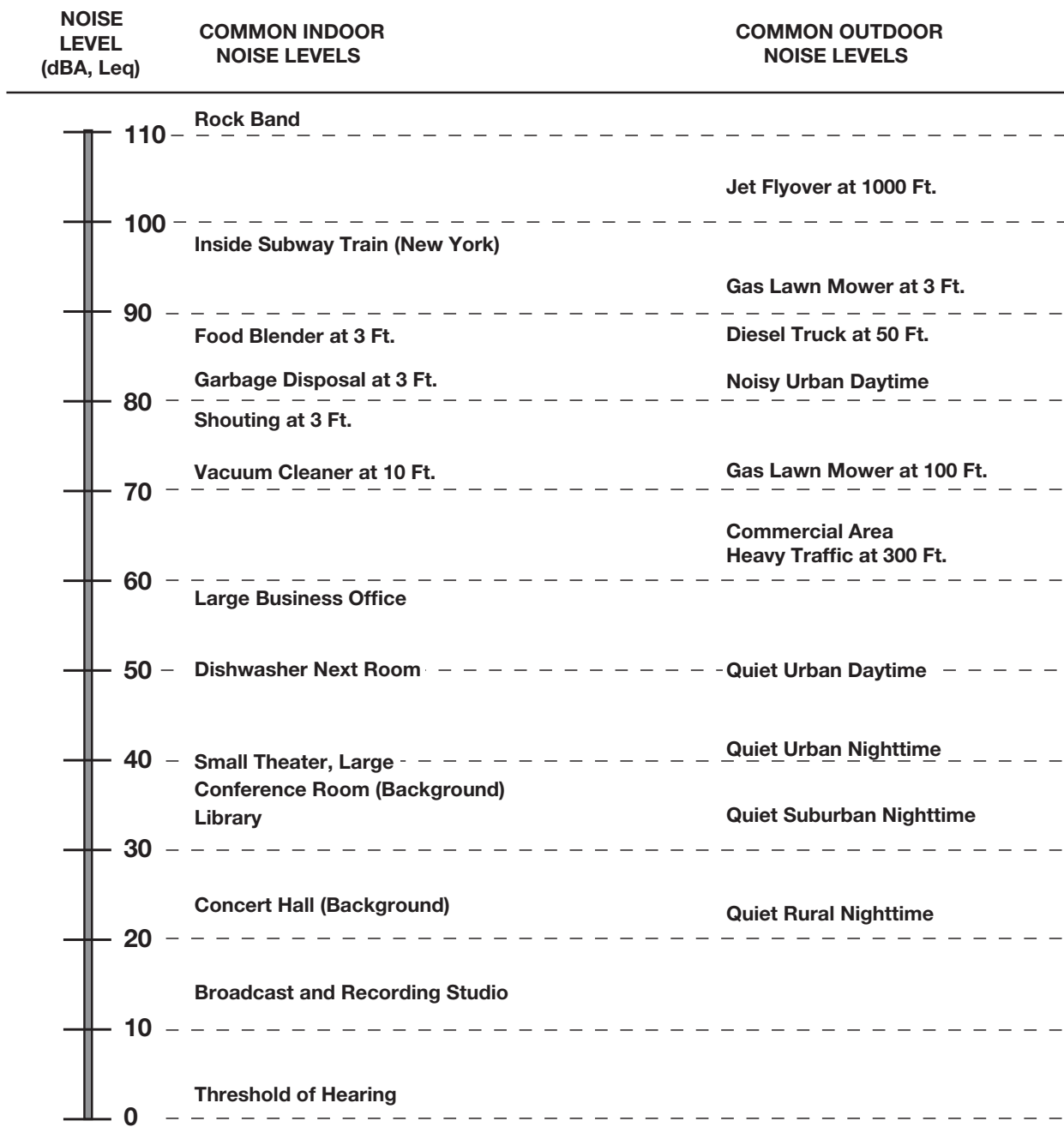
These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the noise exposure to be measured over periods of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. The following noise descriptors are used to characterize environmental noise levels over time, which are applicable to the Project.⁶

- L_{eq}:** The equivalent sound level over a specified period of time, typically, 1 hour (L_{eq}). The L_{eq} may also be referred to as the average sound level.
- L_{max}:** The maximum, instantaneous noise level experienced during a given period of time.
- L_{min}:** The minimum, instantaneous noise level experienced during a given period of time.
- L_x:** The noise level exceeded a percentage of a specified time period. For instance, L₅₀ and L₉₀ represent the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.
- L_{dn}:** The average A-weighted noise level during a 24-hour day, obtained after an addition of 10 dB to measured noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account nighttime noise sensitivity. The L_{dn} is also termed the day-night average noise level (DNL).
- CNEL:** The Community Noise Equivalent Level (CNEL) is the average A-weighted noise level during a 24-hour day that includes an addition of 5 dB to measured noise levels between the hours of 7:00 p.m. to 10:00 p.m. and an addition of 10 dB to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

⁴ Egan MD. 1988. Chapter 1 in *Architectural Acoustics*.

⁵ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.2.2.1.

⁶ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.2.2.2.



SOURCE: State of California, Department of Transportation (Caltrans), Technical Noise Supplement (TeNS). October 1998. Available: [http://www.dot.ca.gov/hq/env/noise/pub/Technical Noise Supplement.pdf](http://www.dot.ca.gov/hq/env/noise/pub/Technical%20Noise%20Supplement.pdf)

Figure 4.9-1
Decibel Scale and Common Noise Sources

Effects of Noise

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep.⁷

With regard to the subjective effects, the responses of individuals to similar noise events are diverse and influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity. Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur:⁸

- Except in carefully controlled laboratory experiments, a change of 1 dBA in ambient noise levels cannot be perceived;
- Outside of the laboratory, a 3 dBA change in ambient noise levels is considered to be a barely perceivable difference;
- A change in ambient noise levels of 5 dBA is considered to be a readily perceivable difference; and
- A change in ambient noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel scale. The human ear perceives sound in a non-linear fashion; therefore, the dBA scale was developed. Because the dBA scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather

⁷ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.2.1.

⁸ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.2.1.

logarithmically. Under the dBA scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two sources are each producing sound of the same loudness, the resulting sound level at a given distance would be approximately 3 dBA higher than one of the sources under the same conditions. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. Under the dBA scale, three sources of equal loudness together produce a sound level of approximately 5 dBA louder than one source, and ten sources of equal loudness together produce a sound level of approximately 10 dBA louder than the single source.⁹

Sources of Noise

In the urban setting, as in most of the city, sources of noise include vehicular traffic on local streets, major arterial, freeways/highways, passenger and freight trains on railroad tracks, aircraft overflight from neighboring airports, as well as exterior operations associated with commercial and industrial land uses, such as loading/unloading activity, trash compactors, heavy-duty truck movement, trash collection, barking dogs, and amplified sound. A more detailed discussion on the noise sources and their potential impacts to the existing environment in Section 4.9.4, *Existing Noise Environment*, below.

Noise Attenuation

When noise propagates over a distance, the noise level reduces with distance depending on the type of noise source and the propagation path. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as “spherical spreading.” Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically “hard” sites and 7.5 dBA for “soft” sites for each doubling of distance from the reference measurement, as their energy is continuously spread out over a spherical surface (e.g., for hard surfaces, 80 dBA at 50 feet attenuates to 74 at 100 feet, 68 dBA at 200 feet, etc.). Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the reduction in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, which in addition to geometric spreading, provides an excess ground attenuation value of 1.5 dBA (per doubling distance).¹⁰

Roadways and highways consist of several localized noise sources on a defined path, and hence are treated as “line” sources, which approximate the effect of several point sources. Noise from a line source propagates over a cylindrical surface, often referred to as “cylindrical spreading.”¹¹ Line sources (e.g., traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.¹² Therefore, noise due to a line source attenuates less with distance than that of a point source with increased distance.

⁹ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.2.1.1.

¹⁰ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.1.4.2.

¹¹ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.1.4.1.

¹² California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.1.4.1.

Additionally, receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Atmospheric temperature inversion (i.e., increasing temperature with elevation) can increase sound levels at long distances (e.g., more than 500 feet). Other factors such as air temperature, humidity, and turbulence can also have significant effects on noise levels.¹³

Vibration

Vibration Characteristics and Measurement

Vibration can be interpreted as energy transmitted in waves through the ground or structure, which generally dissipate with distance from the vibration source. Because energy is lost during the transfer of energy from one particle to another, vibration becomes less perceptible with increasing distance from the source.

Groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard.¹⁴ In contrast to airborne noise, groundborne vibration is not a common environmental problem, as it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, heavy trucks traveling on rough roads, and construction activities, such as blasting, pile-driving, and operation of heavy earth-moving equipment.¹⁵

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal in inches per second (in/sec), and is mostly used to describe vibration impact to buildings. The root mean square (RMS) amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. The relationship of PPV to RMS is expressed in terms of the “crest factor,” defined as the ratio of the PPV amplitude to the RMS amplitude. PPV is typically a ratio of 1.7 to six times greater than RMS vibration velocity. The decibel notation VdB acts to compress the range of numbers required to describe vibration. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include buildings where vibration would interfere with operations within the building or cause damage (especially old masonry structures), locations where people sleep, and locations with vibration sensitive equipment.¹⁶

Effects of Vibration

Building vibration may be perceived by the occupants as the motion of building surfaces, the rattling of items moving on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings that are radiating sound waves. In extreme cases, the vibration can cause damage to buildings. However, building damage is not a factor for most projects, except

¹³ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013, Section 2.1.4.3.

¹⁴ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

¹⁵ California Department of Transportation (Caltrans). 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

¹⁶ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

for occasional blasting and pile driving during construction. Annoyance from vibration often occurs when vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings.

Sources of Vibration

Typical sources of groundborne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earth-moving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with groundborne vibration and noise from these sources are usually localized to areas within approximately 100 feet of the vibration source, although there are examples of groundborne vibration causing interference out to distances greater than 200 feet.¹⁷ When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible.

Vibration Attenuation

Vibration attenuates by 9VdB with the doubling of distance. For example, a vibration level at 50 feet from the source is 9 VdB lower than the vibration level at 25 feet. Vibration at 100 feet from the source is 18 VdB lower than the vibration level at 25 feet. Therefore, receptors at 50 feet from the construction activity may be exposed to groundborne vibration up to 78 VdB (or 0.030 inch/sec PPV or lower). Receptors at 100 feet from the source may be exposed to groundborne vibration up to 69 VdB.

4.9.3 Regulatory Framework

A number of federal and State agencies have prepared guidelines that identify standards and regulations concerning noise compatibility in the workplace and in residences. The following provides relevant federal, State, and local regulations applicable to the Project.

Federal

The United States Noise Control Act of 1972

The Noise Control Act of 1972 established a national policy promoting an environment that does not jeopardize the health of any people. The Noise Control Act recognized the Federal government's role in dealing with major commercial noise sources and to provide uniform treatment of such sources. As Congress has the authority to regulate interstate and foreign commerce, regulation of noise generated by such commerce also falls under congressional authority. The federal government specifically preempts local control of noise emissions from aircraft, railroad and interstate highways.

The Environmental Protection Agency (EPA) has identified acceptable noise levels for various land uses, in order to protect public welfare, allowing for an adequate margin of safety, in addition to establishing noise emission standards for interstate commerce activities.

The U.S. Department of Housing and Urban Development (HUD) has established policies for granting financial support for the construction of dwelling units in noise impacted areas. **Table 4.9-1, *HUD External Noise Exposure Standards for New Residential Construction***, shows noise exposure levels used by HUD to determine eligibility for financial backing for new or rehabilitative residential construction in noise

¹⁷ Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment*. Report No. FTA-VA-90-1003-06. May 2006.

impacted areas, in addition to providing special requirements. As indicated in Table 4.9-1, financial assistance from HUD would still be possible when noise exposure is between 65 dBA and 75 dBA, if adequate sound attenuation is provided to achieve appropriate noise reduction.

**TABLE 4.9-1
HUD EXTERNAL NOISE EXPOSURE STANDARDS FOR NEW RESIDENTIAL CONSTRUCTION**

HUD Approval	Site Noise Exposure	Noise Level (L _{dn})	Special Approval/Requirement
Standard	Acceptable	Not exceeding 65 dB	None
Discouraged	Normally Acceptable	65 dB to 75 dB	Building sound attenuation of 5 dB for 65-70 dB noise level and 10 dB for 70-75 dB noise level Special Environmental Clearance Approval of Regional Administration
Prohibited	Unacceptable	75+ dB	Approval of Assistant Secretary of Community Planning EIS required

SOURCE: Code of Federal Regulations, Title 24, Part 51, Section 51.103(c)(2)(ii): Criteria and standards.

Federal Transit Administration Vibration Standards

There are no federal vibration standards or regulations adopted by any agency specifically for evaluating vibration impacts from land use development projects such as those that would be allowed under the Project. However, Federal Transit Administration (FTA) has adopted vibration criteria that are commonly used to evaluate potential structural damage to buildings by building category from construction activities. The vibration damage criteria adopted by FTA are shown in **Table 4.9-2, Construction Vibration Damage Criteria**.

**TABLE 4.9-2
CONSTRUCTION VIBRATION DAMAGE CRITERIA**

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

NOTES: PPV = peak particle velocity; in/sec = inches per second.

SOURCE: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

FTA has also adopted vibration criteria associated with the potential for human annoyance from groundborne vibration for the following three land use categories: Category 1 – High Sensitivity, Category 2 – Residential, and Category 3 – Institutional. FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, historic buildings, hospitals with vibration-sensitive equipment, and university research operations. Vibration sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional

land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment but still have the potential for activity interference. The FTA uses a screening distance of 100 feet for highly vibration-sensitive buildings (e.g., historic buildings, hospital with vibration sensitive equipment, Category 1) and 50 feet for residential uses (Category 2) and institutional land uses with primarily daytime use (Category 3). The vibration criteria associated with human annoyance for these three land-use categories are shown in **Table 4.9-3, *Indoor Groundborne Vibration Impact Criteria for General Assessment***. No vibration criteria have been adopted or recommended by FTA for commercial uses.

TABLE 4.9-3
INDOOR GROUNDBORNE VIBRATION IMPACT CRITERIA FOR GENERAL ASSESSMENT

Land Use Category	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime uses.	75 VdB	78 VdB	83 VdB

NOTES: VdB = vibration velocity decibels.

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.
4. This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

SOURCE: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

State

State of California Noise Standards

The Office of Noise Control in the State Department of Health Services has developed criteria and guidelines for local governments to use when setting standards for human exposure to noise and preparing noise elements for General Plans. These guidelines include noise exposure levels for both exterior and interior environments. In addition, Title 25, Section 1092 of the California Code of Regulations sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. The State indicates that locating residential units in areas where exterior ambient noise levels exceed 65 CNEL is undesirable. Whenever such units are to be located in such areas, the developer must incorporate construction features into the building design that would reduce interior noise levels to 45 dBA CNEL. **Table 4.9-4, *Noise and Land Use Compatibility Matrix***. Table 4.9-4 presents criteria used to assess the compatibility of proposed land uses with the noise environment. These standards and criteria will be incorporated into the land use planning process to reduce future noise and land use incompatibilities. These tables are the primary tools that allow the City to ensure integrated planning for compatibility between land uses and outdoor noise.

In addition, new or renovated residential and business buildings in California will need to comply with the California Code of Regulations, Title 24 – Building Energy Efficiency Standards, which require that interior noise levels attributable to exterior sources must not exceed 45 dB in any habitable room.

**TABLE 4.9-4
NOISE AND LAND USE COMPATIBILITY MATRIX**

Land Use	Community Noise Exposure L _{dn} or CNEL, dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density	50 to 60	60 to 70	70 to 75	75 to 85
Residential – Multiple Family	50 to 65	65 to 70	70 to 75	75 to 85
Transient Lodging—Motels, Hotels	50 to 65	65 to 70	70 to 80	80 to 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 to 60	60 to 65	65 to 80	80 to 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 to 70	NA	70 to 85
Sports Arena, Outdoor Spectator Sports	NA	50 to 75	NA	75 to 85
Playgrounds, Neighborhood Parks	50 to 67.5	NA	70 to 80	75 to 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 to 75	NA	70 to 80	80 to 85
Office Buildings, Business and Professional Commercial	50 to 67.5	67.5 to 77.5	77.5 to 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 to 70	70 to 80	80 to 85	NA

NOTES:

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

NA: Not Applicable.

SOURCE: Modified from Governor's Office of Planning and Research (OPR). 2017. *General Plan Guidelines and Technical Advisories*, Appendix D: Guidelines for the Preparation and Content of the Noise Element of the General Plan, pp. 366–379.

Local

City of Irwindale General Plan

The City of Irwindale Public Safety Element establishes guidelines and policies pertaining to the reduction and mitigation of noise levels for the safety of the surrounding community. The City's noise guidelines emphasize the need for limitations on noise level exposure associated with existing development and traffic. The policies include the following:

Issue Area – Noise. The City of Irwindale will work to reduce the high levels of noise exposure associated with the existing development and transportation facilities in the City.

Guiding Policy 1. The City of Irwindale will strive to reduce the community's exposure to noise from on-going manufacturing activities.

Guiding Policy 2. The City of Irwindale will work towards reducing noise exposure in the City by considering noise and land use compatibility in land use planning.

Guiding Policy 3. The City of Irwindale will continue to investigate strategies that will be effective in reducing the community's exposure to harmful noise levels.

City of Irwindale Municipal Code, Noise Ordinance

Title 9, Public Peace, Morals and Welfare Chapter 9.28, Noise Regulation, of the Irwindale Municipal Code, controls any disturbing, excessive or offensive noise which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the community.

The adopted Noise Ordinance sets standards for noise levels citywide and provides the means to enforce the reduction of obnoxious or offensive noise. The noise sources enumerated in the Noise Ordinance include radios, phonographs, loudspeakers and amplifiers, electric motors or engines, animals, motor vehicles and construction equipment. The Noise Ordinance sets interior and exterior noise levels for all properties within designated noise zones, unless exempted, as shown in **Table 4.9-5, City of Irwindale Noise Ordinance Standards**. Enforcing the Noise Ordinance includes requiring proposed development projects to show compliance with the ordinance and requiring construction activity to comply with established scheduling limits. The ordinance is reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

**TABLE 4.9-5
CITY OF IRWINDALE NOISE ORDINANCE STANDARDS**

Designated Noise Zone Land Use (Receptor Property)	Time Interval	Ambient Noise Level (dBA)
Residential Properties	10:00 P.M. to 7:00 A.M. (nighttime)	45
	7:00 A.M. to 10:00 P.M. (daytime)	50
Commercial Properties	10:00 P.M. to 7:00 A.M. (nighttime)	50
	7:00 A.M. to 10:00 P.M. (daytime)	55
Industrial Properties	10:00 P.M. to 7:00 A.M. (nighttime)	60
	7:00 A.M. to 10:00 P.M. (daytime)	70

SOURCE: City of Irwindale. 2024. Irwindale Municipal Code, Sections 9.28.030: Ambient base noise levels designated—Proof of violation. Last updated June 5, 2024.

Any noise at a level which exceeds the ambient or the ambient base level as set forth in Table 4.9-6, whichever is greater, by more than ten dB when measured at any boundary line of the property from which the noise emanates shall constitute sufficient proof of a violation.

Section 9.28.040 states it is unlawful for any person to willfully make or continue, or cause to be made or continued any noise at a level which exceeds by more than five dB the ambient or the ambient base level as set forth in Section 9.28.030, whichever is greater, when measured at any boundary line of the property from which the noise emanates.

Section 9.28.110 states it is unlawful for any person within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other construction type device on a development requiring a city permit, in such a manner that noise is produced which would constitute a violation of Section 9.28.040, unless beforehand authorization has been duly obtained from the building inspector. Such activity is unlawful without a permit

during all hours on Sunday. Construction permitted under these regulations would be allowed to occur from 7:00 a.m. to 7:00 p.m.

4.9.4 Existing Noise Environment

Irwindale's noise environment is dominated by vehicular traffic including vehicular generated noise along Interstate 605 (I-605), Interstate 210 (I-210), and primary and major arterial roadways. Additionally, the San Gabriel, Long Beach, and Los Angeles International Airports, as well as railroad operations within the City, contribute to the overall noise environment. Furthermore, a number of other sources contribute to the total noise environment such as construction activities, power tools, industrial operations, gardening equipment, loudspeakers, auto repair, radios, children playing, and dogs barking. In order to provide a description of the existing noise environment in Irwindale, field noise measurements were taken in 2023 at various locations in the city to reflect ambient noise levels primarily in the vicinity of sensitive uses (i.e., schools, residences, churches, hospitals, etc.). Existing traffic volumes were also modeled throughout the City to provide projected vehicular generated noise levels.

Ambient Noise

To understand the existing ambient or background noise levels throughout the City, short-term (15-minute) field measurements were conducted in August 2023. The noise measurements take into account mobile noise sources and stationary noise sources. Field monitoring consisted of 15 noise measurements recorded at various locations throughout the City. Heavy truck traffic was observed on many of the roadways during the field noise measurements. The noise measurements were conducted using a Larson Davis LxT sound-level meter (SLM). All instruments were calibrated and operated according to the applicable manufacturer specification. The results of the short-term noise measurements are shown in **Table 4.9-6, Summary of Short-Term Noise Measurements**. The measurement locations are identified in **Figure 4.9-2, Noise Measurement Locations**.

Sensitive Receptors

A noise-sensitive receptor would be any location where excessive noise levels would interfere with an individual's normal sleeping activities, normal conversation, or ability to work. Some land uses are more sensitive to high noise levels than others, due to the usage of the occupants at these land uses. Such land uses include residential neighborhoods, hotels and motels, trailer parks, schools, churches and other places of worship, hospitals, long-term medical or mental care facilities, libraries, concert halls, and other land uses that include outdoor active uses with people spending a good amount of time periods in their outdoor areas.

Noise Sources

Roadway Noise

The City is exposed to vehicular traffic along the I-605, and I-210. Existing roadway noise levels were calculated for five roadway segments located in the City, using the Federal Highway Administration's (FHWA's) Highway Traffic Noise Model (TNM) and existing peak hour traffic volumes at the study intersections, collected by LLG in 2024 (see Appendix F of this Draft PEIR for traffic data). TNM calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions.

**TABLE 4.9-6
SUMMARY OF SHORT-TERM NOISE MEASUREMENTS**

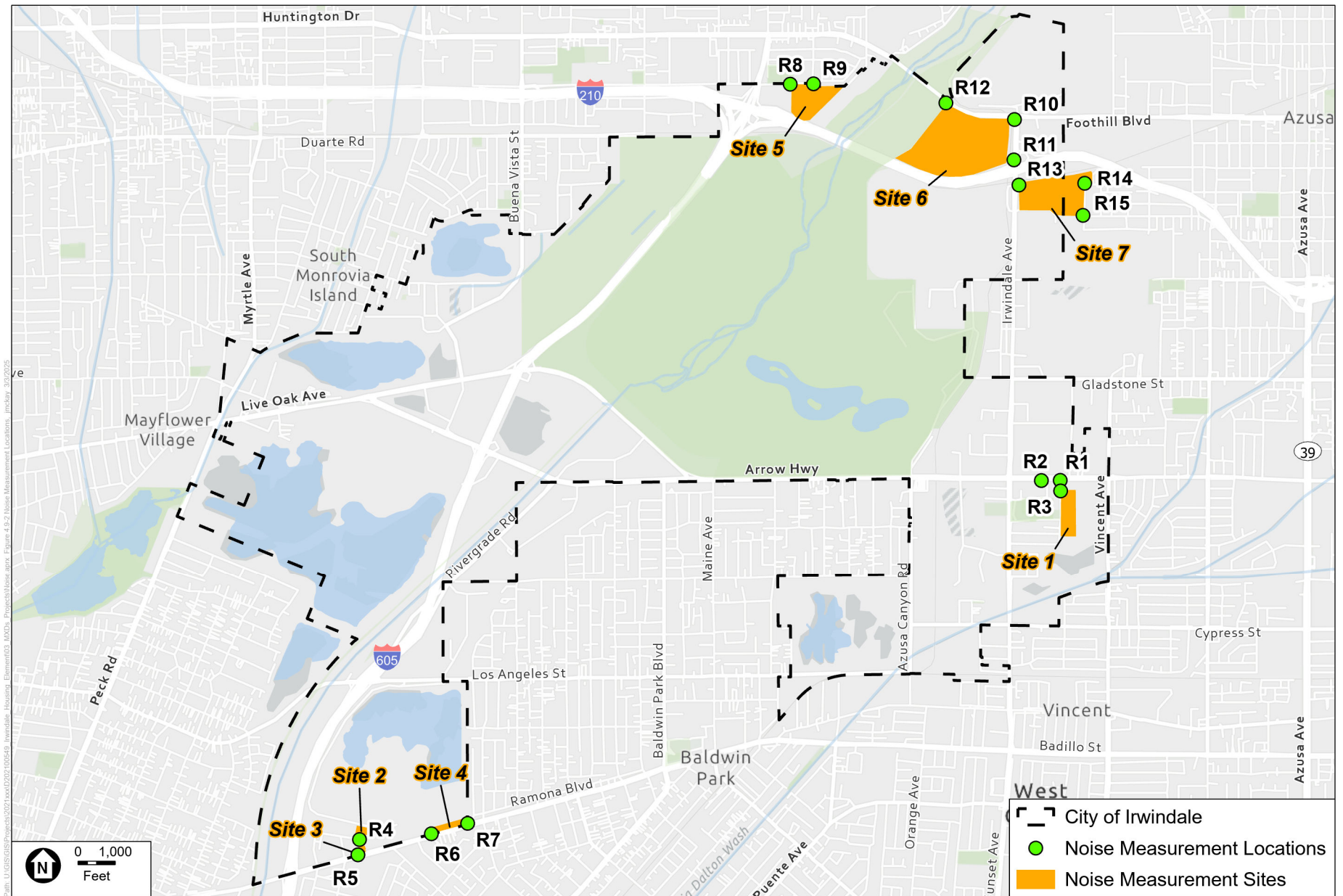
Site	General Location of Noise Measurement	dBA Leq	Type of Sensitive Receptor
R1	By the intersection of Allen Drive and Arrow Highway	70.3	Single-family residences along Allen Drive
R2	Located south of Arrow Highway near Ayon Avenue	73.9	Irwindale Senior Center
R3	East of Allen Drive	55.2	Single-Family along Allen Drive
R4	Near the Cul-de-Sac at Schabarum Avenue.	60.5	None
R5	Along Ramona Boulevard between Barnes Avenue and Summer Lane	72.6	Single- and multi-family residential uses along Ramona Boulevard
R6	North of Earl Avenue and Romona Boulevard	69.5	Single- and multi-family residential uses along Ramona Boulevard
R7	Near Ramona Boulevard and Foster Avenue	72.6	Single-family residential uses along Ramona Boulevard
R8	By Crestfield Drive and Central Avenue	59.6	Sports Park, schools, and single-family residences north of Central Avenue
R9	At the intersection of Crestfield Drive and Central Avenue	58.4	Single-family residential uses along Central and Crestfield Drive
R10	At the intersection of Foothill Boulevard and Irwindale Avenue	76.1	None
R11	Near Irwindale Avenue and the I-210 On ramps	77.1	None
R12	South of Foothill Boulevard near the San Gabriel Trail	74.0	The San Gabriel Trail north of Foothill Boulevard
R13	At the intersection of Irwindale Avenue and Avenida Padilla	60.1	None
R14	At the intersection of Aerojet Avenue and Optical Drive	57.9	None
R15	At the intersection of 3 rd Street and Aerojet Avenue	57.9	None

NOTES: ESA conducted these noise measurements on August 24, 2023. Raw data for these measurements can be found in Appendix E.

SOURCE: ESA, 2025.

The model assumed “hard surface” site propagation conditions. Sound levels caused by line sources, relatively long, variable or moving sound sources such as traffic, decrease at a rate of 3.0 to 4.5 dBA when the distance from the centerline of the road is doubled, depending on the surface hardness between the source and the receiving property. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography. Attenuation due to intervening structures, topography, atmospheric absorption, etc. is not included in the generalized model; therefore, the model analysis assumes a conservative worst-case scenario for traffic noise (i.e., actual site attenuation would potentially result in reduced traffic noise levels at receptors, where intervening structures and topography occur).

The average daily noise levels along these roadway segments at 45 feet from the roadway centerline, and the line-of-sight distance from the roadway segment to the noise contours of 70, 65, and 60 dBA CNEL are presented in **Table 4.9-7, Existing Roadway Noise Levels**. Existing roadway noise contours are shown in **Figure 4.9-3, Existing Roadway Noise Contours**. A noise contour is a line behind which the noise level does not exceed a certain value. For instance, the 60 dBA CNEL contour indicates that the CNEL between the roadway centerline and the contour line is equal to, or greater than 60 dBA; the CNEL beyond the contour line – away from the street – is less than 60 dBA CNEL.



SOURCE: City of Irwindale, 2022; ESA, 2025.

Figure 4.9-2
Noise Measurement Locations

**TABLE 4.9-7
EXISTING ROADWAY NOISE LEVELS**

Roadway Segment	dBA CNEL at 45 Feet from Centerline ¹	Approximate Distance to CNEL Contour (feet) ²		
		60	65	70
Arrow Hwy between Irwindale Ave & Vincent Ave	75.0	1,430	455	145
Huntington Dr/E Foothill Blvd between Las Lomas Rd & Irwindale Ave	73.5	1,015	320	100
Irwindale Ave between Arrow Hwy & Tapia St	71.8	675	215	65
Irwindale Ave between E Foothill Blvd & I-210 Fwy	74.4	1,240	395	125
Ramona Blvd between I-605 Fwy & Foster Ave	70.8	545	175	55

NOTES: Analysis is based on existing peak hour traffic volumes at the study intersections provided in the Transportation Assessment Report provided in Appendix F of this PEIR.

1. CNEL values are calculated at 50 feet from the roadway centerline.
2. All distances are measured from the centerline.

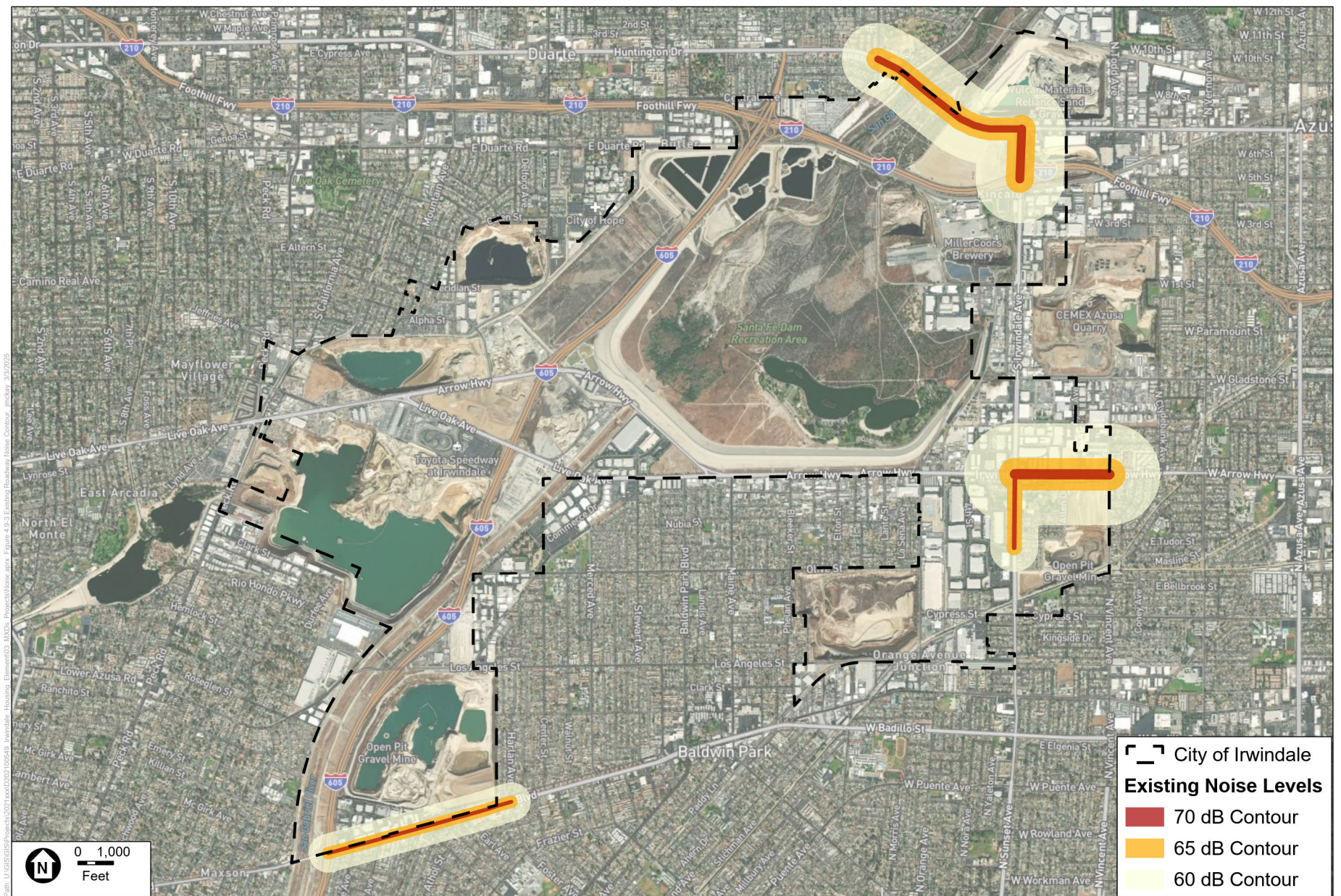
SOURCE: Environmental Science Associate, 2025.

60 dBA CNEL Contour

The 60 dBA CNEL contour defines the noise study zone. The noise environment for any proposed noise-sensitive land use (for example, single- or multi-family residences, hospitals, schools, or churches) within this zone should be evaluated on a project-specific basis. The project may require mitigation to meet City and/or State (Title 24) standards. A site- and project-specific study will be necessary to determine mitigation measures that will help make the interior building environment acceptable for the given type of land use. Some sites may already be sufficiently protected by existing walls or berms so that no further mitigation measures are required.

65 dBA CNEL Contour

The 65 dBA CNEL contour defines the noise mitigation zone. Within this contour, new or expanded noise-sensitive developments should be permitted only if appropriate mitigation measures, such as barriers or additional sound insulation, are included and City and/or State noise standards are achieved. In some instances, it may be possible to show that existing walls, berms, or screening may exist such that required noise reduction is already in place. The inclusion of an area within a 60 or 65 dBA CNEL contour as shown on Figure 4.9-3 indicates that noise levels are high enough to be of potential concern, but does not imply that excessive noise levels are uniformly present on all sites within the area. Buildings, walls, berms, and changes in topography affect noise levels at the receiver site. Some locations may be screened from roadway noise by the presence of one or more of these features. As indicated in Table 4.9-7, the existing roadway noise levels at 45 feet along studied roadways vary from a minimum of 70.8 dBA CNEL to a maximum of 75 dBA CNEL. As indicated in Table 4.9-7, the 65 dBA CNEL contour locations vary from 175 feet to 455 feet from the roadway centerline. For all of these roadway links, the 65 dBA CNEL contours extend beyond the edge of right-of-way (ROW).



SOURCE: City of Irwindale, 2022; ESA, 2025

Figure 4.9-3
Existing Roadway Noise Contours

70 dBA CNEL Contour

The 70 dBA CNEL contour defines the noise impact zone. Within this contour, new or expanded noise-sensitive developments are usually not permitted. The development of an area within a 70 dBA CNEL contour as shown on Figure 4.9-3 indicates that noise levels are high enough to be of potential concern. As indicated in Table 4.9-7, the existing roadway noise levels at 45 feet along studied roadways vary from a minimum of 70.8 dBA CNEL to a maximum of 75.0 dBA CNEL. As indicated in Table 4.9-7, the 70 dBA CNEL contour locations vary from 55 feet to 145 from the roadway centerline. For the majority of these roadway links, the 70 dBA CNEL contours extend beyond the edge of right-of-way ROW.

Railroad Noise

There are railroad tracks along the northern portion of the City, generally following I-210, and are used primarily for the transport of passengers to other metro rail and busway stations in southern California. The Santa Fe Dam Recreation Center in the northern portion of the City is impacted by the train noise along these railroad tracks.

Aircraft Noise

There is currently no airport or private airstrip within the City. The nearest airstrip/airport is the San Gabriel Valley Airport; which is located approximately 1.75 miles to the southwest of the City. The Long Beach International and Los Angeles International airports are located approximately 19 miles and 25 miles to the southwest of the City, respectively. The City is affected by the overflight of airplanes from these airports, but is not within the 60 dBA CNEL noise contours of any of these airports, which would trigger the need for a noise assessment for proposed sensitive uses.

Stationary Noise

Industrial Noise

Industrial uses are spread out across the entire City, from the northwest corner to the north, northeast, east, and to the southeast. The Irwindale Speedway and some industrial uses are located in the southwest corner of the city. Major noise generating sources from industrial uses include heavy duty trucks, loading/unloading activities, and generators that typically occur outdoors. Stationary sources of noise are required to comply with the Irwindale Municipal Code noise control ordinance.

Commercial and Residential Noise

The City's residential neighborhoods generally are located in the southeast and northwest portions of the City.

Commercial uses are spread out and mixed with the residential neighborhoods. Major noise generating noise sources include loading/unloading activities associated with commercial uses, trash collection, and other noise-generating activities occurring outdoors. Stationary sources of noise are required to comply with the Irwindale Municipal Code noise control ordinance.

4.9.5 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G questions regarding noise, a project would have a significant impact if the project would result in:

- Threshold NOI-1:** 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;
- Threshold NOI-2:** Generation of excessive groundborne vibration or groundborne noise levels; or
- Threshold NOI-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.

Methodology

Construction Noise and Vibration

For project-related construction noise, typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, are taken from the FHWA Roadway Construction Noise Model (RCNM).¹⁸

Construction vibration impacts were evaluated using FTA methodology from the FTA Transit Noise and Vibration Impact Assessment Manual.¹⁹ Setback distances for preventing vibration damage were evaluated using reference vibration levels for specific construction equipment.

Traffic Noise

During operation of the project, noise generated from mobile noise sources such as vehicular traffic is assessed with the FHWA-approved traffic noise source noise modeling guidelines. For stationary sources, equipment source noise levels included in the FHWA RCNM are used for the impact analysis.²⁰

Railway Noise

This analysis evaluates impacts associated with the proposed Project at the program level. Accordingly, specific details on future railway expansions or improvements are unknown at this time, neither are the

¹⁸ Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*. January 2006.

¹⁹ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

²⁰ Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*. January 2006.

specific noise sources that might occur in conjunction with development of land uses near the railway under the Project. Therefore, railway noise and vibration impacts are discussed on a qualitative basis.

Stationary Noise

This analysis evaluates impacts associated with the proposed Project at the program level. Accordingly, specific details on future mechanical equipment or HVAC equipment and layout are unknown at this time, neither are the specific noise sources that might occur in conjunction with development of land uses allowable under the Project. Therefore, stationary and other noise source impacts are discussed on a qualitative basis.

Project Impact Analysis

Temporary or Permanent Increase in Ambient Noise Levels

Threshold NOI-1: The Project would have a significant impact if future development allowed by 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.

Impact NOI-1: The Project would result in the generation of a substantial temporary noise increase above ambient in excess of standards established in the local general plan or noise ordinance while construction would occur and impacts would be significant and unavoidable. The Project would not result in a permanent increase in ambient noise levels through Project operations 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 and impacts would be less than significant.

Construction Noise

Construction of future development under the proposed Project would require the use of heavy equipment during the demolition, grading, excavation, and other construction activities within the proposed housing sites. During each stage of development for any given construction project, a different mix of equipment would be used. As such, construction activity noise levels would fluctuate depending on the particular type, number, and duration of use of the various pieces of construction equipment.

Construction crew commutes and the transport of construction equipment and materials to the individual project site within the proposed housing sites would incrementally increase noise levels on access roads leading to the individual project site. Although there would be a relatively high single-event noise-exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 87 dBA L_{max} over a few seconds), the effect on longer-term (hourly or daily) ambient noise levels in the project vicinity would be small when averaged over a long period of time (an hour, 8 hours, or 24 hours) with much lower ambient noise levels. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the individual project site would be less than significant and not require mitigation.

Individual pieces of construction equipment expected to be used during construction could produce maximum noise levels of 75 dBA to 101 dBA L_{max} at a reference distance of 50 feet from the noise source, as shown in **Table 4.9-8, Construction Equipment Noise Levels**. These maximum noise levels would occur

when equipment is operating at full power. The estimated usage factor for the equipment is also shown in Table 4.9-8. The usage factors are based on FHWA's RCNM User's Guide.²¹

**TABLE 4.9-8
CONSTRUCTION EQUIPMENT NOISE LEVELS**

Construction Equipment	Estimated Usage Factor	Noise Level at 50 Feet (dBA Lmax)
Air Compressors	40%	78
Bore/Drill Rig	20%	79
Cement and Mortar Mixer	40%	79
Compactor	20%	83
Concrete Saw	20%	90
Crane	16%	81
Dumpers/Tenders	40%	76
Excavator	40%	81
Forklift	10%	75
Generator Sets	50%	81
Jackhammers	20%	89
Off-Highway Trucks	20%	76
Other Equipment	50%	85
Paver	50%	77
Paving Equipment	20%	90
Roller	20%	80
Rough Terrain Forklift	10%	75
Rubber Tired Loader	50%	79
Surfacing Equipment	50%	85
Tractor/Loader/Backhoe	25%	80
Vacuum Street Sweeper	10%	82
Vibratory Pile Driver	20%	101

SOURCE: Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*. January 2006.

The exact layout of future projects proposed under the Project and associated construction that would be implemented are not known at this time. However, based on the land use and zoning amendments proposed under the Project it is assumed that some of the activities would take place in close proximity to sensitive receptors. The severity of construction-related noise impacts depends on the proximity of construction activities to sensitive receptors, the presence of intervening barriers, the number and types of equipment used, and the duration of the activity.

While the details of these factors are not available for future projects, it is assumed that individual projects would be implemented in compliance with County standards. Future development facilitated by adoption

²¹ Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*. January 2006.

of the Project would be required to comply with the restrictions of the City Noise Ordinance, as feasible. In addition, future projects developed under the Project would be subject to subsequent planning and environmental review in accordance with County requirements and CEQA, which would evaluate future projects' noise impacts on a project-by-project basis. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and mitigation would be incorporated, as feasible, to reduce impacts to the greatest extent feasible. However, since the timing and layout of these future projects are unknown at this time, it would be speculative to determine if site-specific mitigation measures are feasible and/or are able to reduce significant impacts to a less than significant level. Therefore, impacts associated with construction noise would be potentially significant.

Compliance with the City's Noise Ordinance would help to reduce impacts associated with construction noise. To comply with the Municipal Code, construction, maintenance, or demolition activities within the City's jurisdiction would be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday with no construction work occurring on Sundays and federal holidays, except for emergency work of public service utilities or by variance issued by the health officer in accordance with the Municipal Code. In addition, the City has adopted numeric thresholds of ambient base noise levels (as shown Table 4.9-6) plus 5 dBA. If construction on individual project sites would potentially expose adjacent residences or other sensitive uses to construction noise levels exceeding the City's noise thresholds, temporary mitigation measures would be required during construction activities.

Furthermore, implementation of Mitigation Measure (MM) NOI-1 would further aid in helping to minimize the effects of construction noise. MM NOI-1 requires the preparation of a noise mitigation plan for any future development projects within the Project area that are located within 500 feet of sensitive receptors. MM NOI-1 also requires temporary sound barriers, equipment mufflers, and idling limitations.

Although compliance with applicable local, State, and federal regulations, implementation of MM NOI-1, and subsequent environmental review would reduce potential impacts related to construction noise, buildout of the Project could still result in significant impacts associated with construction noise. Even with mandatory compliance with the City Noise Ordinance, it is possible that some future development proposed under the Project could require many pieces of heavy-duty construction equipment and/or heavy-duty trucks would be required and that construction-period noise levels would exceed the significance threshold. While subsequent environmental review of future projects would be required in accordance with CEQA, which would require project-specific mitigation measures to address all significant impacts, since the timing and location of these future projects are unknown at this time, it would be speculative to determine if site-specific mitigation measures are feasible and/or are able to reduce potentially significant impacts to a less-than-significant level. Therefore, impacts related to construction noise associated with future projects developed under the Project are considered significant and unavoidable.

Traffic Noise

Future development under the proposed Project would generate traffic that would increase noise levels along existing and future roadways. The FHWA's TNM was used to evaluate future (2029) traffic-related noise conditions in the City at the study intersections. The model calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions. **Table 4.9-9, *Future Roadway Noise Levels***, provides the future buildout noise levels at 45 feet from the centerline of

these roadway segments and the distances to the 60, 65, and 70 dBA CNEL future roadway noise contours shown in **Figure 4.9-4, Future Roadway Noise Contours**. As shown in Table 4.9-9, traffic noise along the analyzed roadway segments would not be discernably different when existing noise levels are compared to future roadway noise levels with implementation of the Project. The maximum increase would 0.2 dBA be along Ramona Boulevard between I-605 Freeway and Foster Avenue. A 3 dBA increase in noise levels is considered barely perceivable by the human ear. Therefore, the impact from traffic noise would be less than significant.

**TABLE 4.9-9
FUTURE ROADWAY NOISE LEVELS**

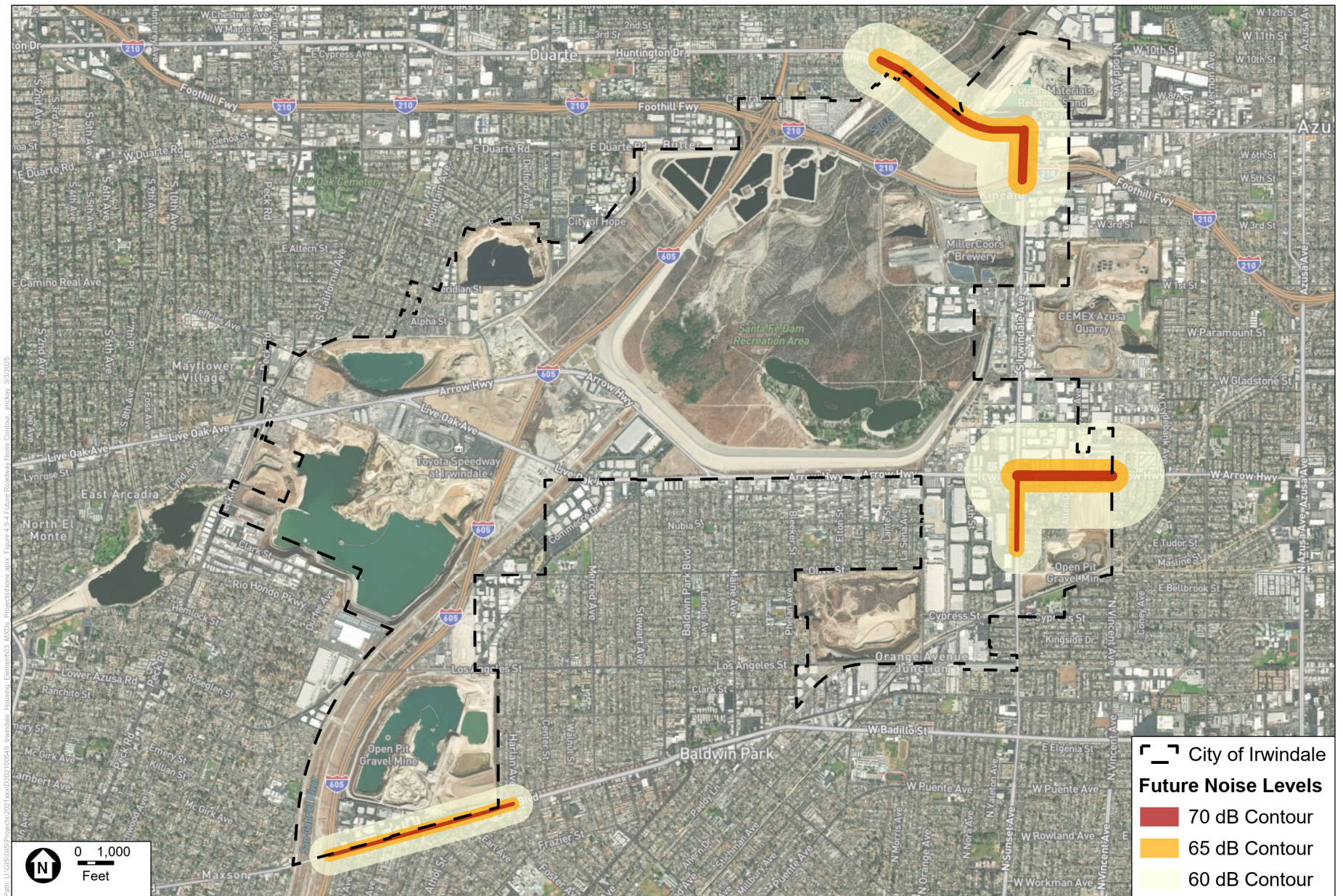
Roadway Segment	Future Plus Project Distance (feet) to Centerline to			Future No Project Noise Levels	Future Plus Project Noise Levels	Increase
	60 dBA CNEL Contour	65 dBA CNEL Contour	70 dBA CNEL Contour	dBA CNEL at 45 Feet from Centerline		
Arrow Hwy between Irwindale Ave & Vincent Ave	1,490	470	150	75.2	75.2	0
Huntington Dr/E Foothill Blvd between Las Lomas Rd & Irwindale Ave	1,065	335	105	73.7	73.7	0
Irwindale Ave between Arrow Hwy & Tapia St	705	220	70	71.9	71.9	0
Irwindale Ave between E Foothill Blvd & I-210 Fwy	1,290	410	130	74.6	74.6	0
Ramona Blvd between I-605 Fwy & Foster Ave	590	185	60	71.0	71.2	0.2

NOTE: Analysis is based data contained in the Transportation Assessment Report provided in Appendix F of this PEIR.

SOURCE: Environmental Science Associates, 2025. based on Appendix F.

Railway Noise

There are railroad tracks along the northern portion of the City, generally following I-210 and are used primarily for the transport of passengers to other city metro rail and busway destinations. The Santa Fe Dam Recreation Center in the northern corner of the City is impacted by the train noise along these railroad tracks. New or renovated noise-sensitive uses proposed in the northern area of Irwindale around the I-210 would be required to evaluate potential train noise level at the site. Mitigation measures designed to meet the exterior and/or interior noise standards shall be identified and implemented. Therefore, the impact from railway noise would be less than significant.



SOURCE: City of Irwindale, 2022; ESA, 2025

Figure 4.9-4
Future Roadway Noise Contours

Stationary Noise

Future development under the proposed Project could expose existing and new sensitive receptors to stationary noise sources, such as, rooftop heating, ventilation, and air conditioning units. In addition, growth anticipated under the Project could expose existing and new sensitive receptors to stationary noise sources associated with industrial uses. Any new development under the proposed Project would be subject to the Irwindale Municipal Code noise control ordinance and to the proposed General Plan policies aimed at reducing noise levels from adjacent properties. Through compliance with the Irwindale Municipal Code noise control ordinance and General Plan policies, the impact from stationary noise would be less than significant.

General Plan Policies that Address the Impact

Public Safety Element

Guiding Policies

PS-G-1: The City of Irwindale will strive to reduce the community's exposure to noise from on-going manufacturing activities.

PS-G-2: The City of Irwindale will work towards reducing noise exposure in the City by considering noise and land use compatibility in land use planning.

PS-G-3: The City of Irwindale will continue to investigate strategies that will be effective in reducing the community's exposure to harmful noise levels.

Implementing Policies

NO-P-1: Code Enforcement. Code enforcement is an integral part of the City's efforts to correct or eliminate substandard structures, properties, and signage. Community code enforcement efforts (funding and staffing) will continue to be the primary means to ensure that properties throughout the City are well maintained. Code enforcement will also ensure that the City's noise control ordinance is adhered to. For this reason, ongoing code enforcement efforts are an important implementation program within the Safety Element.

Community Development Element

Guiding Policies

CD-G-1: The City of Irwindale, through continued comprehensive land use planning, will strive to preserve the overall mix of land uses and development in the community.

CD-G-2: The City of Irwindale will continue to plan for the transition of the quarries located within the City to other land uses.

CD-G-3: The City of Irwindale will continue to ensure that the type, location, and intensity of all new development and intensified developments adhere to the requirements that are specified for their particular land use category in the General Plan.

CD-G-4: The City of Irwindale will continue to examine future potential opportunities for residential development.

Implementing Policies

CD-P-1: Environmental Review. The City shall continue to evaluate the environmental impacts of new development and provide mitigation measures prior to development approval, as required by the California Environmental Quality Act (CEQA). Environmental review shall be provided for major projects, as well as those that will have the potential to adversely impact the environment. Land use and development are among the issue areas that will be addressed in the environmental analysis. In

compliance with CEQA, the City shall also assign responsibilities for the verification of the implementation of mitigation measures that may be recommended as part of the environmental review process.

CD-P-2: Redevelopment. The City will continue to encourage future redevelopment of industrial and commercial projects in suitable locations to strengthen the City's tax and employment base. The existing redevelopment plans applicable to the City's three redevelopment project areas will continue to be implemented. The City may investigate the feasibility of establishing new redevelopment projects in the future.

Mitigation Measures

MM NOI-1: Construction Noise. Applicants for new development projects facilitated by the Project that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that are located within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools) shall submit a noise study to the City Planning Department for review and approval prior to issuance of a grading or building permit. The study shall include noise-reduction measures, if necessary, to ensure project construction noise will be in compliance with the City's Noise Ordinance standards as applicable to construction (i.e., IMC Chapter 9.28). All noise-reduction measures approved by City Planning Division shall be incorporated into appropriate construction-related plans (e.g., demolition plans, grading plans and building plans) and implemented during construction activities. Potential noise-reduction measures may include, but are not limited to, one or more of the following, as applicable to the project:

- Install temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive receptors.
- Equip construction equipment with effective mufflers, sound-insulating hoods or enclosures, vibration dampers, and other Best Available Control Technology (BACT).
- Limit non-essential idling of construction equipment to no more than five minutes per hour.

Significance After Mitigation: Implementation of MM NOI-1 would help to reduce the potentially significant construction-related impacts resulting from a substantial temporary increase in ambient noise levels in the vicinity of future development projects in excess of standards established in the noise ordinance. However, even with implementation of MM NOI-1, construction noise impacts could exceed the significance thresholds and impacts would be significant and unavoidable. Operational noise would be less than significant.

Excessive Groundborne Vibration or Groundborne Noise

Threshold NOI-2: The Project would have a significant impact if future development allowed by Irwindale Housing Element would generate excessive groundborne vibration or groundborne noise.

Impact NOI-2: The Project would generate excessive groundborne vibration or groundborne noise during construction and would be significant and unavoidable. However, the Project would not result in permanent excessive groundborne vibration or noise during operation and impacts would be less than significant without mitigation.

Construction

Future development under the proposed Project would generate groundborne noise and vibration near construction sites and, if sensitive receptors or land uses are adjacent to construction, there could be

significant impacts. Vibration attenuates quickly, but high impact equipment such as pile drivers could cause impacts depending on the distance from the receptor or land use to the construction activity. Most construction activity does not require high impact equipment and would generate vibration mostly from bulldozers and loaded trucks. A discussion of impacts to sensitive receptors and buildings from vibration generated during construction activities is provided below.

Building Damage

The use of large bulldozers and loaded trucks for construction would generate the highest groundborne vibration levels on a typical construction site. According to the FTA, large bulldozers and loaded trucks would generate 0.089 in/sec PPV and 0.076 in/sec PPV, respectively, at a reference distance of 25 feet. Table 4.9-2, above, shows the damage threshold for Class I through IV structures ranging from reinforced concrete, steel, or timber (Class I) to buildings extremely susceptible to vibration (Class IV).²² **Table 4.9-10, Distance within Vibration Damage Criteria**, shows the minimum distance that large bulldozers and loaded trucks could operate at for Class I through IV structures without causing significant damage. Construction activities such as the use of a large bulldozer, would be required to not operate within the distances for each structure type shown in Table 4.9-10 to avoid exceeding the vibration structural damage criteria.

**TABLE 4.9-10
DISTANCE WITHIN VIBRATION DAMAGE CRITERIA**

Construction Equipment Type	Class I: Reinforced concrete, steel, or timber	Class II: Engineered concrete and masonry	Class III: Non- engineered timber and masonry buildings	Class IV: Buildings extremely susceptible to Vibration
	0.5 PPV (in/sec)	0.3 PPV (in/sec)	0.2 PPV (in/sec)	0.12 PPV (in/sec)
Large Bulldozer	8 feet	12 feet	15 feet	21 feet
Loaded Trucks	7 feet	10 feet	14 feet	19 feet

NOTES: PPV = peak particle volume; in/sec = inches per second.

SOURCE: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018

Depending on the proximity of the future developments to vibration-sensitive buildings or structures, construction activities could generate excessive ground vibration and potentially exceed damage criteria for surrounding existing structures. Construction-generated groundborne vibration may exceed the criteria for structural damage at structures near future projects, which would result in a significant impact. The intensity of construction activities and locations of the future projects would dictate whether the level of groundborne vibration and groundborne noise during construction would be above or below the significance thresholds.

For future development requiring discretionary approval, a project-specific groundborne vibration and groundborne noise analysis would be prepared to determine significance in accordance with CEQA. Through each environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require the implementation of mitigation measure(s). It is possible that some future projects facilitated by the Project would be large in construction intensity or located near vibration-sensitive

²² Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

buildings or structures, such that multiple pieces of equipment or other sources of groundborne vibration and/or groundborne noise would cause levels to exceed the specified limits in the FTA Transit Noise and Vibration Impact Assessment Manual. Therefore, construction activities for future projects facilitated by the Project could result in significant construction groundborne vibration and groundborne noise levels in excess of standards and result in a significant impact and mitigation measure(s) would be required. However, even with the implementation of Mitigation Measure NOI-2, impacts would remain significant and unavoidable.

Human Annoyance

The use of large bulldozers and loaded trucks for construction would generate the highest groundborne vibration levels on a typical construction site. **Table 4.9-11, Summary of Construction Equipment and Activity Vibration**, lists the projected vibration level from various construction equipment expected to be used during the construction of development projects that would be allowed under the proposed Project. As shown in Table 4.9-11, large bulldozers and loaded trucks would generate 87 VdB and 86 VdB, respectively, at a reference distance of 25 feet. These levels would exceed the FTA's 78 VdB threshold at the nearest noise-sensitive receiver locations during daytime hours or the FTA's 84 VdB threshold for annoyance of occupants in residential buildings.

**TABLE 4.9-11
SUMMARY OF CONSTRUCTION EQUIPMENT AND ACTIVITY VIBRATION**

Equipment/Activity	Vibration Level (VdB)			
	At 25 Feet	Distance Attenuation	Intervening Canal ¹	Maximum Vibration Level
Buildings adjacent to the construction site (50 feet)				
Large dozers, front end loaders, grader, backhoe ²	87	9	0	78
Loaded trucks	86	9	0	77
Jackhammers, forklift	79	9	0	71

NOTES: The FTA-recommended building damage threshold is 0.2 inch/sec or approximately 94 VdB at the receiving property structure or building.

1. No intervening structure that would provide a damping effect on vibration.

2. Large bulldozer represents the construction equipment with the highest vibration potential that would be used on site. Other equipment would result in a lower vibration when compared to that of large bulldozers.

SOURCE: Prepared by Environmental Science Associates based on Appendix E and Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

Depending on the proximity of the future developments to vibration-sensitive receptors, construction activities could generate excessive ground vibration and potentially exceed the human annoyance criteria for surrounding receptors. The construction intensity and locations of the future projects would dictate whether the level of groundborne vibration and groundborne noise during construction would be above or below the significance thresholds. For future development facilitated by the Project requiring discretionary approval, a project-specific groundborne vibration and groundborne noise analysis would be prepared to determine significance in accordance with CEQA. Through each environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require the implementation of mitigation measure(s). It is possible that some future projects facilitated by the Project would be large in construction intensity or located near vibration-sensitive receptors, such that multiple pieces of equipment or other

sources of groundborne vibration and/or groundborne noise would cause levels to exceed the specified limits in the FTA Transit Noise and Vibration Impact Assessment Manual. Therefore, construction activities for future projects facilitated by the Project could result in significant construction groundborne vibration and groundborne noise levels in excess of standards and result in a significant impact and mitigation measure(s) would be required. However, even with implementation of Mitigation Measure NOI-2, impacts would remain significant and unavoidable.

Traffic

Vehicular traffic would generate groundborne vibration and under the proposed Project, more land development would leave to more traffic volume. However, the vibration from vehicles is temporary and intermittent and generates up to 61 Vdb or 0.005 in/sec PPV.²³ The vibration levels from traffic would be well below the thresholds for structural damage. Therefore, the impact to sensitive receptors and buildings from vibration generated by traffic would be less than significant.

Railway

The operation of passenger trains along the I-210 currently generates vibration. The proposed Project would not change the levels of vibration along this line. All future development in the vicinity of the Alameda corridor would be subject to the noise screening distances found in the Federal Railroad Administration (FRA) High-Speed Ground Transportation Noise and Vibration Manual.²⁴ The screening distance for railroad corridor rail mainline is 300 feet for mechanical/structural sources and 700 feet for aerodynamic sources with steel-wheeled trains and 200 feet for mechanical/structural sources and 300 feet for aerodynamic sources with intervening buildings. At these distances, vibration levels would attenuate rapidly and any new developments would not be affected. Therefore, the impact to sensitive receptors and buildings from vibration generated by rail traffic would be less than significant.

General Plan Policies that Address the Impact

Guiding Policies PS-G-1, and Implementing Policy PS-P-1, as discussed under Impact NOI-1.

Mitigation Measures

MM NOI-2: Construction Vibration. Applicants for new development projects facilitated by the Project that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that are located within 300 feet of groundborne vibration receptors and that utilize vibration-intensive construction equipment (e.g., pile drivers, jack hammers, large dozer, or vibratory rollers) shall submit a vibration impact evaluation to the City Planning Division for review and approval prior to issuance of a grading or building permit. The evaluation shall include a list of project construction equipment and the associated vibration levels and a predictive analysis of potential project vibration impacts. If construction-related vibration is determined to exceed applicable standards, project-specific measures shall be required to ensure project compliance with vibration standards. All project-specific measures approved by the City Planning Division shall be incorporated into appropriate construction-related plans (e.g., demolition plans, grading plans and building plans) and implemented during project construction.

²³ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

²⁴ Federal Railroad Administration (FRA). 2012. *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. Washington, DC: Office of Railroad Policy and Development.

Examples of equipment vibration source-to-receptor distances at which impact evaluation should occur vary with equipment type (based on FTA reference vibration information) and are as follows:

- Jackhammer: 23 feet.
- Dozer, hoe-ram, drill rig, front-end loader, tractor, or backhoe: 43 feet.
- Roller (for site ground compaction or paving): 75 feet.
- Impact pile-driving: 280 feet.

Significance After Mitigation: Implementation of MM NOI-2 would reduce the severity of the impacts to excessive groundborne vibration or groundborne noise. However, even with implementation of MM NOI-2, impacts during construction could exceed the significance thresholds and construction vibration impacts related to structural damage and human annoyance would be significant and unavoidable. The proposed setbacks for certain equipment may not be feasible to achieve within the buildout area and would potentially still result in excessive groundborne vibration noise. Groundborne vibration and groundborne noise impacts during operation would be less than significant and no mitigation is required.

Airport Noise

Threshold NOI-3: The Project would have a significant impact if future development allowed by the Project would expose people residing or working in the project area to excessive noise levels, for projects located within the vicinity of a private airstrip or airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.

Impact NOI-3: The Project would not expose people residing or working in the project area to excessive noise levels generated by aircraft. Therefore, impacts would be less than significant.

The nearest airstrip/airport is the El Monte Airport/San Gabriel Valley Airport, which is located approximately 1.75 miles to the southwest of the City. The Long Beach International and Los Angeles International airports are located approximately 19 miles and 25 miles to the southwest of the City, respectively. The City is affected by the overflight of airplanes from these airports, but is not within the 60 dBA CNEL of any of these airports. Therefore, implementation of the proposed Project would not expose people residing or working in the project area to excessive noise levels, and thus this impact would be less than significant.

General Plan Policies that Address the Impact

Guiding Policies PS-G-1, CD-G-3 and Implementing Policies PS-P-1 and CD-P-2 as discussed under Impact NOI-1.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts with regard to airport noise.

4.9.6 Cumulative Impact Analysis

The geographic context for the analysis of cumulative noise and vibration impacts depends on the impact being analyzed. For construction impacts, only the immediate area around an individual development site would be included in the cumulative context. For operational/roadway related impacts, the context is existing and future development in the City, in conjunction with ambient growth and other development within the vicinity of the City.

Noise

Construction

An increase in noise at sensitive uses would occur as a result of the construction of specific development projects that would occur under the Project along with other construction in the vicinity. Where projects in the vicinity adjoin the construction of specific development projects allowed under the Project, the combined construction noise levels would have a cumulative effect on nearby sensitive uses. Noise is not strictly additive, and a doubling of noise sources would not cause a doubling of noise levels, but would result in a 3 dBA increase over a single source. However, cumulative construction noise levels could be in excess of the noise standards established in the noise ordinance, thus resulting in a cumulative construction noise impact.

Determining the exact location and potential noise levels of future construction activities would be considered speculative at this time. Further, construction noise levels would be considered a temporary nuisance, as the increase in noise levels would only occur during the use of construction equipment associated with each development project. As discussed earlier, construction at each site within the City would be required to comply with the IMC Noise Ordinance. Noise is a localized phenomenon, and because the City is predominately developed with urban uses, it is possible that multiple construction projects could occur simultaneously and in close enough proximity to each other to create a significant combined noise impact. Therefore, the contribution of the Project to any potential cumulative construction noise impact would be cumulatively considerable.

Traffic

Permanent increases in noise would occur primarily as a result of increased traffic on local roadways due to development under the Project and ambient growth through 2029 throughout the region. Related development in adjacent jurisdictions may contribute traffic to the city roadway network. Cumulative traffic-generated noise impacts have been assessed based on the contribution of the Project to the future cumulative base traffic volumes in the project vicinity. **Table 4.9-12, Cumulative Traffic Noise Impacts**, compares the 2029 General Plan buildout year traffic noise levels which encapsulates both the project related traffic noise increase as well as ambient growth in the surrounding areas to the current existing noise levels within the region. . As shown, existing sensitive receptors located near roadway segments would experience cumulative noise level increases less than 3.0 dBA CNEL for all roadway segments. The segments analyzed would be located in an area already classified as Normally Unacceptable or Clearly Unacceptable (refer to Table 4.9-4, above) under existing conditions. Therefore, the increase in traffic noise from implementation of the Project in conjunction with ambient growth and other development within the vicinity would result in a significant cumulative impact. However, as shown in Table 4.9-12, below, project-only increases in future traffic noise levels would only reach up to 0.5 dBA CNEL along Ramona Blvd

between I-605 Fwy & Foster Ave. Thus, the project would contribute less than a 1 dB increase over existing conditions. A 1 dB change is considered barely perceptible to the human ear. Additionally, General Plan policies would help to reduce noise associated with traffic from the Project along with other development projects. Therefore, the contribution of the Project to this cumulative traffic noise impact would not be cumulatively considerable.

**TABLE 4.9-12
CUMULATIVE TRAFFIC NOISE IMPACTS**

Roadway Segment	Existing Noise Levels	Future Plus Project Noise Levels	Increase
	dBA CNEL at 50 Feet from Centerline		
Arrow Hwy between Irwindale Ave & Vincent Ave	75.0	75.2	0.2
Huntington Dr/E Foothill Blvd between Las Lomas Rd & Irwindale Ave	73.5	73.8	0.3
Irwindale Ave between Arrow Hwy & Tapia St	71.8	72.0	0.2
Irwindale Ave between E Foothill Blvd & I-210 Fwy	74.4	74.6	0.2
Ramona Blvd between I-605 Fwy & Foster Ave	70.8	71.3	0.5

NOTES: Analysis is based on existing peak hour traffic volumes at the study intersections provided in the Transportation Assessment Report provided in Appendix F of this PEIR.

1. CNEL values are calculated at 50 feet from the roadway centerline.
2. All distances are measured from the centerline.

SOURCE: ESA.

Vibration

Construction

Vibration generated by the construction of projects in the vicinity, while remote, could combine with the vibration generated by specific development projects allowed under the Project and exceed vibration thresholds at sensitive receptors, thus resulting in a potential cumulative construction vibration impact.

Determining the exact location and potential vibration levels of future construction activities would be considered speculative at this time. Further, construction vibration levels would be considered a temporary nuisance, as the increase in noise levels would only occur during the use of construction equipment associated with each specific development project. As discussed earlier, construction of future development projects requiring discretionary approval within the City would be required to undergo site specific environmental review as required by CEQA. Vibration is a localized phenomenon. Since the City is predominately an urban landscape and primarily built out, future development would be periodic infill development in various areas of the City. It is possible that multiple construction projects would occur simultaneously and in close enough proximity to each other to create a significant combined vibration impact. Therefore, the contribution of the Project to potential cumulative construction vibration impact would be cumulatively considerable.

Traffic

Permanent increases in vibration would occur primarily as a result of increased traffic on local roadways due to development under the proposed Project and ambient growth through 2027 throughout the region. Vibration from these sources, while remote, could combine and exceed vibration thresholds at sensitive receptors, thus resulting in a potential cumulative operational (traffic) vibration impact.

As discussed above, vibration from vehicles is temporary and intermittent and generates up to 61 Vdb or 0.005 in/sec PPV.²⁵ As a result, vibration levels from traffic generated by growth anticipated by the Project would be well below the thresholds for human annoyance and structural damage. Therefore, the contribution of the Project to any potential cumulative operational (traffic) vibration impact would not be cumulatively considerable.

²⁵ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

4.10 Population and Housing

4.10.1 Introduction

This chapter provides an analysis of the potential local and regional environmental impacts related to the population, employment, and housing associated with the implementation of the Housing Element and General Plan Update (proposed Project or Project). The analysis includes a review of the potential to induce population growth and subsequently require additional housing from future development allowed under the Project, as well as the potential displacement of people or housing. The chapter provides context regarding the current population, housing, and employment, growth trends and projections in the City of Irwindale (City), and relevant federal, State, regional, and local regulations and programs. Future discretionary projects facilitated by the Project would be evaluated for project-specific impacts related to population and housing at the time they are proposed. Potential growth-inducing impacts from future development allowed under Project are further addressed in Chapter 6, *Other CEQA Considerations*, of this Draft PEIR.

4.10.2 Environmental Setting

As discussed in Chapter 2, *Project Description*, the City encompasses approximately 9.5 square miles and is located roughly 20 miles east of downtown Los Angeles within the San Gabriel Valley area in the County of Los Angeles. Regional access to the City is provided by the Foothill Freeway (I-210) which crosses the northerly portion of the City in an east/west orientation, and the San Gabriel River Freeway (I-605) that parallels the San Gabriel River. The regional location of the City is shown in Figure 2-1 in Chapter 2, *Project Description*. The City's population and development is located east of the river. Land uses found in the western portion of the City are dominated by large-scale quarry operations with limited areas of more traditional urban development. The City is located approximately 27 miles north of the Pacific Ocean.

The City is located within the easterly portion of Los Angeles County at the periphery of the greater Los Angeles Metropolitan area. The City is bounded by the San Gabriel River to the north with the foothills of the nearby San Gabriel Mountains located further north. The City is also located within the San Gabriel Valley and is bisected by the San Gabriel River into an eastern section and a western section. Nearby cities include Duarte to the north and west, Azusa to the east, Baldwin Park to the south, and Monrovia and Arcadia to the west.

Population Growth Trends

The City is the fourth smallest city by population within the six-county region represented by the Southern California Association of Governments (SCAG) and the 20th smallest city in California. As described in the 2021–2029 Housing Element (Housing Element), as of 2021, the City had a population of 1,441 residents.¹ Between 2010 and 2021, the City showed modest increases in population with population increasing by 1.3 percent. In contrast, both Los Angeles County and the SCAG region experienced higher rates of growth. Los Angeles County saw population growth of 2.3 percent, while the SCAG region had population growth of 4.4 percent, as reported in Table 4.10-1 below.

¹ City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

**TABLE 4.10-1
POPULATION GROWTH 2010 - 2021**

Population	2010	2021	% Change 2010–2021
City of Irwindale	1,422	1,441	1.3%
Los Angeles County	9,818,605	10,044,458	2.3%
6-County SCAG Region ^a	18,051,534	18,849,841	4.4%

NOTES:

a. The six-county SCAG Region includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

SOURCES:

California Department of Finance. 2021. "E-5 Population and Housing Estimates for Cities, Counties and the State – January 1, 2011–2020 with 2010 Census Benchmark" [Excel spreadsheet data]. Accessed February 2025

City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

Housing Growth Trends

As described in the Housing Element, as of 2021, Irwindale had 385 households, as shown in **Table 4.10-2**. Between 2010 and 2021, the City showed modest increases in the number of households, increasing by 2.9 percent. In contrast, both Los Angeles County and the SCAG region experienced higher rates of growth. Los Angeles County saw household growth of 4.4 percent, while the SCAG region had population growth of 5.6 percent, as reported in Table 4.10-2 below.

**TABLE 4.10-2
HOUSING GROWTH, 2010 - 2021**

Population	2010	2021	% Change 2010–2021
City of Irwindale	374	385	2.9%
Los Angeles County	3,239,280	3,382,896	4.4%
6-County SCAG Region ^a	5,843,223	6,169,326	5.6%

NOTES:

a. The six-county SCAG Region includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

SOURCES:

California Department of Finance. 2021. "E-5 Population and Housing Estimates for Cities, Counties and the State – January 1, 2011–2020 with 2010 Census Benchmark" [Excel spreadsheet data]. Accessed February 2025

City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

Additionally, the average household size in the City, at 3.61 persons per household in 2021, is greater than for Los Angeles County or the SCAG Region. Household size in the City and Los Angeles County both decreased, while remaining relatively unchanged in the SCAG region between 2010 to 2021, as reported in Table 4.10-3 below.

**TABLE 4.10-3
AVERAGE HOUSEHOLD SIZE, 2010 AND 2021**

Average Household	2010	2021
City of Irwindale	3.67	3.61
Los Angeles County	2.98	2.92
6-County SCAG Region ^a	3.03	3.03

NOTES:

a. The six-county SCAG Region includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

SOURCES:

California Department of Finance. 2021. "E-5 Population and Housing Estimates for Cities, Counties and the State – January 1, 2011–2020 with 2010 Census Benchmark" [Excel spreadsheet data]. Accessed February 2025.

City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

Employment and Unemployment Growth Trends

As described in the Housing Element, the City has approximately 659 employed civilian residents age 16 and older, as shown in **Table 4.10-4**. Approximately 18 percent of those employed residents work in manufacturing, wholesale and transportation. Other common industries include health and educational services (17.0 percent), and financial and professional services (16.1 percent). Resident employment by industry follows the Los Angeles County distribution closely, with the exceptions that there are a smaller proportion of workers in the City in the health and education services, financial & professional services, and information sectors, and a greater proportion in agriculture and construction.

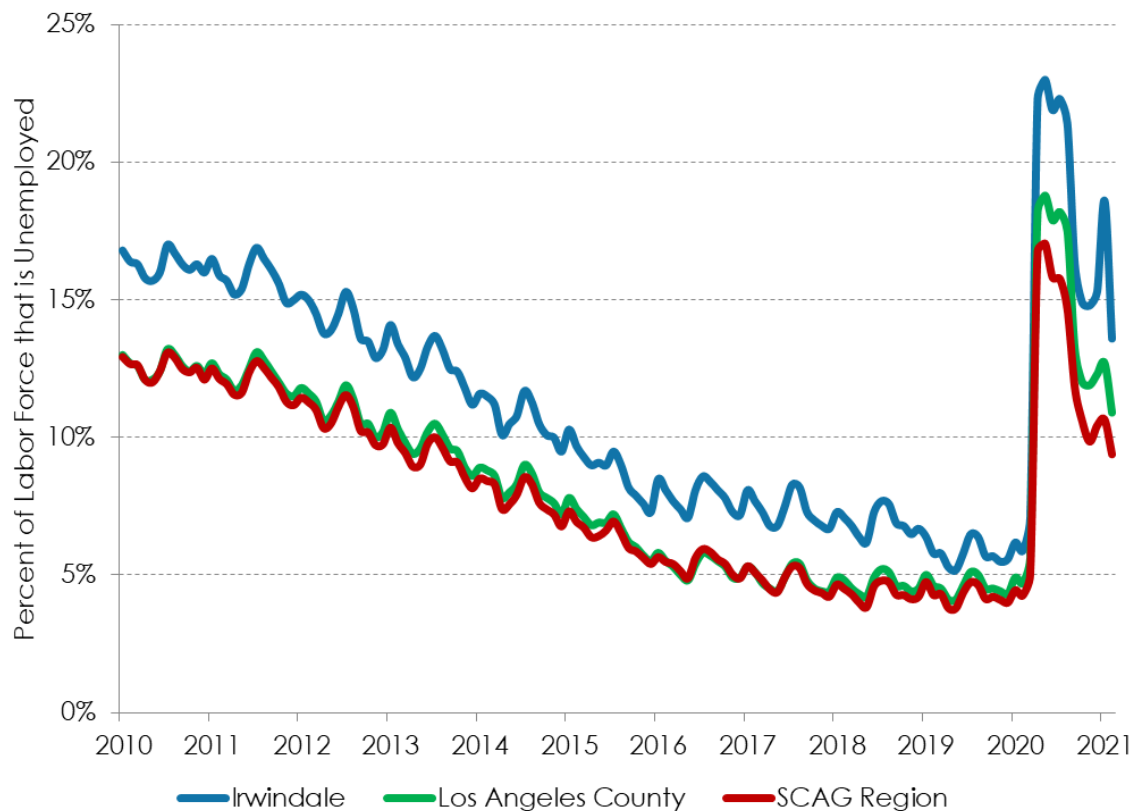
**TABLE 4.10-4
EMPLOYED RESIDENTS BY INDUSTRY, 2015 - 2019**

Industry	City of Irwindale		Los Angeles County	
	Number	Percent	Number	Percent
Agriculture and Natural Resources	10	1.5%	22,103	0.4%
Construction	76	11.5%	292,507	5.9%
Financial and Professional Services	106	16.1%	946,134	19.2%
Health and Education Services	112	17.0%	1,021,009	20.7%
Information	12	1.8%	219,495	4.5%
Manufacturing, Wholesale, and Transportation	120	18.2%	921,653	18.7%
Retail	59	9.0%	501,902	10.2%
Arts, Entertainment, Recreation, Accommodations, and Food Services	83	12.6%	555,779	11.3%
Other	81	12.3%	449,281	9.1%
Total	659	100.0%	4,929,863	100.0%

NOTE: This table reflects the civilian employees population age 16 and older only.

SOURCES: City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

Additionally, the unemployment rate for workers living in Irwindale is consistently higher than the rate for Los Angeles County and the SCAG Region, while following the same trends overall, as shown in **Figure 4.10-1, Unemployment Rate Trends, 2010-2021**. In January 2010, the unemployment rate for the City was 16.8 percent, even as the County and the Region saw much lower rates of 13 percent and 12.9 percent, respectively, reflecting the effects of the Great Recession. Up until 2016, rates for all three geographies generally declined, and then converged at around five to six percent until the pandemic generated a massive spike in May 2020 to 22.3 percent for the City, 18.2 percent for Los Angeles County, and 16.8 percent for the SCAG Region. Since then, rates have begun to fall rapidly, but as of June 2021 are still well above the five percent level, especially for the City.



SOURCE: City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

Figure 4.10-1
Unemployment Rate Trends, 2010-2021

4.10.3 Regulatory Framework

This section provides the relevant State, regional, and local regulations applicable to the Project. There are no federal regulations which apply to the Project.

State

California Government Code

Housing Element Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code Section 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need.

The California Legislature developed the RHNA process (Government Code Section 65580 et seq.) in 1977 to address the affordable housing shortage in California. The California Department of Housing and Community Development Department (HCD) in consultation with each council of governments determines each region's existing and projected housing need (Government Code Section 65584(b)). HCD must meet and consult with each council of governments regarding the assumptions and methodology to be used by HCD to determine the region's housing need (Government Code Section 65584.01(b)). (SCAG's governing board serves as the Regional Council for the region in which the City is located.) HCD's determination is based on population projections produced by the California Department of Finance (DOF) and regional population projections forecasts used in preparing regional transportation plans (Government Code Section 65584.01(a)). These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. HCD provides the RHNA to SCAG, and in turn SCAG's Regional Board assigns a share of the regional housing need to each of its cities and counties.

The State of California housing element laws (Section 65580–65589 of the California Government Code) require that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community commensurate with local housing needs. California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.
- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low and moderate income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing.
- Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower income households the publicly assisted multifamily housing developments in each community.

Housing Element Law (Article 10.6)

The “No Net Loss” provisions in Section 65583.2 of the Housing Element Law were established to make sure that housing elements identify sufficient sites to accommodate the jurisdiction's RHNA or include programs to ensure that sites will be available throughout the planning period. Under the “No Net Loss”

requirements, a jurisdiction may not reduce residential density or allow development at a lower residential density unless the jurisdiction makes findings supported by substantial evidence that the reduction is consistent with the general plan and there are remaining sites identified in the housing element adequate to meet the jurisdiction's outstanding RHNA.

California Department of Housing and Community Development

HCD enforces standards for housing construction, maintenance of farmworker housing, and manufactured/factory-built homes. HCD also proposes amendments to California's residential building standards for new construction to the California Building Standards Commission and helps train local government to better understand new requirements. HCD works with regional governments to determine their housing needs and reviews every city and county's housing element of the general plan to determine compliance with State law. HCD works with regional governments to determine their housing needs and reviews every city and county's housing element of the general plan to determine compliance with State law.

California Housing Accountability Act

The California Housing Accountability Act (Government Code Section 65589.5) enacted in 2017 ensures that local governments may not reject housing development projects (including emergency shelters) that contribute to meeting or exceeding its share of the regional housing need or otherwise make housing projects infeasible.

Housing Density Bonus Law

California Government Code sections 65915–65918 provide for an increase in the amount of housing allowed under a given land use designation or zoning ordinance (i.e., a “density bonus”) and other incentives or concessions such as waivers or reductions of development standards in exchange for building affordable housing or donating land for the building of affordable housing, including senior housing.

Assembly Bill 686 (Affirmatively Furthering Fair Housing)

Assembly Bill (AB) 686 [Government Code Sections 8899.50, 65583(c)(5), 65583(c)(10), and 65583.2(a)] requires public agencies (as defined by the statute) to administer its housing and community development programs and activities in a manner that affirmatively furthers fair housing. In particular, housing elements are required to contain an assessment of fair housing within the jurisdiction and a program that sets forth a schedule of actions to be undertaken by the local jurisdiction during the planning period to implement these policies and achieve housing element goals and objectives. The bill requires an inventory of land suitable and available for development, and an inventory of identified sites that can be developed for housing within the planning period sufficient to provide for the jurisdiction's share of the regional housing need for all income levels.

Senate Bill 9 (Housing Development; Approvals)

Senate Bill (SB) 9 (Government Code Sections 66452.6, 65852.21, and 66411.7) provides for ministerial approval of a housing development of no more than two units in a single-family zone (duplex) or the subdivision of a parcel zoned for residential use into two parcels (lot split), or both. This law allows for development of up to four housing units where only one would have been permitted without further discretionary review.

Regional

Southern California Association of Governments

The Planning Area is located within the jurisdiction of SCAG, a Joint Powers Agency established under California Government Code Section 6502 et seq. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO). Under state law, SCAG serves as a designated Regional Transportation Planning Agency and the Council of Governments for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible for preparing the Regional Comprehensive Plan (RCP), Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and RHNA, in coordination with other State and local agencies. These documents include population, employment, and housing projections for the region and its 15 subregions. Subregions play an important role as a conduit between SCAG and cities and counties of the region by participating and providing input on SCAG's planning activities, which helps the Regional Council and its committees make better-informed decisions. The Planning Area is located within the San Gabriel Valley Council of Governments (SGVCOG) Subregion.

SCAG is tasked with providing demographic projections for use by local agencies and public service and utility agencies in determining future service demands. Projections in the SCAG 2020 RTP/SCS serve as the basis for demographic estimates in this analysis of Project consistency with growth projections. The findings regarding growth in the region are consistent with the methodologies prescribed by SCAG and reflect SCAG goals and procedures.

SCAG data is periodically updated to reflect changes in development activity and provisions of local jurisdictions (e.g., zoning changes). Through these updates, public agencies have advance information regarding changes in growth that must be addressed in planning for their provision of services. Changes in the growth rates are reflected in the new projections for service and utilities planning through the long-term time horizon.

SCAG Connect SoCal 2024

The 2024-2050 RTP/SCS, known as Connect SoCal 2024, was developed through a four-year planning process that involved rigorous technical analysis, extensive stakeholder engagement and robust policy discussions with local elected leaders, who make up SCAG's policy committees and Regional Council. The Connect SoCal 2024 plan charts a path toward a more mobile, sustainable and prosperous region by making key connections between transportation networks, planning strategies and the people whose collaboration can make plans a reality. The Connect SoCal 2024 plan was approved and adopted by SCAG's Regional Council in April 2024.²

The Connect SoCal 2024 plan embodies a collective vision for the region's future, through the horizon year of 2050. It is developed with input from a wide range of constituents and stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura, including public agencies, community organizations, elected officials, tribal governments, the business community and the general public. The Connect SoCal 2024 plan is an important planning document for the region, allowing public

² Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

agencies who implement transportation projects to do so in a coordinated manner, while qualifying for federal and State funding. The plan includes robust financial analysis that considers operations and maintenance costs to ensure the existing transportation system's reliability, longevity, resilience and cost effectiveness. In addition, the Connect SoCal 2024 plan is supported by a combination of transportation and land use strategies that outline how the region can achieve California's greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

In addition, Connect SoCal 2024 establishes policies pertaining to regional growth and efficient development patterns to reduce development impacts on traffic congestion and related increases in air quality emissions.

SCAG Regional Housing Needs Assessment

The RHNA is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods, or cycles. In prior cycles, factors such as household growth and household income distribution were the primary factors considered in determining a jurisdiction's RHNA allocation. SCAG's 6th Cycle RHNA quantified the regional need for housing and allocated the regional need to each jurisdiction for a planning period between October 2021 and October 2029. The 6th Cycle RHNA is focused on existing need (current housing shortages and overcrowding) plus projected growth, which takes into account factors beyond what was used in the past. Therefore, the 6th Cycle RHNA allocation for the City results in a higher allocation of housing than what was represented in the 2020 RTP/SCS, which is focused solely on projected or future growth. For the 6th Cycle RHNA, SCAG considered other factors in addition to household growth, including transit accessibility, job accessibility, and indicators that influence a community's environmental, educational, and economic resource accessibility.³

On October 15, 2019, SCAG received the Final Regional Determination from HCD. On November 7, 2019, SCAG Regional Council approved a Draft RHNA Allocation Methodology⁴ for HCD's review. The Regional Council approved the Final RHNA Methodology on March 5, 2020, and released the Draft RHNA Allocation by jurisdictions. The RHNA underwent Appeals Board Hearings throughout January 2021. In February 2021, the RHNA Appeals Board concluded its determination of appeals and issued the proposed final RHNA Allocation Plan and recommended the Plan for approval by SCAG's Community, Economic & Human Development (CEHD) Committee and Regional Council. The final 6th Cycle RHNA methodology and allocations were adopted by the Regional Council on March 4, 2021, and approved by HCD on March 22, 2021. As part of the RHNA draft allocations, the City's allocation of housing between October 2021 and October 2029 is 119 units.^{5, 6}

³ Southern California Association of Governments (SCAG). 2024. "Regional Housing Needs Assessment" [webpage]. <https://scag.ca.gov/rhna>. Accessed January 2024.

⁴ Southern California Association of Governments (SCAG). 2020. Final RHNA Allocation Methodology. Updated March 5, 2020.

⁵ Southern California Association of Governments (SCAG). 2021. 6th Cycle RHNA Appeals Timeline. Posted online February 9, 2021.

⁶ Southern California Association of Governments (SCAG). 2021. SCAG 6th Cycle Final Appeals RHNA Allocation Plan. Approved by HCD on March 22, 2021. Modified July 1, 2021.

Consistent with the State housing law, the primary objectives of the 6th Cycle RHNA allocation plan are to:

- Increase the housing supply and mix of housing types, tenure and affordability within each region in an equitable manner.
- Promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns.
- Promote an improved interregional relationship between jobs and housing.
- Allocate a lower proportion of housing need in income categories in jurisdictions that have a disproportionately high share in comparison to the county distribution.
- Affirmatively further fair housing.

Local jurisdictions are required to plan and zone to accommodate their respective RHNA allocation (housing units) by income categories through the process of updating the Housing Elements of their General Plans. Communities use the RHNA in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment and housing unit growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life; improve access to jobs; promote transportation mobility' and address social equity and fair share housing needs.

Local

Irwindale Zoning Code

Title 17, Zoning Code, of the Irwindale Municipal Code (IMC) contains development standards that regulate the type, location, density, and scale of residential development. The Zoning Code serves to implement the General Plan and the development standards are designed to protect and promote the public health, safety, comfort, convenience, and general welfare of residents. The Zoning Code also helps to preserve the character and integrity of existing neighborhoods.

4.10.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to population and housing if the project would:

- Threshold POP-1:** 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).
- Threshold POP-2:** Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Methodology

The Housing Element is a policy document that would guide the development of residential units within the City throughout the 6th Cycle RHNA. The Housing Element has identified five Housing Sites in the City that can accommodate residential development or redevelopment, as shown in Figure 2-6 in Chapter 2, *Project Description*. The five Housing Sites are parcels where future residential development guided by the Project would be considered infill development. Since the City would not be able to fully accommodate its 6th Cycle RHNA with the identified five Housing Sites' existing zoning, the Housing Element also includes a program to redesignate and rezone the five Housing Sites for residential development via new residential development overlay zones.

The draft Housing Element includes the RHNA allocation through year 2029; however, the Project does not speculate when the development would occur, as long-range population and housing trends are difficult to predict. The designation proposed for the five Housing Sites does not necessarily mean that the site would be developed or redeveloped with that use during the timeframe, as most development depends on property owner initiative.

Additionally, as identified in the Initial Study, implementation of the Safety and Environmental Justice (EJ) Elements would have no impacts related to population and housing, thus no further analysis of the Safety and EJ Elements related to this topic are discussed below.

Project Impact Analysis

Induce Unplanned Population Growth

Threshold POP-1: The Project would have a significant impact if the Project would 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).

Impact Statement POP-1: The Project would accommodate regional growth in an orderly manner for the next 8 years and would result in a less than significant impact related to inducing unplanned population growth.

Induced population growth may result in impacts if a project induces growth in an area not otherwise planned for growth or in an area that cannot adequately accommodate such growth. Growth may be induced directly by proposals for new residential uses or indirectly by proposals for new roadways, other infrastructure, or employment opportunities.

Implementation of the Project would facilitate the construction of up to 279 units, which could accommodate approximately 1,008 residents based on the average household size of 3.61 persons per household.⁷ An increase of approximately 1,008 residents would account for a 70 percent population increase. However, it should be noted that some of the future residential units allowed under the Housing Element could serve existing residents in addition to potentially new residents, making the 1,008 additional residents a conservative projection.

⁷ Based on the household average size in the City of Irwindale. *2021–2029 Housing Element*. Revised Draft. September 12, 2024, page 30.

Implementation of the Project would generally facilitate residential development in areas that are either currently vacant or are developed with non-residential uses. This development is consistent with the goals and policies of the Housing Element intended to balance increased intensity of use and housing throughout the City. Future residential development facilitated by the Project would be planned in accordance with the Housing Element, and therefore would not result in substantial unplanned population growth.

Related utilities improvements would be required in some areas to support new development (e.g., the five Housing Sites), and could be considered a potential inducement to growth in adjacent areas. However, considering that the five Housing Sites identified in the Housing Element are either currently vacant or are developed with non-residential uses in urban areas, the Project would not indirectly induce substantial population growth through the extension of infrastructure to new areas. In addition, any roadway improvement activities deemed necessary by future development encouraged by the Housing Element would focus on the needs of new housing development facilitated by the Project (such as improving access and/or evacuation routes) and would not open a new area to development through the provision of extended roadways.

Further, the Housing Element Update is intended to accommodate the City's RHNA for the planning period. As such, the Project would ensure that the City plans for the provision of housing necessary for the projected population growth. Therefore, the impact on population growth would be less than significant.

Applicable Proposed Housing Element Policies

Draft Housing Element

Policy 1: Maintain Existing Housing Quality and Affordability. The City will work to maintain the quality of the existing housing stock to provide residents with safe, sound, and affordable housing.

Policy 2: Remove Governmental Constraints. The City will work to remove government constraints to the production and maintenance of housing in Irwindale.

Policy 3: Provide Adequate Housing Sites. The City will ensure that it maintains a supply of land, appropriately zoned, that is sufficient to accommodate the City's Regional Housing Need Allocation (RHNA) for the 6th Cycle.

Policy 4: Provide New Affordable Housing. The City will utilize existing resources, develop new resources, and leverage the resources of other agencies to provide new housing in Irwindale that addresses needs of households across the socio-economic spectrum.

Policy 5: Affirmatively Further Fair Housing and Address Special Housing Needs. The City will dedicate specific resources and take active steps to ensure housing opportunities for the community's most vulnerable populations, including traditionally under-represented minority populations and other population with special housing needs.

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to inducing unplanned population growth.

Require Construction of Replacement Housing

Threshold POP-2: The Project would have a significant impact if the Project would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact Statement POP-2: The Project would not displace people or require construction of new housing as a result of displacing substantial numbers of existing people or housing and no impacts would occur.

The Project would provide infill development opportunities in vacant and underutilized areas in the City. As described in the Draft Housing Element, the City is predominantly owner-occupied single-family detached homes, with 90 percent of the City's occupied housing units being detached single-family homes, and 80 percent of that unit type is occupied by owners. Even amongst renters, nearly two-thirds live in detached single-family homes. Most of the remainder of renters live in multi-family housing (29 percent). Thus, it is not anticipated that the City would undergo significant land use changes as a result of the Project, other than the residential overlays for the five Housing Sites. Proposed land use designations, as described and discussed in Chapter 2, *Project Description*, of this Draft PEIR, would introduce greater flexibility of uses, such as townhouses, single-family, and apartments and condominiums. As such, the Project is projected to increase the overall number of dwelling units and provide additional housing opportunities to serve the diverse needs of the community at various socioeconomic levels. No existing housing would be displaced as a result of implementing the Project. In addition, none of the five Housing Sites would result in the redevelopment of an existing residential use.

California Government Code Article 10.6 of the outlines the State's Housing Element requirements. Consistent with Article 10.6, the Draft Housing Element analyzes existing and projected housing needs, examines special housing needs within the population, evaluates the effectiveness of current goals and policies, identifies governmental and other constraints, determines compliance with other housing laws, and identifies opportunities to incorporate energy conservation into the housing stock. As required, the element also establishes goals, policies, and programs to maintain, enhance, and develop housing.

For these reasons, growth anticipated under the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Impacts would not occur.

Applicable Proposed Housing Element Policies

Draft Housing Element

Policy 1: Maintain Existing Housing Quality and Affordability. The City will work to maintain the quality of the existing housing stock to provide residents with safe, sound, and affordable housing.

Policy 2: Remove Governmental Constrains. The City will work to remove government constraints to the production and maintenance of housing in Irwindale.

Policy 3: Provide Adequate Housing Sites. The City will ensure that it maintains a supply of land, appropriately zoned, that is sufficient to accommodate the City's Regional Housing Need Allocation (RHNA) for the 6th Cycle.

Policy 4: Provide New Affordable Housing. The City will utilize existing resources, develop new resources, and leverage the resources of other agencies to provide new housing in Irwindale that addresses needs of households across the socio-economic spectrum.

Policy 5: Affirmatively Further Fair Housing and Address Special Housing Needs. The City will dedicate specific resources and take active steps to ensure housing opportunities for the community's most vulnerable populations, including traditionally under-represented minority populations and other populations with special housing needs.

Policy 6: Promote Sustainability, Energy Efficiency, and a Healthy Community. The City will work to promote sustainability and energy efficiency in new housing development through community design and building design and will provide residential program support for a healthy community.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to requiring construction of new housing.

4.10.5 Cumulative Impacts Analysis

The Project would result in less than significant cumulative impacts related to population and housing. The geographic context for the cumulative impacts associated with population and housing is the San Gabriel Valley region of Los Angeles County, which is comprised of the cities of Alhambra, Arcadia, Azusa, Covina, Irwindale, Montebello, Rosemead, San Gabriel, San Marino, and Temple City. Future development in this portion of the county, including growth anticipated under the Project, would not induce substantial unplanned population growth in the area as future development would have to be consistent the general plans and zoning codes of local jurisdictions in the area, and therefore would not be unplanned. In addition, future development in the San Gabriel Valley region of Los Angeles County, including growth anticipated under the Project, would not result in the displacement of substantial numbers of existing people or housing as future development would be required to follow existing State law governing relocation of residents and the five Housing Sites identified in the Housing Element are currently vacant and underutilized. Other housing elements must also prepare for the population growth projected for the region and the associated need for new housing to accommodate that growth. As with Project, the growth accommodated by the housing elements of other jurisdictions would be planned growth, not unplanned growth; thus, implementation of the Project would not result in a significant cumulative impact. Therefore, the Project would not contribute to cumulative impacts related to population and housing, and cumulative impacts would be less than significant.

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4.11 Public Services

4.11.1 Introduction

This chapter assesses potential impacts related to public services, including fire and police protection, schools, parks, and other facilities from development facilitated by the Housing Element and General Plan Update (proposed Project or Project). Impacts related to water and wastewater infrastructure and solid waste collection and disposal are discussed in Chapter 4.14, *Utilities and Service Systems*.

4.11.2 Environmental Setting

Fire Protection

The Los Angeles County Fire Department (LACFD) provides fire protection and emergency medical services (EMS) for the City. The LACFD is responsible for protecting the lives and property of 4.1 million residents living in 1.2 million housing units in 59 cities and all unincorporated areas of Los Angeles County.¹ The LACFD has 22 departmental battalions and are grouped into 9 divisions, Irwindale is within Division 2.²

The General Plan Public Safety Element Profile indicates that the LACFD maintains a single fire station in the City, Station No. 48, located at 15546 E. Arrow Hwy. The LACFD Station No. 48 consists of 16 full-time fire fighters and includes one pumper, one reserve truck, and a paramedic unit.³ Secondary LACFD Stations to the City that provide fire protection and EMS services include LACFD Stations No. 44, 29, 169, 32, 105, 152 and West Covina Fire Station No. 3. **Figure 4.11-1** shows the locations of fire stations in the City and in the vicinity. Additionally, the General Plan Public Safety Element indicates that the LACFD has an average response time of six minutes.⁴

According to the Irwindale Hazard Mitigation Plan, the City is in a Severe Fire Hazard Zone (SFHZ).⁵ Additional emergency resources are available from the California Division of Forest (CDF) stations, commonly known as the California Department of Forestry and Fire Protection (CAL FIRE), which focuses on state responsibility areas (SRAs), which are typically wildlands and forests. While CAL FIRE does not directly manage fire protection services in the City, it collaborates with local agencies like LACFD during large-scale emergencies, such as wildfires that extend beyond local jurisdictions. This partnership ensures efficient resource sharing and coordinated responses when needed. The station located in the City of Baldwin Park (LACFD Station No. 29 as mentioned above) provides additional services to the City as needed. LACFD stations are equipped with a snorkel truck and a triple pump.

¹ Los Angeles County Fire Department (LACFD). 2024. "About Us" [webpage]. <https://www.irwindaleca.gov/DocumentCenter/View/50/Irwindale-Hazmit-Plan-11-20-12---Website>. Accessed February 21, 2025.

² Los Angeles County Fire Department (LACFD). 2023. "Fire Division Boundaries" [digital GIS map]. <https://egis-lacounty.hub.arcgis.com/datasets/lacounty::lacofd-division-boundaries-feature-layer/explore?location=34.125442%2C-117.920476%2C12.44>. Accessed February 21, 2025.

³ City of Irwindale. 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 126–147.

⁴ City of Irwindale. 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 126–147.

⁵ City of Irwindale. 2012. *City of Irwindale 2012 Hazard Mitigation Plan*. November 20, 2012.

In addition, a fire insurance rating assess a community's fire protection capability on a scale from 1 to 10, with 1 being the best. This rating is determined by evaluating key factors, including the quality of the local fire department, the adequacy of water supply systems, and efficiency of emergency community services, and fire prevention efforts like public safety education and building code enforcement. The overall fire insurance rating of the City is 3 with the availability of alarm systems.⁶

Police Protection

The Irwindale Police Department (IPD) provides police protection to the City. The IPD has jurisdiction over the City's 9.5 square miles of land that includes the Santa Fe Dam Recreational Area and bike paths along the riverbed.⁷ Based on the Irwindale Public Safety Element Profile, the IPD was established with five motorcycles and one police unit.⁸ The department now consists of 28 full-time police officers, 7 reserve officers, and 11 civilian employees.

The department's enforcement tools include access to a K-9 unit, when necessary, from outside agencies, stolen vehicle tracking devices, and one motor unit and a commercial enforcement unit, each equipped with radar. A mutual aid contract with the Los Angeles County Sheriff's Department provides for special weapons teams when required, and other specialized equipment and services including Homicide investigations. The IPD also includes air support services provided through a contract with the Pasadena Foothill Air Support Team as well as jail bookings accomplished through a contract for services with the cities of West Covina and Baldwin Park Jail Facilities. Additionally, there are Flock cameras installed at the major entrances to the City.

The Public Safety Element indicates that the IPD maintains a single police station in the City, located at 5050 North Irwindale Avenue.⁹ As mentioned above, the mutual aid contract with the Los Angeles County Sheriff's Department, Department also provides further police protection to the City. The nearest Los Angeles County Sheriff's Department station is located at 1042 Huntington Drive, Duarte, the West Covina Police Department station is located at 1444 South Garvey Avenue W, and the Baldwin Park Police Department station is located at 14403 Pacific Avenue. Police protection response times in most areas of the City are five minutes or less.¹⁰ **Figure 4.11-1** shows the locations of police stations in the City and in the vicinity.

Schools

Covina-Valley Unified School District (CVUSD) serves the City, as well as Covina, West Covina, Glendora, and San Dimas. The CVUSD provides 18 campuses and offers leadership, curricular, and

⁶ City of Irwindale, 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 127.

⁷ City of Irwindale, 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 126–147.

⁸ City of Irwindale, 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 126–147.

⁹ City of Irwindale, 2008. Section 6: Public Safety Element. In *City of Irwindale 2020 General Plan*, pp. 127.

¹⁰ City of Irwindale, 2008. Section 6: Public Safety Element. In *City of Irwindale 2020 General Plan*, pp. 127

athletics/sports opportunities.^{11, 12} The CVUSD has a total of 11,143 students enrolled and a student/teacher ratio of 22.95.¹³

As described in the General Plan Community Development Element, the City maintains a single public school, Merwin Elementary, located on the City's southern boundary on 16125 E. Cypress Avenue, Covina.^{14, 15} Merwin Elementary provides grades KG-5, with 445 total students, and a student/teacher ratio of 23.42.¹⁶ **Figure 4.11-2** shows the location of schools in the City.

Parks/Open Space

Open space represents the largest land use category in terms of land area in the City. The Santa Fe Dam and Recreation Area, consisting of approximately 1,920 acres, is the largest area of open space. As described in the City's General Plan, the dam serves to provide recreation and resource conservation in addition to flood control.^{17,18} Existing amenities in the Santa Fe Dam include a 70-acre lake (complete with swimming beach and lifeguard), picnic areas, playgrounds, natural trails, bicycle trails, camping areas, and the wildlife interpretative center. Other recreational activities include non-power boating (with boat launch), fishing, outdoor performing areas, and a 45-acre equestrian staging area.

In addition, the City own and maintain four parks: Irwindale Park (15.25 acres), Jardin de Roca Park (5 acres), El Nido Park (0.49 acres), and Little Park of Irwindale (0.40 acres), which totals 21.14 acres of local parkland. The recently renovated Irwindale Park, located at 16001 Calle Paseo, includes a gym, baseball field, children's playground, tennis courts, and an Olympic-size swimming pool. The Irwindale Park also includes picnic tables located throughout the grounds, as well as a picnic shelter for group gatherings complete with gas ranges and electric capability. The gym inside Irwindale Park includes a basketball court, tennis room (with big screen TV), and a weight room. The Jardin de Roca Park, located at 5051 N. Irwindale Avenue, has a skate park, picnic tables, and playground equipment. El Nido Park, located at 1662 Nora Avenue, and Little Park of Irwindale, located at Alice Rodriguez Circle, include a tot lot and picnic tables. In addition, the City is served by the Dan Diaz Recreation Center which offers an indoor

¹¹ Covina-Valley Unified School District. 2024. "About Covina-Valley Unified" [webpage]. <https://www.c-vusd.org/domain/42>. Accessed February 21, 2025.

¹² National Center for Education Statistics (NCES). 2025. "Common Core of Data Search: Covina-Valley Unified (2023-2024 school year). [online database]. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?Search=2&details=1&ID2=0610050&DistrictID=0610050. Accessed February 2025.

¹³ NCES. 2025. "Common Core of Data Search: Covina-Valley Unified (2023-2024 school year). [online database]. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?Search=2&details=1&ID2=0610050&DistrictID=0610050. Accessed February 2025.

¹⁴ Merwin Elementary School. 2024. About Our School. Available online at: <https://www.c-vusd.org/domain/222>. Accessed February 5, 2025.

¹⁵ The Merwin Elementary School website shows an address within the City of Covina. In addition, the City of Irwindale interactive zoning map shows the Merwin Elementary School with a Covina address but located at the southern boundary of the City, within City limits.

¹⁶ NCES. 2023. "Common Core of Data Search: Merwin Elementary (2023-2024 school year). [online database]. https://nces.ed.gov/ccd/schoolsearch/school_detail.asp?Search=1&InstName=Merwin+Elementary&State=06&SchoolType=1&SchoolType=2&SchoolType=3&SchoolType=4&SpecificSchlTypes=all&IncGrade=-1&LoGrade=-1&HiGrade=-1&ID=061005001100. Accessed February 5, 2025.

¹⁷ City of Irwindale. 2020. Community Development Element, page 35; Resource Management Element, page 109.

¹⁸ Los Angeles County Parks and Recreation. 2024. "Santa Fe Dam Recreational Area" [webpage]. <https://parks.lacounty.gov/santa-fe-dam-recreational-area/>. Accessed February 21, 2025.

basketball court, game room, weight and cardio room, showers and locker rooms as well as various rental spaces. Rental spaces include a banquet room, all-purpose/meeting room, kitchen, and indoor basketball court. Figure 4.11-2 shows the location of the parks in the City.

Other Public Facilities

The City has a single library, Irwindale Public Library, located at 16053 Calle de Paseo, which provides eBooks and digital resources, mobile printing, volunteer opportunities, passport services, and study rooms.¹⁹ The Irwindale Public Library is currently undergoing an expansion to provide more services and programs to the City, with a projected buildout year of 2026. The City is also served by the Los Angeles County Libraries including Baldwin Park Library (located at 4181 Baldwin Park Blvd), West Covina Library (located at 1601 W. West Covina Pkwy), Norwood Library (located at 4550 N. Peck Rd), Live Oak Library (located at 22 W. Live Oak Ave), and Duarte Library (located at 1301 Buena Vista St).²⁰ Figure 4.11-2 shows the location of libraries in the City. In addition, the Irwindale Senior Center, located at 16116 Arrow Highway, provides classes, events, and facilities for residents and the public.²¹

4.11.2 Regulatory Framework

This section provides the relevant State, regional, and local regulations applicable to the Project. There are no federal regulations which apply to the Project.

State

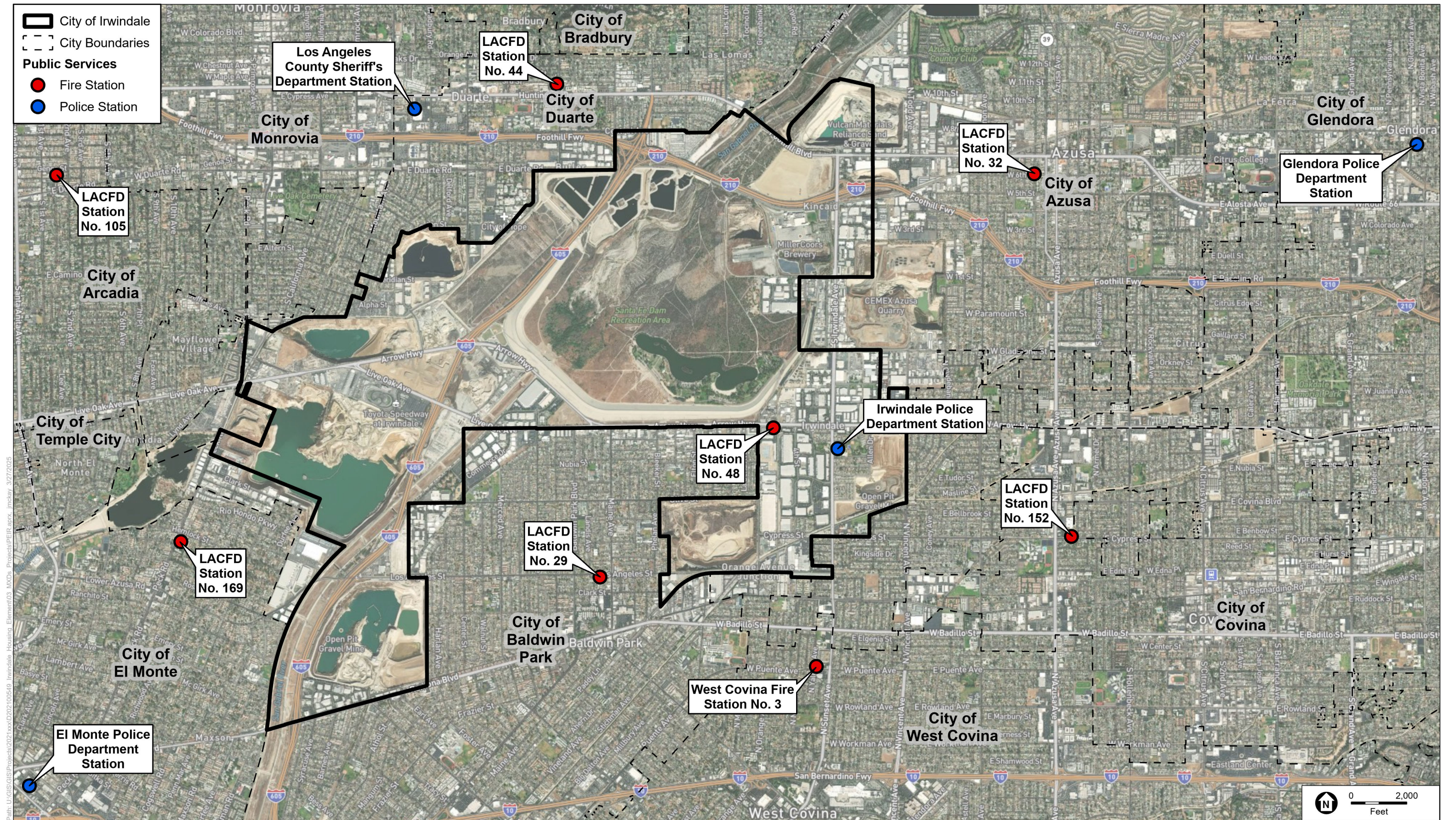
California Fire and Building Code

The State of California provides minimum standards for building design through the California Building Code (CBC), which is in Part 2 of Title 24, California Building Standards Code, of the California Code of Regulations (CCR). The CBC is based on the International Building Code but has been amended for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. In general, commercial and residential buildings are plan-checked by local building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. As discussed below, the City has adopted the Los Angeles County Building Code which has specific regulations for the region.

¹⁹ City of Irwindale. 2024. "Irwindale Public Library – Services" [webpage]. <https://www.irwindaleca.gov/199/Library-Services>. Accessed February 21, 2025.

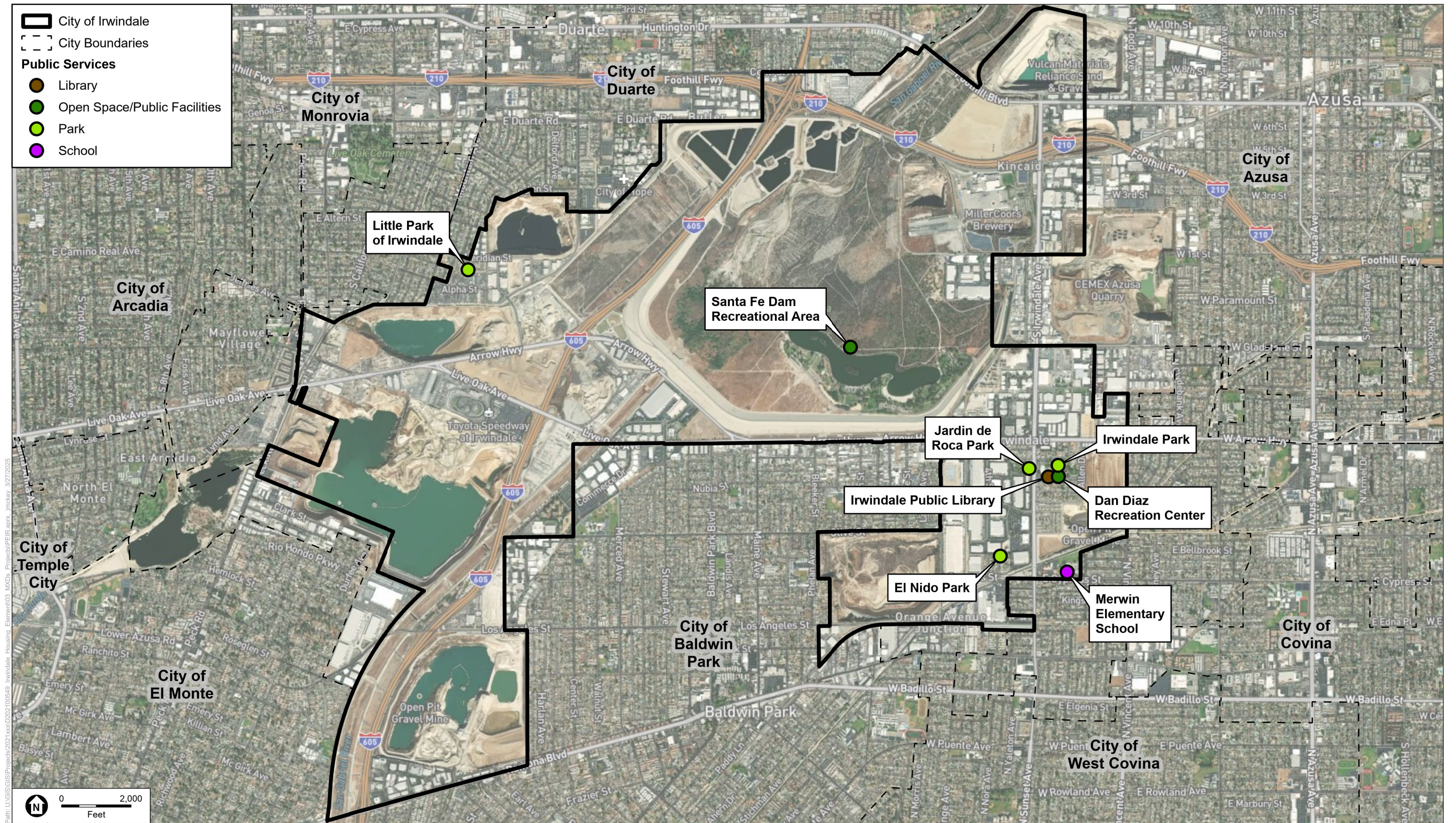
²⁰ City of Irwindale. 2024. "Facilities – Dan Diaz Recreation Center". [webpage]. <https://www.irwindaleca.gov/Facilities/Facility/Details/Dan-Diaz-Recreation-Center-1>. Accessed July 10, 2024. February 21, 2025.

²¹ City of Irwindale. 2025. "Senior Center" [webpage]. [Senior Center | Irwindale, CA - Official Website](#). Accessed March 21, 2025.



SOURCE: Los Angeles County, 2024; ESA, 2025

Figure 4.11-1
Fire and Police Stations in the City



SOURCE: Los Angeles County, 2024; ESA, 2025

Figure 4.11-2
Schools, Parks, Libraries, and
Open Space Facilities in the City

California Code of Regulations

The CCR, Title 5 Education Code, governs all aspects of education within the State. California State Assembly Bill 2926 (AB 2926) – School Facilities Act of 1986 – was enacted by the State of California in 1986 and added to the California Government Code (Section 65995). It authorizes school districts to collect development fees, based on demonstrated need, and generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees which may be collected under this, and any other school fee authorization are \$1.50 per square foot (\$1.50/ft²) for residential development and \$0.25/ft² for commercial and industrial development.

AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 et seq. of the Government Code. Under this statute, payment of statutory fees by developers serves as total mitigation under CEQA to satisfy the impact of development on school facilities. However, subsequent legislative actions have alternatively expanded and contracted the limits placed on school fees by AB 2926.

As part of the further refinement of the legislation enacted under AB 2926, the passage of Senate Bill (SB) 50 in 1998 defined the Needs Analysis process in Government Code Sections 65995.5–65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. SB 50 generally provides for a 50/50 State and local school facilities match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available; whether the school district is eligible for State funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

California Government Code Sections 65995–65998 set forth provisions to implement SB 50. Specifically, in accordance with Section 65995(h), the payment of statutory fees is “deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...on the provision of adequate school facilities.” The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.²²

CVUSD collects developers fees to offset the costs associated with providing additional school facilities for increased student enrollment generated by new housing developments within the District boundaries.²³

²² CVUSD does not currently require developers to pay school development fees.

²³ CVUSD. Annual Development Fee Report 2022-2023 fiscal year. Available online at: <https://www.cvusd.org/cms/lib/CA02218491/Centricity/Domain/49/2022-23%20Developer%20Fee%20Report.pdf>, accessed February 2025.

State Public Park Preservation Act

The State Public Park Preservation Act (California Public Resource Code Section 5400-5409) is the primary instrument for protecting and preserving parkland in California. The State Public Park Preservation Act sets forth certain requirements for the transfer of property in use as a public park for any non-park use.

Quimby Act

The Quimby Act (California Government Code Section 66477) allows cities and counties to adopt park dedication standards/ordinances requiring developers to set aside land, donate conservation easements, or pay fees towards parkland when property is subdivided.

Los Angeles County Fire Code

Title 32, Ordinance No. 2020-0014, of the Los Angeles County Code, incorporates and amends the 2022 California Fire Code, including all appendixes thereto and changes made by the County of Los Angeles, and such shall be and become the fire code of the city which prescribes the minimum Fire Code requirements for fire and life-safety issues.

Local

Irwindale General Plan

This section provides applicable policies and programs from the City's adopted General Plan.

Resource Management Element

Park Goals and Policies

Issue Area: Open Space Resources. The City of Irwindale will strive to enhance the recreational and open space resources for the benefit and enjoyment of the existing and future residents.

Policy 5: The City of Irwindale will maintain and improve the existing park facilities in the City for the benefit and enjoyment of future generations.

Policy 6: The City of Irwindale will evaluate the feasibility (of expanded join-use or multi-use) of the open space lands used for flood control.

Policy 7: The City of Irwindale will continue to investigate new opportunities for recreational activities and services.

School Programs

Program: Joint Use Facilities. The City will explore the feasibility of joint agreements with the local school districts and with other special districts. The City is not involved in any joint use agreements at the present time.

Public Safety Element

The adopted Public Safety Element focuses on addressing risks to life and property from natural hazards like earthquakes and floods, as well as human-made hazards such as air pollution and water contamination. The Public Safety Element also outlines the roles of public safety providers, including law enforcement and emergency response teams. The Project includes the proposed Safety Element, which incorporates updated policies and measures to address these risks in greater detail and aligns with State laws and includes additional considerations, such as wildfire hazard planning, infrastructure development in high-risk areas,

and collaboration with fire protection agencies. In addition, the update integrates the Safety Element with other elements of the General Plan, such as the Environmental Justice (EJ) Element, to ensure consistency and address broader health and safety concerns.

The following are applicable programs in the adopted Public Safety Element:

Fire and Police Protection Programs

Program: Fire Prevention. The City shall continue to work with the County of Los Angeles Fire Department to promote fire prevention and fire safety programs. The City shall also encourage periodic inspections of existing structures by the Fire Department for compliance with fire safety standards and practices. All new development plans must be submitted to the Fire Department for review and comment during the plan check process. This review must be completed for the development process to continue. New development must conform to applicable standards and regulations.

Program: Code Enforcement. A significant cause of damage, injury, and loss of life to fire involves unsafe structures with poor or obsolete wiring or construction materials. The Building Code contains regulations regarding construction techniques and materials that may be effective in eliminating or reducing the spread of fire. Code enforcement will also ensure that the City's noise control ordinance is adhered to. For this reason, ongoing code enforcement efforts are an important implementation program within the Safety Element.

Program: Police and Fire Services Review. The City shall regularly review the adequacy of law enforcement services and fire protection and emergency services in the City. This review effort shall be a component of the annual budget review of the contract with the Fire Department, and the City shall work with the Fire Department to correct any identified deficiencies. Local law enforcement officials and Fire Department representatives shall also continue their review of any proposed development plans. Annual reports concerning each Department will be submitted to the City Council for consideration.

Program: Safety Development Review Program. Certain design standards have been established by the City of Irwindale and the Los Angeles County Fire Department to ensure that site planning and building design consider public safety and fire prevention. These standards include requirements governing emergency access, roadway widths, clearance around structures, location of fire hydrants, etc.

Irwindale Municipal Code

Chapter 15.12, *Fire Code*, of the Irwindale Municipal Code (IMC), adopts the Los Angeles County Fire Code, 2023 Edition (Title 32 of the Los Angeles County Code), including all appendixes thereto and changes made by the County of Los Angeles, and such code shall become the fire code of the City which prescribes the minimum Fire Code requirements for fire and life-safety issues.

Chapter 15.01, Building Code, of the Irwindale Municipal Code, adopts the Los Angeles County Fire Code, 2023 Edition (Title 26 of the Los Angeles County Code), and incorporates and amends the 2022 California Building Code, including all appendixes thereto and changes to the County of Los Angeles and by the City of Irwindale. Such code shall be and become the building code of the City of Irwindale. The adopted Los Angeles County Fire Code has specific regulations for this region.

Title 17, *Zoning Code*, of the IMC contains development standards that regulate the type, location, density, and scale of residential development. The Zoning Code serves to implement the General Plan and the development standards designed to protect and promote the public health, safety, comfort, convenience,

and general welfare of residents. The Zoning Code also helps to preserve the character and integrity of existing neighborhoods.

Chapter 3.50 of the IMC outlines the implementation of unified development impact fees in order to fund public facilities including administrative facilities, transportation facilities, libraries, storm drains, police facilities, sewer facilities, and parks and recreation facilities.

Parks Master Plan

The Irwindale Park Master Plan contemplates a number of public improvements including the expansion of the library, enhancement of the learning center services, the creation of a child care facility, and expanded City Hall offices and support areas. The Park Master Plan also revisits Irwindale Park's overall plan and the relationships of the elements included within its boundaries. The goals of the Irwindale Park Master Plan Project are to make effective, efficient, sensitive site location and programming recommendations related to the addition or expansion of proposed recreation and civic facilities.

Irwindale Hazard Mitigation Plan

The City adopted its Hazard Mitigation Plan (HMP) in 2014 and works in conjunction with other City plans, including the Emergency Operations Plan, General Plan, and Capital Improvement Plan. Mitigation goals and priorities of the City's HMP are to protect life and property; enhance public awareness; preserve natural systems; encourage partnerships and implementation; and strengthen emergency services. The LACFD and IPD are designated to respond to hazards and emergencies in the City. The City is currently in the process of updating its HMP, which is expected to be completed by August 2026.²⁴

Local Mitigation Actions

Local Mitigation Action #4 – Fire Prevention. The City shall also encourage periodic inspections of existing structures by the Fire Department for compliance with fire safety standards and practices. All new development plans must be submitted to the Fire Department for review and comment during the plan check process. This review must be completed for the development process to continue. New development must conform to applicable standards and regulations.

Local Mitigation Action #6 – Capability Assessment Review. Local law enforcement officials and Fire Department representatives shall continue their review of existing resources including staff and equipment to ensure that any potential service demand can be accommodated. Annual reports concerning each Department will be submitted to the City Council for consideration.

Local Mitigation Action #8 –Emergency Preparedness Planning. The City currently maintains an Emergency Operations Plan that outlines responsibilities and procedures the City will follow in the event of an emergency or City-wide disaster. Specific emergency functions and operations, available resources (fire stations, emergency shelters, hospitals and clinics, resource persons, etc.), and mutual aid agreements are described in the Plan. The City shall update the Plan every three years as required by the California Emergency Management Agency (Cal EMA).

Local Mitigation Action #9 – Safety Development Review Program. Certain design standards have been established by the City of Irwindale and the Los Angeles County Fire Department to

²⁴ City of Irwindale, 2023. Request for Proposals (RFP) Hazard Mitigation Plan Preparation Notice. Available online at: <https://www.irwindaleca.gov/DocumentCenter/View/8653/Hazard-Mitigation-Plan-RFP--2023-Revised-deadline>, accessed February 2025.

ensure that site planning and building design consider public safety and fire prevention. These standards include requirements governing emergency access, roadway widths, clearance around structures, location of fire hydrants, etc.

Police Mitigation Actions

Local Mitigation Action #3 – Disaster Response Database. Under this program, a database will be created to identify Police Explorers, medical professionals, heavy equipment operators, and volunteers trained in first aid and search-and-rescue. The database would identify other volunteers that would staff emergency collection centers, distribution centers, and otherwise assist in the recovery efforts. This information, and the appropriate procedures, would then be incorporated into the City’s Emergency Preparedness Plan.

Local Mitigation Action #6 – Capability Assessment Review. Local law enforcement officials and Fire Department representatives shall continue their review of existing resources including staff and equipment to ensure that any potential service demand can be accommodated. Annual reports concerning each Department will be submitted to the City Council for consideration.

Local Mitigation Action #8 –Emergency Preparedness Planning. The City currently maintains an Emergency Operations Plan that outlines responsibilities and procedures the City will follow in the event of an emergency or City-wide disaster. Specific emergency functions and operations, available resources (fire stations, emergency shelters, hospitals and clinics, resource persons, etc.), and mutual aid agreements are described in the Plan. The City shall update the Plan every three years as required by Cal EMA.

4.11.3 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to public services if the project would:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services:

- Threshold PS-1:** Fire protection
- Threshold PS-2:** Police protection
- Threshold PS-3:** Schools
- Threshold PS-4:** Parks
- Threshold PS-5:** Other public facilities

Methodology

This analysis considers the CEQA Guidelines Appendix G thresholds, in determining whether the proposed Project, including future development accommodated by the Housing Element, would result in impacts

related to the provision of public services and recreation. Public services information was acquired through review of relevant documents. The determination that the Project would or would not result in substantial adverse effects concerning public services considers the relevant policies and regulations established by State, local, and regional agencies, the Projects' compliance with such policies, and whether the Project would create the need for new or expanded facilities, the construction of which could result in environmental impacts.

In *City of Hayward v. Trustees of California State University* (2015) 242 Cal.App.4th 833, the Court of Appeal held that significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area of a project and potential impacts on public safety services are not an environmental impact that CEQA requires a project applicant to mitigate: "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city. (Cal. Const., art. XIII, § 35, subd. (a)(2) [“The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services.”].) Thus, the need for additional fire and police protection services is not an environmental impact that CEQA requires a project proponent to mitigate but may require a city to address.

Impacts related to other public facilities (i.e., such as water, wastewater, and electricity) are addressed in Section 4.14, *Utilities and Service Systems*.

Project Impact Analysis

Fire Protection

Threshold PS-1: The Project would have a significant impact to fire protection services if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services.

Impact PS-1: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project could increase demand for fire services, the growth would occur within areas already served by LACFD. Compliance with applicable requirements, including review by LACFD, would ensure that the Project would result in less than significant impacts related to the provision of new or physically altered governmental facilities such as fire protection services.

Future growth within the City associated with implementation of the Project would increase demand on existing fire protection services and facilities. As discussed above, fire protection services for the City are provided by the LACFD, which operates out of one fire station in the City, Station No. 48, located at 15546 E. Arrow Hwy. The Project would not expand the current service area but would result in an increased population within the existing service area. The increase in residents associated with the Project could increase demand for fire protection and emergency medical services such that additional staff, equipment, or facilities could be needed to meet this goal.

Development facilitated by the Project would increase calls for service for issues including, but not limited to, emergency medical service, structure or vegetation fires, and traffic collisions. The direct effect on the

LACFD would include evaluation of staffing and resource deployment to accommodate the increase in call volume throughout the City. In 2022, LACFD responded to 10,275 incidents annually for approximately 4,038,776 residents which is approximately 0.25 incidents per resident $[(10,275 / 4,038,776) \times 100 = 0.25]$.²⁵ Therefore, development facilitated by the Project is estimated to result in an estimated 252 additional annual incidents (1,008 residents x 0.25 incidents per resident = 252).

According to the Wildland Urban Interface Map, some parts of the City are designated as a Wildland Urban Interface (WUI) Intermix Area.²⁶ The WUI Intermix Areas are where houses meet or intermingle with undeveloped wildland vegetation, which makes the WUI a focal area for human-environmental conflicts such as wildland fires, habitat fragmentation, invasive species, and biodiversity decline.²⁷ Additionally, according to the Irwindale Hazard Mitigation Plan, the City is considered to be in a SFHZ.²⁸ However, development facilitated by the Project would be required to comply with applicable Fire Code and ordinances for construction, emergency/fire access, water mains, fire flows, and hydrants, and would be subject to review and approval by the LACFD prior to building permit and final building permit inspection approval. In addition, new development would be required to meet current Building Code standards. Further, the Project would promote infill development by introducing new development or replacing older buildings with newer structures built to current Fire Code standards that would be more fire resilient, therefore, reducing the potential impacts of fires in WUI Intermix Areas within the City.

As discussed in Chapter 2, *Project Description*, the proposed Public Safety Element identifies risks from natural and human-made hazards, including fires, and outlines the roles of public safety providers and specifies areas in the City that may be unsuitable for certain land uses due to potential hazards. The City would implement the policies and actions stated in the Safety Element which would ensure the fire protection facilities necessary to serve future development encouraged by the Project. Specifically, the Public Safety Element includes the Fire Prevention, Code Enforcement, Police and Fire Services Review, and Safety Development Review Program, which ensure fire facilities are regularly inspected to provide adequate fire protection services to the City. The Irwindale Hazard Mitigation Plan describes these programs further and includes Local Mitigation Action #4 – Fire Prevention, which continues a mutual aid agreement between the City and the LACFD to promote fire prevention and fire safety programs. Local Mitigation Action #6 – Capability Assessment Review, requires the IPD and LACFD to regularly review existing resources and ensure adequate services are provided to meet service demand. Local Mitigation Action #8 – Emergency Preparedness Planning, requires the City’s Emergency Operations Plan to be updated every 3 years as required by the Cal EMA and ensures the City maintains adequate emergency response services and operations. Lastly, Local Mitigation Action #9 – Safety Development Review Program, requires design standards by the City and LACFD to ensure building design is safe and adequate for fire prevention.

Future projects developed under the Project would be required to comply with all applicable State and local laws, regulations, and policies related to fire safety and ensuring adequate fire protection services. Future

²⁵ Los Angeles County Fire Department (LACFD). 2023. *2023 Fire Plan: County of Los Angeles Fire Department – Appendix C: 2022 Statistical Summary*. Last updated July 3, 2023.

²⁶ U.S. Forest Service (USFS). 2023. “Wildland Urban Interface (2020) (MapService)” [digital GIS map]. <https://data-usfs.hub.arcgis.com/documents/usfs::wildland-urban-interface-2020-map-service/explore>. Accessed February 2024.

²⁷ U.S. Forest Service (USFS). 2023. “Wildland Urban Interface (2020) (MapService)” [digital GIS map]. <https://data-usfs.hub.arcgis.com/documents/usfs::wildland-urban-interface-2020-map-service/explore>. Accessed February 2024.

²⁸ City of Irwindale. 2012. *City of Irwindale 2012 Hazard Mitigation Plan*. November 20, 2012.

development would also need to comply with Chapters 15.04 and 15.12 of the IMC, which include minimum fire safety and fire prevention standards. Future projects developed under the Project would be required to demonstrate consistency with the goals and policies of the General Plan related to fire protection and safety. Future development under the Project would also be required to comply with abatement of fire-related hazards and pre-fire management prescriptions as outlined under the California Health and Safety Code and the California Fire Plan.

Moreover, existing and proposed policies and regulations are intended to minimize impacts to performance objectives of fire protection services (i.e., standard response times). LACFD is a special district that receives most of its revenue from the unincorporated areas through a portion of the property tax paid by the owners of all taxable properties. As new development occurs under the Project, these payments would fund services to maintain acceptable service ratios, response times or other performance objectives, such as the hiring of fire protection services personnel, the construction of new stations, and the funding of certain capital equipment. Operational funding for the LACFD is also supported by the County's General Fund. The County's Board of Supervisors allocates funding for various County-provided public services, including LACFD, to address staffing and equipment needs to serve the communities, including the City.

The development that would occur under the Project would occur gradually through the buildout horizon of 2029, during which time LACFD would add staff and equipment to the existing stations on an as-needed basis to accommodate increased demand. Due to the existing stations serving the City, the staff and equipment, and the anticipated development over the 9-year buildout horizon under the Project, implementation of the Project would result in less than significant impacts related to fire protection and emergency services.

Applicable Proposed Safety Element Policies

Wildfire

Goal SAF15: A City where residents and businesses are safe from wildfires and are prepared for the risks associated with wildfire spread.

Policy SAF15.1:- Fire Prevention and Suppression Needs. Coordinate with Valley County Water District, as well as other water service providers within the city and neighboring cities and fire agencies in neighboring cities to plan for future fire prevention and suppression needs including identifying future water supply for fire suppression needs.

Policy SAF15.3: Maintenance of Emergency Evacuation Routes. Proactively manage vegetation along roadsides of emergency/evacuation routes to prevent wildfires.

Policy SAF15.5: Consistency with California Codes. Ensure that all residential, commercial, and industrial construction and development maintain consistency with California Code of Regulations Title 14, Natural Resources, Division 1.5, Department of Forestry, Chapter 7, Fire Protection.

Policy SAF15.6: Existing Structures in VHFHSZ. Support the retrofitting of existing structures in VHFHSZs built prior to modern fire safety codes or wildfire hazard mitigation guidance to help reduce the risk of structural and human loss due to wildfire.

Policy SAF15.7: Development in the VHFHSZ. Avoid or minimize new residential development in the VHFHSZ. If new development occurs within or near the VHFHSZ, ensure projects comply with all applicable state or local fire safety and defensible space regulations or standards, and any applicable fire protection or risk-reduction measures identified in locally adopted plans. Discourage

land uses that could exacerbate the risk of ignitions in the VHFHSZ, such as outdoor storage of hazardous or highly flammable materials, automobile service stations, or gas stations.

Policy SAF15.8: New Development Fire Safety Standards. Require all new development prepare a fire protection plan that complies with established fire safety standards. Require that ingress and egress routes be constructed using the most current state Fire Safe Regulations, Fire Code, and or City Code that meets these minimum requirements. Fire protection plans shall be referred to the appropriate fire agency and other public agencies for comment as to:

1. Risk analysis
2. Location of anticipated water supply
3. Adequacy of water supply for new development (i.e., maintenance and long-term integrity)
4. Adequacy of fire flow (gallons per minute) to extinguish a fire at the proposed development
5. Fire response capabilities including site design for fire department access in and around structures
6. Ability for a safe and efficient fire department response
7. Traffic flow and ingress/egress for residents and emergency vehicles
8. Mitigation measures and design considerations for non-conforming fuel modification
9. Potential impacts to emergency services and fire department response
10. Wildfire education maintenance and limitations

Emergency Preparedness

Goal SAF16: A City that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage, and disruption to the social and economic life of the City.

Policy SAF16.1:- Emergency Response Planning. In cooperation with City emergency response providers, maintain and regularly update emergency plans for floods, earthquakes, fires, hazardous materials, and other disasters. Plans should be consistent with the California Standardized Emergency Management System protocol.

Policy SAF16.2: Interagency Coordination. Cooperate with other public agencies, nearby cities, community groups, and private enterprises in developing comprehensive disaster preparedness, assistance, and post-disaster recovery plans in order to maximize mutual aid response. Participate in regularly scheduled disaster exercises to better prepare Police, Fire, Public Works, and other City department employees with disaster responsibilities.

Policy SAF16.6: Community Capacity. Involve volunteers, community groups, and civic organizations in emergency response activities, including planning and program development to prepare for disasters and disaster recovery. Individuals and businesses should have access to up-to-date information that allows them to engage with the City, regional agencies, and community-based organizations to expand communications, coordinate hazard preparation and response, and be able to make informed decisions about potential safety hazards and the level of risk they are willing to accept.

Policy SAF16.8: Critical Facilities. Ensure that public facilities that are critical to health and safety (such as police and fire stations, and water and sewer facilities) are designed to maximize their resilience and ability to function during and after a natural disaster.

Policy SAF16.9: Technology. Support the use of communication technologies to transmit information to other agencies and the public during emergencies, including:

- CivicReady emergency alert system.
- Social media operated by the Los Angeles County Fire Department, Irwindale Police Department, and other public safety agencies and municipalities.
- Other systems to provide outreach to residents without telephone or Internet service.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to fire protection.

Police Protection

Threshold PS-2: The Project would have a significant impact to police protection services if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services.

Impact PS-2: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for police services, the growth would occur within areas already served by IPD. Compliance with applicable requirements would ensure that the Project would result in less than significant impacts related the provision of new or physically altered government facilities such as police protection services.

Police protection services for the City are provided by the IPD, which operates out of one police station in the City, located at 5050 North Irwindale Avenue. The Project would not expand the current service area but would result in an increased population within the existing service area. The increase in residents associated with the Project could increase demand for police protection and emergency medical services such as additional staff, equipment, or facilities. The IPD currently does not have a citizen to officer ratio goal.

Development facilitated by the Project would increase calls for service for issues including, but not limited to, police protection and emergency medical services such that additional staff, equipment, and facilities would be needed. The Project would provide the opportunity for the development of up to 279 residential units, which could accommodate approximately 1,008 residents based on the 2021 average household size of 3.61 persons per household. An increase of approximately 1,008 residents would account for a 70 percent population increase, in which the IPD would require additional services. However, it should be noted that some of the future residential units allowed under the General Plan Update would also serve existing residents in addition to potentially new residents. Also, the City would continue a mutual aid contract with the Los Angeles County Sheriff's Department, El Monte Police Department, and Glendora Police Department and thus providing further police protection to the City.

The City's General Plan includes policies and programs focused on police protection. The proposed Public Safety Element includes the Code Enforcement program, which contains building regulations to ensure safe structures and reduce the spread of fire or unsafe habitats.²⁹ The Police and Fire Services Review program ensures regular review of law enforcement services in the City and ensures adequate police protection services to meet demand. Additionally, the Irwindale Hazard Mitigation Plan includes police protection mitigation actions such as Local Mitigation Action #3 – Disaster Response Database, which creates a database to identify Police Explorers, medical professionals, heavy equipment operators, and volunteers when in need. Local Mitigation Action #6 – Capability Assessment Review, requires local law enforcement and fire department representatives to regularly review existing resources including staff and equipment to ensure that any potential service demand can be accommodated. Lastly, Local Mitigation Action #8 – Emergency Preparedness Planning, highlights the Emergency Operations Plan which outlines responsibilities, procedures and ensures adequate services are prepared during the event of an emergency. Development Impact Fees would be required from future residential development projects that could occur under the Project, which would allow for any support or improvements required for police protection services.

Further, under the Project, future development would be required to comply with law enforcement requirements and standards. The Project would facilitate future development which would induce population growth in the City. However, future development would be required to comply with the City's General Plan, IMC, and Local Mitigation Plan thus reducing potential impacts related to police protection services. Thus, impacts would be less than significant.

Applicable Proposed Safety Element Policies

Law Enforcement and Crime

Goal SAF12: A resourced police department with sufficient staffing, equipment, resources, and readiness to address crime, respond to local emergencies, and increase community safety.

Policy SAF12.1: Police Services Management. Continue regular review of staffing, equipment, and resources of the police and fire departments to ensure continuous and responsive service for law enforcement, crime reduction, monitoring, investigations, emergency, and other critical operations. Identify potential gaps and needs to carry out services and prioritize capacity-building for the Irwindale Police Department to be able to respond to crime reports and increase safety.

Policy SAF12.2: Patrolling and Surveillance. Evaluate need for increased patrolling and surveillance through additional officers or increased frequency of patrols using crime reports and feedback from the community to enhance safety in areas of concern within the City.

Goal SAF13: An engaged and responsive community that contributes to reporting, information sharing, and crime reduction.

Policy SAF13.2: Police and Community. Continue to build positive relationships between community members and the Irwindale Police Department through programs, mentorship, education, and events that provide opportunities for engagement and connection.

²⁹ City of Irwindale. 2008. "Section 6: Public Safety Element." In *City of Irwindale 2020 General Plan*, pp. 126–147. June 2008.

Goal SAF14: A built environment that improves public safety, discourages and prevents crime, and instills a sense of community ownership for people and property in Irwindale.

Policy SAF14.1: Urban Design. Promote the design of safe neighborhoods to enhance public safety and discourage crime. Require that buildings, streets, and public spaces be designed with safety elements, including lighting, as well as “eyes on the street” and “crime prevention through urban design” features such as gathering areas, sidewalks, walkways and bicycle lanes, street-fronting uses, large and open windows, attractive designs, and other elements that help to connect people in public spaces and maintain public sight.

Policy SAF14.3: Implementation of Safety Features. Identify areas of the City in need of additional safety features, including lighting and surveillance technology. Prioritize areas of employment, residential neighborhoods, major roads, and alleyways.

Emergency Preparedness

Goal SAF16: A City that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage, and disruption to the social and economic life of the City.

Policy SAF16.2: Interagency Coordination. Cooperate with other public agencies, nearby cities, community groups, and private enterprises in developing comprehensive disaster preparedness, assistance, and post-disaster recovery plans in order to maximize mutual aid response. Participate in regularly scheduled disaster exercises to better prepare Police, Fire, Public Works, and other City department employees with disaster responsibilities.

Policy SAF16.6: Community Capacity. Involve volunteers, community groups, and civic organizations in emergency response activities, including planning and program development to prepare for disasters and disaster recovery. Individuals and businesses should have access to up-to-date information that allows them to engage with the City, regional agencies, and community-based organizations to expand communications, coordinate hazard preparation and response, and be able to make informed decisions about potential safety hazards and the level of risk they are willing to accept.

Policy SAF16.8: Critical Facilities. Ensure that public facilities that are critical to health and safety (such as police and fire stations, and water and sewer facilities) are designed to maximize their resilience and ability to function during and after a natural disaster.

Policy SAF16.9: Technology. Support the use of communication technologies to transmit information to other agencies and the public during emergencies, including:

- CivicReady emergency alert system.
- Social media operated by the Los Angeles County Fire Department, Irwindale Police Department, and other public safety agencies and municipalities.
- Other systems to provide outreach to residents without telephone or Internet service.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to police protection.

Schools

Threshold PS-3: The Project would have a significant impact to schools if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services.

Impact PS-3: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. However, schools have existing capacity. In addition, payment of school impact fees that are deemed to fully mitigate the impacts of development on school facilities for purposes of CEQA would ensure that impacts to schools would be less than significant.

As discussed above, CVUSD serves the City, as well as Covina, West Covina, Glendora, and San Dimas. The CVUSD provides 18 campuses and offers leadership, curricular, and athletics/sports opportunities. The CVUSD has a total of 11,143 students enrolled and a student/teacher ratio of 22.95 based on the 2023-2024 school year.³⁰ Merwin Elementary, located at 16125 Cypress Street, provides grades KG-5 and has an enrollment of 445 total students, and a student/teacher ratio of 23.42.³¹ Development facilitated by the Project would increase population growth and generate new students entering CVUSD. Although the Project would result in an increase in enrollment each year, the CVUSD offers 18 other campuses that offer further institutional services, curricular, and education opportunities.

According to the California Department of Finance (DOF), the City had an estimated population of 1,441 residents for the year 2021.³² The Project would encourage the development of up to 279 additional residential units, which could accommodate approximately 1,008 residents based on the 2021 average household size of 3.61 persons per household (279 residential units x 3.61 persons per household = 1,008 residents). With growth from the Project, the City's total population would be 2,449 residents compared to existing conditions of 1,441 residents. As of 2020, the City's population was made up of approximately 20 percent (19.82 percent [rounded]) individuals under the age of 19.³³ Applying this ratio to the maximum addition of residents facilitated by the Housing Element would generate approximately 490 (2,449 total population growth x 0.20 percent = 489.8) school-aged (under the age of 18) residents to the City in a maximum population increase scenario.

The CVUSD would be able to accommodate this increase in students as all schools within the district are under capacity. However, in order to accommodate the increase in students, programmatic adjustments and additional auxiliary facilities (such as restrooms, etc.) may be required. Consistent with SB 50, CVUSD

³⁰ National Center for Education Statistics (NCES). 2023. "Common Core of Data Search: Covina-Valley Unified (2023-2024 school year)" [online database]. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?Search=2&details=1&ID2=0610050&DistrictID=0610050. Accessed February 5, 2025.

³¹ NCES. 2023. "Common Core of Data Search: Merwin Elementary (2023-2024 school year)" [online database]. https://nces.ed.gov/ccd/schoolsearch/school_detail.asp?Search=1&InstName=Merwin+Elementary&State=06&SchoolType=1&SchoolType=2&SchoolType=3&SchoolType=4&SpecificSchlTypes=all&IncGrade=-1&LoGrade=-1&HiGrade=-1&ID=061005001100. Accessed February 5, 2025.

³² City of Irwindale. 2024. *2021–2029 Housing Element*. Revised Draft. April 2025.

³³ U.S. Census Bureau. 2024. "City of Irwindale, 2020" [online database]. Available at: https://data.census.gov/profile/Irwindale_city,_California?g=160XX00US0636826. Accessed February 2024.

would continue to collect development impact fees that would incrementally pay for facility upgrades and expansions needed. The payment of statutory fees fully mitigates the impacts of development on school facilities for purposes of CEQA per SB 50. Overall, the proposed Project would not result in the need for new or substantially physically altered school facilities the construction of which could cause significant environmental impacts. This impact would be less than significant.

Applicable Proposed Policies

No proposed policies are applicable.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to inducing unplanned population growth.

Parks

Threshold PS-4: The Project would have a significant impact to parks if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services.

Impact PS-4: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for parks, the growth would occur within areas already served by the City. Compliance with applicable requirements would ensure that the Project would result in less than significant impacts related the provision of new or physically altered government facilities such as parks.

As discussed above, open space represents the largest land use category in terms of land area in the City. The Santa Fe Dam Recreation Area, consisting of 1,920 acres, serves as a regional facility and provides various amenities. Additionally, the City maintains and owns four parks that totaling to 21.14 acres: Irwindale Park (15.25-acres), Jardin de Roca Park (5-acres), El Nido Park (0.49 acres), and Little Park of Irwindale (0.40 acres), which provide open space amenities to the City. As shown in Figure 4.11-2, parks and open space facilities in the City are located near the five Housing Sites, which would provide open space and recreational opportunities for future population growth that would occur as a result of the Project.

As discussed in Section 4.10, *Population and Housing*, buildout under the Housing Element would increase the population in the City by 1,008 new residents by 2029, which would increase the demand and use of parks and recreational facilities. The Resource Management Element of the City's General Plan establishes a citywide parkland level of service goal of a minimum of one acre of parkland per 2,500 residents. The addition of 1,008 new residents generated by the Project in addition to the current population of 1,441 residents, would result in a population of 2,449 residents by the horizon year of 2029. Given that the City has approximately 21 acres of local park land, the City would provide greater than one acre per 2,500 residents.

The Project would be consistent with the policies and actions of the Irwindale's Resource Management Element including Policy 5, which ensures the City will maintain and improve the existing park facilities in the City for existing and future generations. Additionally, Policy 6, ensures the City will evaluate the feasibility of expanded joint-use or multi-use facilities for open space, and Policy 7 ensures further investigation for new open space and recreational opportunities for City residents. Furthermore, the goals of the Parks Master Plan Project are to make effective, efficient, sensitive site location and programming recommendations related to the addition or expansion of proposed recreation and civic facilities. In addition, proposed goals and policies in the Draft Environmental Justice Element would ensure access to public services and facilities including parks and open space access, in compliance with SB 1000, such as Policy EJ6.6, Expand Park Access, Policy EJ6.8, Provide Free Physical Activity Programming at Dan Diaz Recreation Center, and Policy EJ6.9, Increase Recreation Programming Access for all community residents. Further policies proposed include Goal EJ12 aim to provide the community with enhanced, diverse, and equitable distribution of public facilities that meet the needs of all residents, including the projected population growth that would occur as a result of the Project. Development Impact Fees would be required from future residential development projects that could occur under the Project, which would allow for any support or improvements required for other public services and facilities.

Development Impact Fees would be required as part of the building permit process for future residential development projects that could occur under the Project, which would allow for any support or improvements required for parks and recreational facilities. Given that the City's parkland standard would be met and future development would comply with applicable requirements and not conflict with goals and policies in the City's General Plan, impacts would be less than significant.

Applicable Proposed Safety Element Policies

Air Quality

Goal SAF3: A community that maximizes natural elements in design and infrastructure to promote quality air and mitigate pollution.

Policy SAF3.1: New Parks. Promote the creation of new parks, including pocket parks, with a mix of amenities (trees, trails, ponds, exercise equipment, benches, picnic tables), throughout the community, with priority for areas with residential and sensitive uses such as community centers, social gathering places, and schools. Ensure new park sites are environmentally safe from hazards prior to development.

Policy SAF3.2: Preservation of Parks and Open Spaces. Preserve existing parks and open space areas, including the Santa Fe Dam and Recreation Area, from development.

Policy SAF3.3: Private Open Spaces. Develop incentives for private businesses and properties to engage in voluntary creations of open spaces and new tree plantings that promote good air quality.

Applicable Proposed Environmental Justice Policies

Promote Health and Physical Activity

Goal EJ6: A community that provides access to programs, services, and a built environment that promotes healthy and active lifestyles suited to and available for all community members.

Policy EJ6.6: Expand Park Access. Identify and eliminate barriers to parks and recreation access in Irwindale.

Promote Access to Public Facilities

Goal EJ11: A community with equitable access to high-quality, well-maintained, and safe public facilities.

Policy EJ11.1: Evaluate General Plan Programs for Parks. Ensure updates to the General Plan Resource Management Element includes programs that reflect current park conditions, community needs, and infrastructure needs.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to parks and open space facilities.

Other Public Facilities

Threshold PS-5: The Project would have a significant impact to other public facilities, such as libraries, if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for any of the public services.

Impact PS-5: The Project would result in an increase in the overall number of dwelling units in the City thereby increasing the City's population. While future development encouraged by the Project would increase demand for libraries, compliance with applicable requirements would ensure that the Project would result in less than significant impacts.

As discussed above, the City has one library, Irwindale Public Library, located at 16053 Calle de Paseo, which provides eBooks and digital resources, mobile printing, volunteer opportunities, passport services, and study rooms. The Irwindale Public Library is currently undergoing an expansion effort to provide further services and programs to the City, with a projected completion in 2026. Additional library services are provided by Los Angeles County Libraries in the vicinity including Baldwin Park Library (located at 4181 Baldwin Park Blvd), West Covina Library (located at 1601 W. West Covina Pkwy), Norwood Library (located at 4550 N. Peck Rd), Live Oak Library (located at 22 W. Live Oak Ave), and Duarte Library (located at 1301 Buena Vista St).

The increase in population that would occur as a result of the Project could increase the demand for library services. However, given the expansion that is underway and that residents can access other libraries in the region as well as information electronically, the increase in population would result in a less than significant impact.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to inducing unplanned population growth.

4.11.4 Cumulative Impacts Analysis

The Project would not have significant environmental impacts to fire protection, police protection, schools, parks/open space, and other public facilities, such as libraries. Thus, the Project would result in a less than significant impact 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 objectives for any of the public services. Future development in the City, including growth anticipated under the Project, would not impact public services, as discussed above, as future development would be consistent with the City's General Plan goals and policies. Therefore, the Project would not contribute to cumulative impacts related to new or expanded public services, and cumulative impacts would be less than significant.

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4.12 Transportation

This chapter assesses the potential for the Project to result in significant transportation impacts. CEQA issues evaluated include consistency with circulation system plans, ordinances, and policies relevant to transportation; vehicle miles traveled (VMT); hazards due to geometric design features; and emergency access. The chapter describes the existing environmental setting as it relates to transportation facilities and provides a regulatory framework that discusses applicable regulations. The chapter identifies the thresholds of significance, evaluates potential significant transportation impacts resulting from construction and operation of the Project, and identifies feasible mitigation measures to ensure that potentially significant impacts would be avoided or minimized to the greatest extent feasible.

The information in this section is based primarily on the Transportation Assessment Report prepared by Linscott, Law & Greenspan, Engineers (provided in Appendix F), the City of Irwindale 2020 General Plan and the City of Irwindale Active Non-Motorized Transportation Plan (ATP), as well as the 2024 Connect SoCal Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS).^{1,2,3}

4.12.1 Environmental Setting

Transportation Infrastructure

The City of Irwindale is located within the San Gabriel Valley of the County of Los Angeles. Surrounding jurisdictions include Duarte to the north and west, Azusa to the east, Baldwin Park to the south, and Monrovia and Arcadia to the west. Regional access to the City is provided via Interstate 210 (I-210) Freeway to the north, Interstate 10 (I-10) Freeway to the south, and Interstate 605 (I-605) Freeway to the west.

Regional Highway and Street System

The City of Irwindale 2020 General Plan Infrastructure Element describes a roadway classification system that provides a logical framework for the design and operation of roadways serving Irwindale.⁴ The primary circulation system in the City serves two distinct and equally important functions: 1) providing access to individual properties, and 2) accommodating the transport of people and goods into and through the City. The roadway system in Irwindale has been defined using a classification system that describes a hierarchy of roadway types:

Major Arterials

The main function of a Major Arterial is to provide regional, sub regional, and intra-City travel service. Through-traffic comprises the bulk of traffic volumes on major arterial roadways. Major arterials typically have four to six travel lanes.

¹ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

² City of Irwindale. 2021. *City of Irwindale Active Transportation Plan*. January 2021.

³ Southern California Association of Governments (SCAG). 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy*. Adopted April 4, 2024.

⁴ City of Irwindale. 2008. "Section 4: Infrastructure Element." In *City of Irwindale 2020 General Plan*, pp. 85–101. June 2008.

Secondary Streets

Secondary Streets serve a similar function to Major Arterials, except the design capacity of the former is not as great as the latter. In addition, Secondary Streets do not carry the volumes of through traffic typically associated with Major Arterials. They typically have four travel lanes with on-street parking permitted.

Collector Streets

A Collector Street provides circulation in a defined geographic area of the City and connects this area to secondary streets, arterials, and freeways. Most traffic uses collector streets to move to roadways carrying intra-City or through-traffic.

Local Streets

Local streets are subordinate to the basic circulation network described above yet constitute the majority of the City's streets. These streets provide access to individual parcels and only provide circulation within a neighborhood block. Local streets typically have two travel lanes with on-street parking permitted on both sides.

Relevant Project roadways are described in further detail below:

Ramona Boulevard is a major, four-lane, east-west arterial which extends from I-605 to Foster Avenue within the City. Ramona Boulevard has a posted speed limit of 40 mph and becomes West San Bernardino Road at its intersection with Puente Avenue.

Arrow Highway is a four-lane, east-west arterial roadway that extends from Irwindale Avenue to Vincent Avenue and has a posted speed limit of 45 mph.

Huntington Drive/East Foothill Boulevard is a major, four-lane, east west arterial which extends from Las Lomas Road to Irwindale Avenue within the City. Huntington Drive becomes East Foothill Boulevard just before it intersects with Irwindale Avenue. The roadway has a speed limit of 40 mph.

Irwindale Avenue is a major, six-lane, north south arterial which extends from East Foothill Boulevard to I-210 and from Arrow Highway to Badillo Street within the City (and turns into N Sunset Avenue south of Badillo Street). Irwindale Avenue has a posted speed limit of 40 mph.

Public Transit Services

Foothill Transit serves the San Gabriel and Pomona Valleys, including the City of Irwindale. Foothill Transit operates four bus routes in the City including Lines 185, 492, 190, and 280. Line 185 provides connections with Hacienda Heights and Azusa, via Irwindale Avenue each half hour on weekdays. Line 492 extends between Los Angeles and Montclair, via Arrow Highway in Irwindale, every half-hour on weekdays. Line 190 extends between El Monte and Pomona and intersects North Irwindale Avenue below Cypress Street, every half-hour on weekdays. Line 280 provides connection from Azusa to Walnut to the south, intersecting Arrow Highway, approximately every 30 minutes on weekdays.

Bicycle Facilities

The City of Irwindale ATP was completed in January 2021 and guides the development of pedestrian and bicycle infrastructure and programs throughout the City.⁵ Currently, there is a limited existing bicycle network within the City of Irwindale, described further below. Bicycle facilities within the City of Irwindale are classified based on the Caltrans Highway Design Manual terminology:

Class I Bikeway (Bicycle Path)

Class I Bikeways include a completely separate right-of-way for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflows minimized.

Class II Bikeway (Bicycle Lane)

Class II Bikeways include a restricted right-of-way designated for the use of bicycles, with a striped lane on a street or highway.

Class III Bikeway (Bicycle Route)

Class III Bikeways include a right-of-way designated by signs or pavement markings for shared use with pedestrians and motor vehicles.

Class IV Bikeway (Separated Bikeway)

Class IV Bikeways include a right-of-way for the exclusive use of bicycles which provides a required separation between the bikeway and through vehicular traffic.

The City of Irwindale contains a small number of bicycle facilities located near the Santa Fe Dam Recreation Area. These include the San Gabriel River Bike Path, the Santa Fe Dam Park Access Road, and the Santa Fe Spur Bike Path.

The San Gabriel River Bike Path is a Class I facility which traverses the southern and eastern edges of the Santa Fe Dam Open Space and Recreation Area adjacent to the City of Azusa to the east and the City of Baldwin Park to the south. As noted in the ATP, citywide connections would improve by increasing access to the existing Class I facility, the San Gabriel River Trail.

The Santa Fe Dam Park Access Road is a Class II facility which traverses the southeastern edge of the Santa Fe Dam Recreation Area.

The Santa Fe Spur Bike Path is a Class I facility which traverses the western edge of the Santa Fe Open Space Area adjacent to the City of Duarte to the northwest.

The Vincent Community Bikeway is a Class I facility along Irwindale Avenue and transitions to a Class II facility after entering the path that follows Big Dalton Wash. There is a signalized crossing at Vincent Avenue, where the path enters Los Angeles County jurisdiction.

The ATP outlines proposed infrastructure improvements to be completed for bicycle paths in the short-term, medium-term, and long-term.

⁵ City of Irwindale. 2021. *City of Irwindale Active Transportation Plan*. January 2021.

Pedestrian Facilities

The City of Irwindale ATP was completed in January 2021 and guides the development of pedestrian and bicycle infrastructure and programs throughout the City.⁶ Pedestrian facilities within the City include sidewalks and pathways, which together form a safe and comfortable pedestrian network, as well as crosswalks, pedestrian crosswalk signals, lighting, street trees, and curb ramps. The ATP notes that, to improve the City's pedestrian network cohesion, Americans with Disabilities Act (ADA) compliant sidewalks should be provided on major pedestrian pathways and connection routes. Future pedestrian projects are proposed in the ATP to improve connectivity and walkability.

4.12.2 Regulatory Framework

Federal

There are no federal laws or regulations related to transportation which would apply to the Project.

State

Governor's Office of Planning and Research (OPR) Senate Bill 743

The Governor's Office of Planning and Research (OPR) published the Technical Advisory on Evaluating Transportation Impacts in CEQA in 2018.⁷ SB 743 (Steinberg, 2013) updated the way transportation impacts are measured in California for new development projects. It required changes to the guidelines implementing CEQA regarding the analysis of transportation impacts in that the criteria for determining the significance of impacts must promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

To that end, the California Natural Resources Agency has implemented changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. Automobile delay, as measured by "level of service" and other similar metrics, generally will no longer constitute a significant environmental effect under CEQA.

Local

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) Regional Council adopted the Connect SoCal 2024 plan in April 2024. In contrast to previous RTP/SCSs, to develop a forecasted regional development pattern, instead of relying on RHNA allocations, SCAG first prepared a Regional Growth Forecast to understand how many people, households and jobs to plan for. Then SCAG developed a preliminary Forecasted Regional Development Pattern based on local general plans and known development entitlement agreements. RHNA allocations, to the extent that they had been embedded into certified housing elements, were taken into account. In addition, regional sustainability strategies from the final, adopted Connect SoCal 2020, including priority growth and environmentally constrained areas, were embedded into the forecast. Then SCAG met with local jurisdictions across the region to verify that our

⁶ City of Irwindale. 2021. *City of Irwindale Active Transportation Plan*. January 2021.

⁷ Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. April 2018.

understanding of the future matched with local planning efforts. This input from local jurisdictions was integrated into the Forecasted Regional Development Pattern for Connect SoCal 2024.

City of Irwindale 2020 General Plan – Infrastructure Element and Housing Element

The policies included in the City of Irwindale 2020 General Plan Infrastructure Element focus on the following issue areas:

- The City’s commitment to maintaining highest standards of service with respect to circulation and infrastructure; and
- The City’s commitment to improving safe and efficient circulation in the City.

The following goals and policies apply to the Project:

Issue Area – Traffic and Circulation. The City of Irwindale will strive to improve safe and efficient circulation in the City.

- The City of Irwindale will continue to develop and enhance the existing streets and intersections in the City.
- The City of Irwindale will strive to ensure that all new development implements its “fair-share” of infrastructure improvements to offset the potential adverse impacts associated with the additional traffic that will be generated by the new development.
- The City of Irwindale will continue to support the development and expansion of the region’s public and mass transit system.

The policies included in the Housing Element focus on the following issue areas:

- The conservation of the existing affordable housing
- The City’s strategy for providing assistance towards the development of affordable housing;
- The City program to provide adequate sites for the development of new housing;
- The manner in which the City will remove governmental constraints as necessary; and,
- How the City intends to promote equal housing opportunities.

The following goal and policy apply to the Project:

Issue Area – New Housing Development. The City of Irwindale will continue to assist in the development of new housing for all income groups.

- The City of Irwindale will ensure that the adequacy of future low- and moderate-income housing sites, especially those for seniors, are located near shopping, transportation facilities, and services.

4.12.3 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to transportation if the project would:

- Threshold TRA-1:** Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Threshold TRA-2:** Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- Threshold TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Threshold TRA-4:** Result in inadequate emergency access.

Approach to Analysis

VMT Methodology

The Transportation Assessment Report prepared for the Project evaluated VMT based on the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (Guidelines).⁸ (The Transportation Assessment Report is provided in Appendix F of the PEIR.) This approach is in compliance with CEQA Guidelines Section 15064.3(a) and identifies VMT as the primary metric for evaluating a project's transportation impacts. The analysis is consistent with the recommended screening criteria contained in the State of California Governor's Office of Planning and Research's 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*.⁹

Because the City is a member agency of the San Gabriel Valley Council of Governments (SGVCOG), the City uses the SGVCOG Senate Bill (SB) 743 Implementation Study to assist with answering important implementation questions about the methodology, thresholds, and mitigation approaches for VMT impact analysis. As part of the SGVCOG SB 743 Implementation Study, a VMT Evaluation Tool was developed which is a web-based tool that can be used for VMT screening and includes mitigation recommendation, if required.

The City's Guidelines outline the steps for complying with the CEQA VMT analysis. The Guidelines have established screening criteria pertaining to project trip generation forecasts, project land use types, proximity to transit, and locality within a low VMT-generating area. The Guidelines provide three types of potential screening criteria that may be applied to screen projects from project-level assessments.

- **Transit Priority Area Screening** – If a project is located within a Transit Priority Area (TPA) which is defined as one-half mile area from either an existing major transit stop or an existing stop along a high-quality transit corridor, a project may be presumed to cause a less than significant transportation impact. However, according to the City's Guidelines, the presumption might not be appropriate if the project

⁸ City of Irwindale. *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. 2021.

⁹ OPR. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.

(1) has a floor area ratio of less than 0.75, (2) includes more parking for use by residents, customers, or employees of the project than required by jurisdiction, (3) is inconsistent with the applicable Sustainable Communities Strategy, or (4) replaces affordable residential units with a smaller number of moderate- or high-income residential units.

- Low VMT-generating Area Screening – If a project is residential, the project is considered screened out if it is located within a low VMT area of the “Home-Base VMT per Capita”. Alternatively, if the predominant land uses in the vicinity are normally of the same type as a project, the project is reasonably expected to generate similar VMT as the existing uses, and the project is considered screened out if it is in the low VMT area for the “Total Daily VMT per Service Population.”
- Project Type Screening – Some project types have been identified in the City’s Guidelines as having the presumption of a less than significant impact. Various types of non-residential project types are included; however, the following residential types are included: (1) affordable, supportive, or transitional housing, (2) senior housing (as defined by the U.S. Department of Housing and Urban Development (HUD)), (3) student housing projects on or adjacent to a college campus, (4) projects generating less than 110 daily vehicle trips.

Proposed projects are not required to satisfy all of the screening criteria to screen out of further VMT analysis. Satisfaction of one criterion is sufficient for screening purposes. Projects, or project components, which are screened out of detailed VMT assessment based on these criteria, are presumed to have less than significant transportation impacts.

Although a project could be screened out based on the Transit Priority Screening, the City’s Guidelines identify that this screening criteria would not be appropriate for projects that meet one of the following additional criteria:

- Has a floor area ratio of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the Lead Agency with input from the Metropolitan Planning Organization)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

4.12.4 Impacts and Mitigation Measures

Threshold TRA-1: The Project would have a significant impact to alternative transportation if the Project would result in conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Impact TRA-1: The Project would not cause significant environmental impacts due to conflicts with any program, plan, ordinance, or policy addressing the circulation system. Therefore, impacts would be less than significant.

The CEQA Guidelines state that a project (including a land use project such as the proposed Housing Element Update) would have a potential impact if it would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Any

inconsistency with an adopted policy is only a significant impact under CEQA if the plan, ordinance, or policy were adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

The Project comprises a total of 21 parcels within five Housing Sites consisting of approximately 125 acres located throughout the City. It should be noted that there are no specific development projects proposed at this time for consideration and any future projects will have to go through the City's review and approval process. As described below, the Project would generally complement and be consistent with the regional and City transportation vision.

SCAG's Connect SoCal 2024

Connect SoCal aims to reduce or limit new trip generation and associated regional growth in traffic congestion and VMT by focusing growth, density, and land use intensity within existing urbanized areas. Connect SoCal also strives to enhance the existing transportation system, maximize multi-modal transportation, and integrate land use into transportation planning. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas to reduce VMT, congestion, and GHG emissions. As such, the Project would be consistent with Connect SoCal, as it would propose land uses consistent with existing and proposed transportation planning. Since proposed Housing Sites would be located in areas near transit, density would increase, and vehicle trip generation would be limited.

City of Irwindale General Plan Infrastructure Element and Draft Housing Element

Implementation of the Project would also help fulfill the goals and policies of the City's General Plan. Specifically, the Infrastructure Element includes a policy aimed at supporting the expansion of the region's public transit system, and the Housing Element includes a policy which would ensure that low- and moderate-income housing sites are located near transportation facilities. The Project would introduce Housing Sites near transit and would therefore facilitate implementation of the General Plan.

City of Irwindale Active Transportation Plan

The City of Irwindale Active Transportation Plan aims to establish policy and design recommendations to improve walking and bicycling throughout the City. The Plan proposes specific projects to guide future pedestrian and bicycle improvements in Irwindale with the goal of enhancing safety, convenience, and comfort for people walking and bicycling in the City. The Project would facilitate pedestrian access throughout the City by increasing the availability of housing near transit, schools, grocery stores, and other services as well as commercial uses.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would not conflict any program, plan, ordinance, or policy addressing the circulation system. Therefore, impacts would be less than significant.

Threshold TRA-2: The Project would have a significant impact to VMT if it would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impact TRA-2: The Project could have a significant VMT impact and could be in conflict or inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Therefore, Project impacts could be significant. However, after implementation of the mitigation measure, the VMT impacts for Housing Sites 1, 3, and 5 would be less than significant.

The Transportation Assessment Report identified that the City's VMT Guidelines stated a significant project-generated VMT impact could occur if either of the following conditions are satisfied:

1. The baseline project-generated VMT per service population exceeds 15% below the existing City baseline VMT per service population, or
2. The baseline project-generated VMT per home-based trip per resident or VMT per home-based work trip per employee exceeds 15% below the existing City baseline.

As described in the Transportation Assessment Report, the City's residential VMT baseline is 25.82 VMT per capita. Therefore, the threshold of 15 percent below the baseline residential VMT is 21.95 VMT per capita. A significant transportation impact could result if a project VMT were to exceed 21.95 VMT per capita. Even though a project could exceed the VMT threshold, projects could have less than significant transportation impacts if one of the three screening criteria identified above are satisfied. The VMT analysis in the Transportation Assessment Report identified that the five Housing Sites satisfied the Transit Priority Area screening criterion and two of the five Housing Sites (Sites 2 and 4) satisfied the Project Type screening criterion. Table 4.12-1, VMT Assessment Summary, provides the VMT projections for the development that would occur under the Project. A determination of whether each of the Housing Sites satisfy a screening criterion is provided as well as the VMT per capita for each Housing Site.

**TABLE 4.12-1
VMT ASSESSMENT SUMMARY**

Project Area	Satisfaction of Screening Criteria ¹			Home Based VMT Per Capita ⁵		VMT Reductions
	Inside TPA	Low VMT	Project Type	With Project	Project + Reductions	
Site 1	Yes ²			23.0	NA	NA
Site 2	Yes ²		Yes ⁴	25.09	NA-	NA
Site 3	Yes ²			25.09	NA	NA
Site 4	Yes ³		Yes ⁴	30.37	NA-	NA
Site 5	Yes ³			28.79	NA-	NA

NOTES:

NA – Not Applicable. Reductions are not required because the Housing Site satisfied at least one of the screening criterion.

1. Sources: San Gabriel Valley Council of Governments' VMT Evaluation Tool, Connect SoCal, 2024; Southern California Association of Governments, 2024; and City of Irwindale Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment, 2021.

2. Site is located within 0.50 mile of a High Quality Transit Corridor.

3. Site is located within 0.5 mile of a Major Transit Stop.

4. Site is planned for 100 percent affordable housing development.

5. The City's residential VMT threshold is 21.95 VMT per capita

SOURCE: Linscott, Law & Greenspan, Engineers. 2025. Transportation Assessment Report – Irwindale Housing Element and General Plan Update. February 2025.

Because Housing Sites 2 and 4 meet the Project Type screening criterion, the VMT impact associated with these individual sites would be less than significant. Housing Sites 1, 3, and 5 meet the Transit Priority Area screening criterion; however, because the City's Guidelines require additional screening criteria for projects within Transit Priority Areas and there is no specific development project proposed for consideration at this time, the additional screening criteria will need to be assessed at the time of formal review and approval. Therefore, prior to mitigation Housing Sites 1, 3, and 5 could result in significant VMT impacts.

Mitigation Measures

MM TRA-1: Prior to approval of individual projects on Housing Sites 1, 3, and 5 that are located within Transit Priority Areas, the Project Applicant shall demonstrate compliance with additional screening criteria identified within the City's Guidelines. Each Project Applicant for projects within Housing Sites 1, 3, and 5 shall provide written evidence to the City of Irwindale Planning Division that none of the following criteria would be met.

- Has a floor area ratio of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the Lead Agency with input from the Metropolitan Planning Organization)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

Significance After Mitigation: The project VMT for Housing Sites 2 and 4 would be less than significant. After the implementation of MM TRA-1, the Project VMT impacts for Housing Sites 1, 3, and 5 would be less than significant.

Threshold TRA-3: The Project would have a significant impact to roadway hazards if the Project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact TRA-3: The Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Therefore, impacts would be less than significant.

Construction traffic associated with individual development projects under the Project would typically include haul trucks, cement trucks, equipment delivery trucks, and construction worker vehicles. The timing and frequency of haul trucks would be dictated by the rate of excavation activities for individual projects. However, construction-related increases in traffic for individual development projects would be temporary in nature, and traffic management plans could be required by the City on a project-by-project basis.

The Project does not propose any new Citywide improvements to the City's transportation network. The Project would plan for new residential development projects on existing sites within the City's network. While the Project provides a framework to increase housing opportunities throughout the City, it does not include any site-specific project plans or circulation schemes that can be evaluated for transportation hazards. Individual projects proposed for development subsequent to approval of the Project would be subject to, and designated in accordance with, existing standards and specifications. While the details for

future residential development projects are unknown, all individual development projects as planned for under the proposed Project would be subject to City permits and compliance with the Irwindale Active Transportation Plan Design Guidelines.

Future residential development projects under the Project would not substantially increase hazards due to design features or incompatible uses. Therefore, the Project would not introduce new safety hazards at intersections or along roadway segments, and from a program level, impacts would be less than significant.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses and impacts would be less than significant.

Threshold TRA-4: The Project would have a significant impact if the Project would result in inadequate emergency access.

Impact TRA-4: Implementation of the Project would not result in inadequate emergency access to individual sites within the City. Therefore, impacts would be less than significant.

As described above, details regarding project-level emergency access at individual future housing sites under the Project are not known at this time. However, emergency access for individual residential developments would continue to be required at the project level. Proposed future development would be required to comply with applicable building and fire safety regulations, such as the California Fire Code, which requires compliance with emergency access design standards as part of the new construction of roads to provide sufficient access for emergency equipment. The California Fire Code also sets standards for road dimension, design, grades, and other fire safety features. Therefore, emergency access would be maintained following construction of individual projects under the Project and impacts would be less than significant.

Mitigation Measures

None required.

Significance after Mitigation: Not applicable. The Project would not result in inadequate emergency access to individual sites within the City and impacts would be less than significant.

4.12.5 Cumulative Impact Analysis

Cumulative impacts are evaluated through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Projects that are consistent with this plan in terms of development, location, density, and intensity are part of the regional solution for meeting air pollution and GHG reduction goals. As noted in the City's Guidelines, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita, VMT per employee, or VMT per service population), a less-than-significant project impact conclusion would demonstrate that there is no cumulative VMT impact. The City's Guidelines also note that projects which do demonstrate VMT impacts through application of efficiency-

based threshold, and which are deemed inconsistent with the RTP/SCS, could contribute toward a significant cumulative impact on VMT. Based on the Project-related VMT analysis provided above, Housing Sites 2 and 4 falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS. Housing Sites 1, 3, and 5 meet the Transit Priority Area screening criterion; however, because the City's Guidelines require additional screening criteria for projects within Transit Priority Areas and there are no specific development projects proposed for consideration at this time, the additional screening criteria will need to be assessed at the time of formal review and approval. Therefore, prior to mitigation Housing Sites 1, 3, and 5 could contribute to significant VMT impacts that are cumulatively considerable. However, with the implementation of MM TRA-1, the contribution of the Project, including Housing Sites 1, 3, and 5, to VMT impacts would be less than cumulatively considerable.

4.13 Tribal Cultural Resources

4.13.1 Introduction

This section provides an analysis of potential impacts on tribal cultural resources from future development allowed under the implementation of the City's Housing Element and General Plan Update (Project or proposed Project). Proposed future development under the Project would result in the construction of 279 new dwelling units on five development sites (Housing Sites 1 through 5) within the City. Two of these five sites are vacant while the other three sites are non-vacant with active industrial/business park uses.

The analysis is based on a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC), and consultations between the City and Native American tribes pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18. Native American consultation documentation is provided in Appendix G of this Draft PEIR. Tribal cultural resources are defined by the California Public Resources Code (PRC) Section 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Historical resources, unique archaeological resources, or non-unique archaeological resources, which are defined in Section 4.4, Cultural Resources, of this Draft PEIR, may also be tribal cultural resources if they meet these criteria.

4.13.2 Environmental Setting

Ethnographic Setting – The Gabrielino

The City is located within Gabrielino (Gabrieleño, *Tongva*, or *Kizh*) territory. According to Bean and Smith,¹ the Gabrielino, with the exception of the Chumash to the north, “were the wealthiest, most populous, and most powerful ethnic nationality in aboriginal Southern California.” Named after the San Gabriel Mission, the Gabrielino occupied sections of Los Angeles, Orange, and San Bernardino counties, and the islands of San Nicolas, Santa Catalina, and San Clemente. The Gabrielino subsisted on a variety of resources in several ecological zones. Acorns, sage, and yucca were gathered throughout the inland areas whereas shellfish, fish, as well as a variety of plants and animals were exploited within the marshes and along the coast. Deer and various kinds of small mammals were hunted on an opportunistic basis. Their material culture reflected subsistence technology. Lithic tools such as arrow points and modified flakes were used to hunt and process animals. A variety of ground stone grinding implements, such as the mortar, pestle, mano, and metate, were used to process both plant and animal remains for food.²

The settlement patterns of the Gabrielino, and other nearby groups such as the Juaneño and Luiseño, were similar and they often interacted through marriage, trade and warfare. The seasonal availability of water and

¹ Bean LJ, Smith CR. 1978. “Gabrielino.” In *Handbook of North American Indians*, Vol. 8, California, edited by Heizer RF, pp. 538–549. Washington, DC: Smithsonian Institution, page 538.

² Bean LJ, Smith CR. 1978. “Gabrielino.” In *Handbook of North American Indians*, Vol. 8, California, edited by Heizer RF, pp. 538–549. Washington, DC: Smithsonian Institution.

floral and faunal resources dictated seasonal migration rounds with more permanent villages and base camps being occupied primarily during winter and spring months. In the summer months, the village populations divided into smaller units that occupied seasonal food procurement areas. The more permanent settlements tended to be near major waterways and food sources and various secular and sacred activities, such as food production and storage and tool manufacturing, were conducted at these areas.³

Sacred Lands File Search

The NAHC maintains a confidential SLF which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on July 28, 2023, to request a search of the SLF. The NAHC responded to the request in a letter dated August 25, 2023, indicating that the results were positive and to contact the Gabrieleño Band of Mission Indians – Kizh Nation (see Appendix G).

Native American Consultation

Assembly Bill 52 and Senate Bill 18

On July 13, 2023, the City submitted notification and request to consult letters to nine (9) individuals and organizations pursuant to Assembly Bill (AB) 52. On July 13, 2023, the City also submitted notification and request to consult letters to none (9) individuals and organizations pursuant to Senate Bill (SB) 18. In particular, AB 52 letters were sent via certified mail to the following California Native American tribes and individuals:

- Lovina Redner, Santa Rosa Band of Cahuilla Indians
- Andrew Salas, Gabrieleño Band of Mission Indians—Kizh Nation
- Joseph Ontiveros, Soboba Band of Luiseño Indians
- Isaiah Vivanco, Soboba Band of Luiseño Indians
- Charles Alvarez, Gabrielino-Tongva Tribe
- Christina Conley, Gabrielino Tongva Indians of California Tribal Council
- Robert Dorame, Gabrielino Tongva Indians of California Tribal Council
- Sandonne Goad, Gabrielino/Tongva Nation
- Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians

SB 18 letters were sent via certified mail to the following California Native American tribes and individuals:

- Lovina Redner, Santa Rosa Band of Cahuilla Indians
- Andrew Salas, Gabrieleño Band of Mission Indians—Kizh Nation
- Joseph Ontiveros, Soboba Band of Luiseño Indians
- Isaiah Vivanco, Soboba Band of Luiseño Indians
- Charles Alvarez, Gabrielino-Tongva Tribe

³ Bean LJ, Smith CR. 1978. "Gabrielino." In *Handbook of North American Indians*, Vol. 8, California, edited by Heizer RF, pp. 538–549. Washington, DC: Smithsonian Institution.

- Christina Conley, Gabrielino Tongva Indians of California Tribal Council
- Robert Dorame, Gabrielino Tongva Indians of California Tribal Council
- Sandonne Goad, Gabrielino/Tongva Nation
- Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians

On July 17, 2023, the City received a response from Chairman Andrew Salas of the Gabrieleño Band of Mission Indians – Kizh Nation (Gabrieleño Band) indicating that they agree with the General Plan Amendment. However, the Gabrieleño Band indicated that they would like to request consultation for all future projects. On November 13, 2023, the City and the Gabrieleño Band set up a consultation call to take place on January 9, 2024. However, on January 8, 2024, the Gabrieleño Band cancelled the consultation call, and indicated that the call would be rescheduled for a later date. To date, no other responses from the Native American community have been received as part of the AB 52 nor SB 18 tribal consultation effort. The AB 52 and SB 18 Native American consultation documentation is provided in Appendix G of this Draft EIR.

4.13.3 Regulatory Framework

This section provides the relevant State regulations applicable to the Project.

State

Assembly Bill 52

AB 52 was approved by California State Governor Edmund Gerry “Jerry” Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the State CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1(d) requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the

lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Senate Bill 18

SB 18 (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."⁴

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines, the following are the contact and notification responsibilities of local governments:⁵

⁴ Governor's Office of Planning and Research (OPR). 2005. *Tribal Consultation Guidelines: Supplement to General Plan Guidelines*. November 14, 2005.

⁵ Governor's Office of Planning and Research (OPR). 2005. *Tribal Consultation Guidelines: Supplement to General Plan Guidelines*. November 14, 2005.

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

4.13.4 Project Impact Analysis

Thresholds of Significance and Methodology

Thresholds of Significance

Appendix G of the State CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G questions regarding tribal cultural resources, a project would have a significant impact if the project would:

- Threshold TCR-1:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- i. Listed or eligible for listing in the California Register of Historical Resources, or in the 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Methodology

The analysis is based on a SLF search conducted by the NAHC and consultation between the City and Native American tribes pursuant to AB 52 and SB 18. Specifically, the City submitted notification and request to consult letters to Native American individuals and organizations and conducted follow-up Native American consultation.

Project Impact Analysis

Tribal Cultural Resource Significance

Threshold TCR-1: The Project would have a significant impact if future development allowed by the General Plan Update would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (i) Listed or eligible for listing in the California Register of Historical Resources, or in the 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact TCR-1: The Project could cause a substantial adverse change in the significance of a tribal cultural resource. However, with implementation of MM-CUL-2, impacts to a tribal cultural resource would be reduced to less than significant.

Future development proposals initiated under the Project that include ground-disturbance activities (e.g., excavation, trenching, boring, grading, drilling, demolition, clearing/grubbing, etc.) have the potential to cause a substantial adverse change to tribal cultural resources as defined by Public Resources Code Section 21074. Specifically, anticipated development at the five development sites (Housing Sites 1 through 5) would occur through infill development on vacant property and through redevelopment of non-vacant property (with active industrial/business park uses), which could result in damage to tribal cultural resources as a result of construction-related ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of tribal cultural resources buried below the ground surface. Future development that results in changes to the setting through incompatible adjacent construction or facilitates public access to culturally significant sites could result in additional impacts to tribal cultural resources.

Future development that does not require ground-disturbing activities would cause no impacts on tribal cultural resources.

The NAHC SLF search for the City yielded positive results. The City submitted notification and request to consult letters to nine (9) Native American individuals and organizations on July 13, 2023, pursuant to AB 52 and to nine (9) Native American individuals and organizations on July 13, 2023, pursuant to SB 18. On July 17, 2023, the City received a response from Chairman Andrew Salas of the Gabrieleño Band of Mission Indians – Kizh Nation (Gabrieleño Band) indicating that they agree with the General Plan Amendment and that they would like to request consultation for all future projects. On November 13, 2023, the City and the Gabrieleño Band set up a consultation call to take place on January 9, 2024. However, on January 8, 2024, the Gabrieleño Band cancelled the consultation call and indicated that the call would be rescheduled for a later date. On January 23, 2025, the Gabrieleño Band sent an email to the City indicating that, since there will not be any ground disturbance taking place, further consultation would not be needed. To date, no other

responses from the Native American community have been received as part of the AB 52 nor SB 18 tribal consultation effort.

In summary, no tribal cultural resources were identified within or adjacent to the City. Also, no previously recorded precontact cultural resources are known to exist within the City. However, it is possible that future development within the City could yield the identification of precontact cultural resources that could qualify as potential tribal cultural resources. Future projects would be required to comply with the provisions of SB 18 and AB 52 to incorporate tribal consultation into the CEQA process to ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. Such projects could nonetheless result in significant impacts to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe qualifying as tribal cultural resources. Thus, there could be a significant impact to tribal cultural resources.

However, implementation of MM CUL-2 would reduce impacts to tribal cultural resources, including archaeological resources that could also meet the definition of tribal cultural resource, to less than significant levels.

4.13.5 Cumulative Impact Analysis

Future development in the City and adjacent cities, including growth anticipated under the proposed General Plan Update, could result in a substantial adverse change in the significance of tribal cultural resources, thus resulting in a potentially significant cumulative impact. All future development would be required to comply with SB 18 and AB 52 consultation, which would ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. For this reason, the Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.

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4.14 Utilities and Service Systems

4.14.1 Introduction

This chapter evaluates potential impacts related to utilities and service systems from the development facilitated by the Housing Element and General Plan Update (proposed Project or Project). The chapter provides context regarding the utilities that are currently in place to provide water, wastewater treatment, stormwater drainage, electric power, natural gas, and telecommunications services to the City and the five Housing Sites identified for future development under the Project. This chapter also discusses relevant federal, State, regional and local regulations and programs that are applicable to future development that could occur under the Project.

4.14.2 Environmental Setting

As discussed in Chapter 2, *Project Description*, the City encompasses approximately 9.5 square miles and is located roughly 20 miles east of downtown Los Angeles within the San Gabriel Valley area in the County of Los Angeles. The regional location of the City is shown in Figure 2-1 in Chapter 2, *Project Description*. The City's population and development is located east of the San Gabriel River.

The City is located within the easterly portion of Los Angeles County at the periphery of the greater Los Angeles Metropolitan area. The City is bounded by the San Gabriel River to the north with the foothills of the nearby San Gabriel Mountains located further north. The City is also located within the San Gabriel Valley and is bisected by the San Gabriel River into an eastern section and a western section. Nearby cities include Duarte to the north and west, Azusa to the east, Baldwin Park to the south, and Monrovia and Arcadia to the west.

Three of the five Housing Sites that could be developed under the Project have been previously developed and have existing utilities that currently serve the site. These previously developed sites include Site 2 located at 12881 Ramona Boulevard, Site 3 located at 13201 Ramona Boulevard, and Site 5 located at the southeast intersection of Irwindale Avenue and I-201. Sites 1 and 4 are currently disturbed but are undeveloped and do not have existing utilities onsite; however, Site 1 has utilities available nearby that would be able to support future residential uses.

Water

Water service is provided to the City by various water retailers including Azusa Light & Water, California American Water, Golden State Water Company, San Gabriel Valley Water Company, and Valley County Water District. These water retailers purchase water from the Upper San Gabriel Valley Municipal Water District which obtains water from groundwater resources as well as imports from two conveyance systems including the State Water Project and the Colorado River Aqueduct. Groundwater in the San Gabriel Valley comes from the Main San Gabriel Basin. Metropolitan Water District of Southern California is the wholesale water agency that provides imported water to the San Gabriel Valley.¹² The Upper San Gabriel

¹ Upper San Gabriel Valley Municipal Water District. 2024. "Imported Water" [webpage]. <https://upperdistrict.org/imported-water/>. Accessed March 2024.

² Upper San Gabriel Valley Municipal Water District. 2024. "Local Water" [webpage]. <https://upperdistrict.org/local-water/>. Accessed March 2024.

Valley Municipal Water District has prepared their Urban Water Management Plan which provides a framework for long-term water planning to ensure that sufficient water supplies are available to meet existing and future demands.³

The City of Azusa Water Department supplies water to the largest portions of Irwindale from its most northeasterly boundaries to Ornelas Street, including all of the Santa Fe Dam area located to the east of San Gabriel Freeway.⁴ Site 1, Site 4, and Site 5 that could be developed under the Project are located within the Azusa Water Department's service area.

Portions of the City are located within the California American Water Company's Service Area 8. Service Area 8 services the area north of the Buena Vista Channel to the Duarte boundary.⁵ None of the five Housing Sites that could be developed under the Project are located within the California American Water Company's Service Area.

The Golden State Water Company supplies water to 12,300 customers in the San Gabriel Valley, including customers in the eastern portion of the City.^{6,7} None of the five Housing Sites that could be developed under the Project is located within the Golden State Water Company service area. The San Gabriel Valley Water Company serves approximately 50 customers in the Vulcan's Durbin Pit area as well as the area generally located between Lower Azusa Road and Ramona Boulevard.⁸ Site 2 and Site 3 are located within the San Gabriel Water Company's service area.

The Valley County Water District procures its water supplies primarily from the Marin Basin and imported water. Valley County Water District serves the southeasterly portion of the City as well as an area generally bounded by Arrow Highway, Live Oak Avenue, and the I-605 Freeway.⁹ Site 1 is on the boundary of multiple service areas and a water line on Allen Drive belongs to Valley County Water District. Therefore, Site 1 has the potential to be within Valley County Water District's service area. None of the other four Housing Sites that could be developed under the Project are located within the Valley County Water District service area.

Wastewater

The City's Maintenance Division is responsible for ensuring that sanitation sewers are installed, repaired, and/or properly maintained. The City contracts with Los Angeles County Public Works for sewer maintenance. The City's local sewers discharge into larger facilities owned and maintained by the Los Angeles County Sanitation Districts for conveyance, treatment, and disposal.

The Sanitation Districts consist of 24 special districts serving about 5.5 million people. The service area covers approximately 850 square miles and encompasses 78 cities and unincorporated areas in Los Angeles County.

³ Upper San Gabriel Valley Municipal Water District. 2021. *2020 Urban Water Management Plan*. Final. June 2021.

⁴ City of Azusa. 2008. "Azusa Light and Water – Water Service Area" [map]. Scale not given. May 21, 2008.

⁵ California American Water Company. 2019. Los Angeles District Tariff Area. June 4, 2019.

⁶ Golden State Water Company. 2019. "Foothill District South Arcadia System Map" [map]. Scale not given. Filed April 10, 2019. Effective May 16, 2019.

⁷ Golden State Water Company. 2024. "San Gabriel" [webpage]. <https://www.gswater.com/san-gabriel>. Accessed March 2024.

⁸ San Gabriel Valley Water Company. 2010. "Los Angeles County Division Service Map" [map]. [SGVWC-Service-Area-Map-1.g.pdf](#). Accessed March 2025.

⁹ Valley County Water District. 2024. "Service Area" [webpage]. <https://www.vcwd.org/159/Service-Area>. Accessed March 2024.

The Los Angeles County Sanitation Districts wastewater treatment system currently treats about 400 million gallons of water per day.¹⁰ The City is within Sanitation District 15 and Sanitation District 22. These two Sanitation Districts are signatory to the Joint Outfall Agreement (JOA), an agreement that provides collective ownership and operation of shared wastewater conveyance, treatment, and disposal facilities. The districts that are signatory to the JOA are known collectively as the Joint Outfall Districts (JOD). The JOD have constructed a regional, interconnected system of wastewater conveyance and treatment facilities known as the Joint Outfall System (JOS). The JOS provides wastewater treatment and disposal service for residential, commercial, and industrial users. It currently consists of seven wastewater treatment plants, more than 509 miles of trunk sewers, and 12 pumping plants.¹¹

Wastewater from the City is treated at the San Jose Creek Water Reclamation Plant located adjacent to the City of Industry. The San Jose Creek Water Reclamation Plant provides primary, secondary, and tertiary treatment for a design capacity of 150 million gallons of wastewater per day (MGD). Currently, the Plant treats up to 100 MGD and serves a residential population of 1,000,000 people.^{12,13}

Stormwater

The City is situated within two watersheds: the Los Angeles River Watershed and the San Gabriel Valley River Watershed. Most of the City's runoff drains into Reach 3 of the San Gabriel River, while a smaller portion drains into Reach 2 of the Rio Hondo, which is a tributary to the Los Angeles River. The Los Angeles County Department of Public Works (LACPWD) is the agency responsible for flood control protection within Los Angeles County.¹⁴

Solid Waste Management

The City has an exclusive franchise agreement with Athens Services to provide mixed waste collection services and other available programs to its residents. Athens Services serves 28 municipalities in the Los Angeles area and operates six operation service facilities, two material recovery facilities (including a new facility opening in Irwindale, CA), and one composting facility. Athens Services currently transports all of Irwindale's commercial waste to the City of Industry Recycling Facility (Athens Services Materials Recovery Facility [MRF]), where recyclable materials are sorted and then diverted from local landfills.¹⁵ The City of Industry Recycling Facility processes 5,000 tons of solid waste daily from the over 50 communities it serves.¹⁶ In addition, Athens Services is in the process of developing a new MRF in the City

¹⁰ Los Angeles County Sanitation Districts. 2023. *2022 Annual Report*.

¹¹ Los Angeles County Sanitation Districts. 2024. "Who We Are and What We Do For You" [webpage]. <https://www.lacsd.org/services/wastewater-programs-permits/wastewater-revenue-program/who-we-are-what-we-do-for-you>. Accessed March 2024.

¹² Los Angeles County Sanitation Districts. 2024. "San Jose Creek Water Reclamation Plant" [webpage]. <https://www.lacsd.org/services/wastewater-sewage/facilities/san-jose-creek-water-reclamation-plant/>. Accessed March 2024.

¹³ Waterandwastewater.com, 2024. San Jose Cree Water Reclamation Plant. Available online at: <https://www.waterandwastewater.com/san-jose-creek-water-reclamation-plant/>, accessed February 19, 2025.

¹⁴ City of Irwindale. 2014. *Storm Water and Watershed Management Program – Section One: Programmatic Overview*. July 28, 2014.

¹⁵ Solid waste landfills are designed to accept a wide variety of waste materials, including household garbage, commercial waste, construction and demolition debris, and other non-hazardous solid wastes.

¹⁶ Athens Services. 2022. Athens Quick Facts. Available online at: <https://athensservices.com/>, accessed February 19, 2025.

that is expected to be fully operational by May 2025. The MRF is projected to divert nearly 200,000 tons of waste annually.¹⁷ In addition, an inert landfill operated by Hanson Aggregates is located within the City.

Electricity

The City is part of the 50,000-square-mile Southern California Edison (SCE) Service Area for electric utilities. The SCE grid is powered by a mix of different energy sources, the largest proportion of which comes from eligible renewable resources including solar, wind, geothermal, eligible hydroelectric, and biomass/biowaste. The second largest contributing category is unspecified sources of power which includes electricity that has been purchased through open market transactions and is not traceable to a specific generation source. Natural gas, nuclear, and large hydroelectric are other significant energy resources.¹⁸

In 2023, the SCE power system experienced a peak demand of 21,254 MW (the most recent year for which data are available). The annual electricity sale to customers in 2023 was approximately 79,256,000 MWh.¹⁹

Although wildfire hazard safety concerns and extreme heat days have led to power outages or service reductions in past years, SCE is dedicated to maintaining a high level of reliability through demand-response programs and energy efficiency programs. These conservation strategies, in combination with SCE's continued advances in technology and renewable sources ensure safe, quality services in the SCE service area.

Natural Gas

Natural gas is provided to the City by Southern California Gas Company (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.1 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout Central and Southern California, from the city of Visalia to the Mexican border.²⁰

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies. The traditional, southwestern U.S. sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport. The annual natural gas sale to customers in 2023 was approximately 1,039,520 million cf.^{21,22}

¹⁷ Athens Services, 2022. Athens Irwindale Materials Recovery Facility. Available online at: <https://athensservices.com/irwindale-mrf/>, accessed February 19, 2025.

¹⁸ Southern California Edison (SCE). n.d. 2022 Power Content Label.

¹⁹ Southern California Edison (SCE). 2023. *2023 Annual Report*, p. 2.

²⁰ Southern California Gas Company (SoCalGas). 2024. "Company Profile" [webpage]. <https://www.socalgas.com/about-us/company-profile>. Accessed March 2024.

²¹ Daily natural gas usage in 2022 was 2,848 million cf, annual value derived by multiplying daily values by 365 days.

²² California Gas and Electric Utilities. 2024. *2024 California Gas Report Supplement*.

Telecommunication

Cable operators serving Los Angeles County include Spectrum, AT&T U-verse, and Verizon. Federal laws provide oversight of the cable industry.

While the County continues to serve as the local franchise authority and will respond to every community inquiry that it receives, it is important for residents to understand the extent of the County's authority. Under current federal law, the County does not have any legal ability to dictate what cable companies charge for their services or how they set its channel lineup. As currently written, federal law allows all cable providers to operate in a deregulated manner when it comes to issues concerning pricing or channel lineup.

4.14.3 Regulatory Setting

Federal

Water

Federal Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), administered by the U.S. Environmental Protection Agency (USEPA) in coordination with the States, is the main federal law that ensures the quality of drinking water. Under the SDWA, the USEPA sets standards for drinking water quality and oversees the States localities, and water suppliers who implement those standards. The California Department of Public Health administers the regulations contained in the SDWA in the State of California.

U.S. Environmental Protection Agency

The 1986 amendments to the SDWA and the 1987 amendments to the Clean Water Act (CWA) established the USEPA as the primary authority for water programs. The USEPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems. The City is located in EPA Region 9 (Pacific Southwest), which includes Arizona, California, Hawaii, Nevada, Pacific Islands and Tribal Nations.

Federal Water Pollution Control Act of 1972 (Clean Water Act)

The CWA establishes the basic structure for regulating discharges of pollutants into the "waters of the United States." The Act specifies a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303(d) of the CWA requires States, territories, and authorized tribes to develop a list of water quality limited segments of rivers and other water bodies under their jurisdiction. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for waters on the list and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality. These are action plans designed to improve the quality of water resources. As part of the TDML process, municipalities must examine the water quality problems and identify sources of pollutants in order to create specific actions designed to improve water quality.

Section 402 of the CWA regulates point-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Resources Control Board (SWRCB) oversees the program which is administered by Regional Water Quality Control Boards

(RWQCBs). The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits.

The NPDES program covers municipalities, industrial activities, and construction activities. The NPDES program includes an industrial stormwater permitting component that covers ten categories of industrial activity that require authorization under a NPDES industrial stormwater permit for stormwater discharges. Construction activities, also administered by the SWRCB, are discussed below. Section 402(p) of the CWA, as amended by the Water Quality Act of 1987, requires NPDES permits for stormwater discharges from municipal separate storm sewer systems (MS4s), stormwater discharges associated with industrial activity, and designated stormwater discharges, which are considered significant contributors of pollutants to waters of the United States.

On November 16, 1990, the USEPA published regulations (40 CFR Part 122), which prescribe permit application requirements for MS4s pursuant to CWA Section 402(p). On May 17, 1996, the USEPA published an Interpretive Policy Memorandum on Reapplication Requirements for MS4s, which provided guidance on permit application requirements for regulated MS4s. MS4 permits include requirements for post-construction control of stormwater runoff in what is known as Provision C.3. The goal of Provision C.3 is for the Permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble storm water runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Section 404 of the CWA establishes a permit program, administered by United States Army Corps of Engineers (USACE), to regulate the discharge of dredge or fill materials into waters of the U.S., including wetlands. Activities in waters of the U.S. that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. CWA Section 404 permits are issued by USACE.

Wastewater

National Pollutant Discharge Elimination System

The Clean Water Act was amended in 1987 to include urban and stormwater runoff, which required many cities to obtain an NPDES permit for stormwater conveyance system discharges. Section 402(p) of the CWA prohibits discharges of pollutants contained in storm water runoff, except in compliance with a NPDES permit.

Electricity

United States Department of Energy (Energy Policy Act of 2005)

The United States Department of Energy (DOE) is the federal agency responsible for establishing policies regarding energy conservation, domestic energy production and infrastructure. The Federal Energy Regulatory Commission (FERC) is an independent federal agency, officially organized as part of the DOE which is responsible for regulating interstate transmission of natural gas, oil and electricity, reliability of the electric grid and approving of construction of interstate natural gas pipelines and storage facilities. The Energy Policy Act of 2005 has also granted FERC with additional responsibilities of overseeing the

reliability of the nation's electricity transmission grid and supplementing State transmission siting efforts in national interest electric transmission corridors.

FERC has authority to oversee mandatory reliability standards governing the nation's electricity grid. FERC has established rules on certification of an Electric Reliability Organization (ERO) which establishes, approves and enforces mandatory electricity reliability standards. The North American Electric Reliability Corporation (NERC) has been certified as the nation's ERO by FERC to enforce reliability standards in all interconnected jurisdictions in North America. Although FERC regulates the bulk energy transmission and reliability throughout the United States, the areas outside of FERC's jurisdictional responsibility include State-level regulations and retail electricity and natural gas sales to consumers which falls under the jurisdiction of State regulatory agencies.

Telecommunication

Federal Communications Commission

The Federal Communications Commission (FCC) requires all new cellular tower construction to be approved by the State or local authority for the proposed site and comply with FCC rules involving environmental review. Additionally, the Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority.

State

Water

California Water Resources Control Board

The SWRCB and nine RWQCBs address water quality and rights regulation. Created by the California Legislature in 1967, the five-member SWRCB protects water quality by setting statewide policy, coordinating and supporting the RWQCB efforts, and reviewing petitions that contest RWQCB actions. The SWRCB is also solely responsible for allocating surface water rights. Each RWQCB makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions.

California Department of Water Resources

The California Department of Water Resources (DWR) is responsible for the operation and maintenance of the California State Water Project. DWR is also responsible for overseeing the statewide process of developing and updating the California Water Plan (Bulletin 160 series); protecting and restoring the Sacramento-San Joaquin Delta; regulating dams, providing flood protection, and assisting in emergency management; educating the public about the importance of water and its proper use; and providing technical assistance to service local water needs.

California Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the SWRCB and divided the State into nine regional basins, each with a RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies, while the regional boards are responsible for developing and enforcing water quality objectives and implementation plans. The City is located within the Los Angeles RWQCB.

The Act authorizes the SWRCB to enact State policies regarding water quality in accordance with CWA Section 303. In addition, the act authorizes the SWRCB to issue WDRs for projects that would discharge into State waters. The Porter-Cologne Water Quality Control Act requires that the SWRCB or the Santa Ana RWQCB adopt water quality control plans (basin plans) for the protection of water quality. A basin plan must:

- Identify beneficial uses of waters to be protected;
- Establish water quality objectives for the reasonable protection of the beneficial uses; and
- Establish a program of implementation of achieving the water quality objectives.

Basin plans also provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. Basin plans are updated and reviewed every three years in accordance with Article 3 of the Porter-Cologne Water Quality Control Act and Section 303(c) of the CWA. The local basin plans are described under Local Regulations, below.

The Water Conservation Act of 2009 (SB X7-7)

California legislation enacted in 2009, as Senate Bill (SB) 7 of the 7th Special Legislative Session (SB X7-7) instituted a new set of urban water conservation requirements known as “20 Percent by 2020”. These requirements stipulate that urban water agencies reduce per-capita water use within their service areas by 20 percent relative to their use over the previous 10–15 years.

State Updated Model Landscape Ordinance

The state’s Updated Model Landscape Ordinance (AB 1881) required cities and counties to adopt landscape water conservation ordinances by January 31, 2010. In 2015, Executive Order B-29-15 tasked the California DWR with revising the 2010 Model Water Efficient Landscaping Ordinance to increase water efficiency standards for new and retrofitted landscapes. Increased water efficiency can be achieved through efficient irrigation systems, graywater usage, and on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf. Projects in the City that are subject to the Model Water Efficient Landscaping Ordinance (MWELo) requirements must submit a landscape design plan with a soil preparation mulch as part of the submittal process with the City.²³

Senate Bill 221

Enacted in 2001, SB 221, which was codified in the Water Code beginning with Section 10910, requires that the legislative body of a city or county, which is empowered to approve, disapprove, or conditionally approve a subdivision map, must condition such approval upon proof of sufficient water supply. The term "sufficient water supply" is defined in SB 221 as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition of sufficient water supply also includes the requirement that sufficient water encompass not only the proposed subdivision, but also existing and planned future uses, including agricultural and industrial uses.

²³ Irwindale Municipal Code, Section 8.22.120.

California Urban Water Management Planning Act

The California Legislature enacted the Urban Water Management Planning Act of 1983 (California Water Code Sections 10610 through 10656), which is intended to support conservation and efficient use of urban water supplies at the local level. The act required that every urban water supplier that provides water to 3,000 or more customers, or over 3,000 AF of water annually, to make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its customers during normal, dry, and multiple dry years. The Act requires that total projected water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single- and multiple-dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses.

Applicable urban water suppliers within California are required by the Water Code to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. A UWMP is required in order for a water supplier to be eligible for DWR-administered State grants, loans, and drought assistance. A UWMP provides information on water use, water resources, recycled water, water quality, reliability planning, demand management measures, best management practices (BMPs), and water shortage contingency planning for a specified service area or territory. The UWMPs for Cal Water and GSW were adopted in June 2021 and July 2021, respectively.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act (SGMA) of 2014,²⁴ passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.²⁵ The SGMA requires the formation of local groundwater sustainability agencies to assess local water basin conditions and adopt locally based management plans. Local groundwater sustainability agencies were required to be formed by June 30, 2017.

The SGMA provides 20 years for groundwater sustainability agencies to implement plans and achieve long-term groundwater sustainability, and protect existing surface water and groundwater rights. The SGMA provides local groundwater sustainability agencies with the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. Furthermore, the SGMA requires governments and water agencies of high and medium priority basins to stop overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under the SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For the basins that are critically over-drafted, the timeline is 2040. For the remaining high and medium priority basins, the deadline is 2042.

California Code of Regulations

Title 20

Title 20, Sections 1605.3 (h) and 1505(i) of the California Code of Regulations (CCR) establishes applicable state efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including

²⁴ Sustainable Groundwater Management Act [And Related Statutory Provisions from SB1168 (Pavley), AB1739 (Dickinson), and SB1319 (Pavley) as Chaptered], 2015 Amendments, effective January 1, 2019.

²⁵ California Department of Water Resources, 2025. SGMA Groundwater Management. <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>. Accessed February 2025.

fixtures such as showerheads, lavatory faucets, and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured on or after July 1, 2018, is 1.8 gallons per minute (gpm) at 80 pounds per square inch (psi); and lavatory faucets manufactured after July 1, 2016, is 1.2 gpm at 60 psi. The standard for toilets sold or offered for sale on or after January 1, 2016, is 1.28 gallons per flush.²⁶

CALGreen Code

Part 11 of Title 24, the title that regulates the design and construction of buildings, establishes the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or a positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code includes both mandatory measures as well as voluntary measures. The mandatory measures establish minimum baselines that must be met in order for a building to be approved. The mandatory measures for water conservation provide limits for fixture flow rates, which are the same as those for the Title 20 efficiency standards listed in the previous section. The voluntary measures can be adopted by local jurisdictions for greater efficiency.

Plumbing Code

Title 24, Part 5 of the CCR establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2019 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2020.

Executive Order B-37-16

In 2018 the California State Legislature enacted two policy bills: SB 606 and AB 1168 to establish a new foundation for long-term improvements in water conservation goals and drought planning to adapt to the longer and more intense droughts climate change is causing in California.

Collectively, these efforts provide a road map for all Californians to work together to ensure there is sufficient water now and in the future. The 2018 legislation applies to the actions of DWR, SWRCB, and water suppliers. DWR and SWRCB will work closely together to develop new standards for:

- Indoor residential water use standard will be 55 gallons per capita daily until January 2025; the standard will become stronger over time, decreasing to 50 gallons per capita daily in January 2030. For the water use objective, the indoor use is aggregated across population in an urban water supplier's service area, not each household;
- Outdoor residential water use standard will be based on land cover [landscaping], climate, and other factors, i.e., geography, pastures and other irrigated lands, or open space determined by the DWR and the SWRCB. The SWRCB will adopt the outdoor standard by June 2022;
- Commercial, industrial, and institutional water use for landscape irrigation with dedicated meters; and

²⁶ California Code of Regulations, Title 20, Section 1605.3(h).

- System water losses, formerly known as unaccounted for water.

Urban water suppliers must stay within annual water budgets based on these standards for their service areas. The 2018 legislation also supports drought planning. In urban areas, drought plans will be primarily led by local water suppliers. DWR and SWRCB will develop recommendations to strengthen drought planning in rural areas and areas served by small water systems by coordinating with counties and other stakeholders.

Executive Order B-40-17

Executive Order B-40-17 was issued on April 7, 2017. Cities and water districts throughout the state are required to report their water use each month and ban wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

Executive Order N-10-21

On July 8, 2021, Executive Order N-10-21 was issued calling for voluntary cutbacks of water usage by 15 percent from 2020 usage levels. The Order lists common sense measures Californians can undertake to achieve water usage reduction goals and identifies the SWRCB for tracking of monthly reporting on the state's progress.

Executive Order 7-77

On March 28, 2022, Governor Newsom issued Executive Order No. 7-77, meant to provide guidance on emergency drought relief. The Order states that the “21st century to date has been characterized by record warmth and predominantly dry conditions, and the 2021 meteorological summer in California and the rest of the western United States was the hottest on record” and “the ongoing drought will have significant, immediate impacts on communities with vulnerable water supplies, farms that rely on irrigation to grow food and fiber, and fish and wildlife that rely on stream flows and cool water.”

Within the Order, the Governor directed SWRCB to evaluate the adoption of regulations and the relaxations of permitting for drought positive measures. These regulations include banning irrigation of “non-functional” turf (or grass), such as decorative grass adjacent to large industrial and commercial buildings. The ban would not include residential lawns or grass used for recreation, such as school fields, sports fields and parks. Further, the Order asks SWRCB to prepare municipal water agencies for drought restrictive measures. More specifically, SWRCB asks these urban water suppliers to prepare to activate, at a minimum, Level 2 of their customized Water Shortage Contingency Plans. These plans are developed by local water agencies to navigate extreme drought and each plan is customized based on an agency's unique infrastructure and management. Triggering Level 2 of these plans involves implementing water conservation actions to prepare for a water shortage level of up to 20 percent.

Wastewater

California Emergency Graywater Regulations

In 2009, as part of the Governor's declared State of Emergency, Chapter 16A "Non-potable Water Reuse Systems" was incorporated into the 2007 California Plumbing Code. Chapter 16A establishes minimum requirements for the installation of graywater systems in residential occupancies regulated by the California Department of Housing and Community Development, providing guidance and flexibility designed to encourage the use of graywater. The standards allow small graywater systems to be installed in homes

without a construction permit, substantially reducing the barriers to installing small residential graywater systems in California. The purpose of the regulations is to conserve water by facilitating greater reuse of laundry, shower, sink, and similar sources of discharge for irrigation and/or indoor use; to reduce the number of noncompliant graywater systems by making legal compliance easily achievable; to provide guidance for avoiding potentially unhealthful conditions; and to provide an alternative way to relieve stress on private sewage disposal systems.

General Waste Discharge Requirement (Order No. 2006-0003)

On May 2, 2006, the SWRCB adopted a General Waste Discharge Requirement (WDR) (Order No. 2006-0003) for all publicly-owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a sewer system management plan.

Solid Waste/Recycling

California Department of Resources Recycling and Recovery

CalRecycle is the State's leading authority on recycling, waste reduction, and product reuse. CalRecycle plays an important role in the stewardship of California's vast resources and promotes innovation in technology to encourage economic and environmental sustainability. CalRecycle brings together the State's recycling and waste management programs and continues a tradition of environmental stewardship. Mandated responsibilities of CalRecycle are to reduce waste, promote the management of all materials to their highest and best use, and protect public health and safety and the environment

California Integrated Waste Management Act (AB 939)

Assembly Bill (AB) 939, California's Integrated Waste Management Act of 1989, mandated that 50 percent of solid waste be diverted by the year 2000 through source reduction, recycling, and composting. AB 939 also established a goal for all California counties to provide at least 15 years of ongoing landfill capacity. This requires each region to prepare a source reduction and recycling element to be submitted to CalRecycle, which administers programs formerly managed by the State's Integrated Waste Management Board and Division of Recycling.

California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327 was established in 1991, which required CalRecycle to develop a model ordinance for the adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects. IMC Title 8, Chapter 8.28, addresses the collection of recyclable materials.

Construction and Demolition Waste Materials Diversion Requirements

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in PRC Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required

that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004.²⁷

Disposal Measurement System Act of 2008

SB 1016 maintains the 50 percent diversion rate requirement established by AB 939, while establishing revised calculations for those entities who did not meet the 50 percent diversion rate. SB 1016 also established a per capita disposal measurement system to make the process of goal measurement, as established by AB 939, simpler, timelier, and more accurate. The new disposal based indicator—the per capita disposal rate—uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

Organic Recycling

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines “organic waste” as food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a “business” as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multifamily residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate four cubic yards or more of commercial solid waste per week also were required to arrange for organic waste recycling services. In October 2021, CalRecycle reduced this threshold to two cubic yards of solid waste (i.e., total of trash, recycling, and organics) per week generated by covered businesses.²⁸

Zero Waste California

Zero Waste California is a state program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste by maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

Solid Waste Diversion

Effective July 1, 2012, AB 341 requires that commercial enterprises that generate four cubic yards or more of solid waste weekly participate in recycling programs. This requirement also includes multifamily housing complexes of five units or more, regardless of the amount of solid waste generated each week. AB 341 is designed to reach California's recycling goal of 75 percent by the year 2020, and annually thereafter.

Organic Waste Reduction

Effective September 2016, SB 1383 established two organic waste disposal reduction targets tied to the 2014 baseline of 23 million tons of organic waste disposal and must be achieved by 2020 and 2025. The target is

²⁷ California Department of Resources Recycling and Recovery, 2025. Senate Bill 1374 (2002).

²⁸ California Department of Resources Recycling and Recovery, 2025. Mandatory Commercial Organics Recycling. <https://calrecycle.ca.gov/recycle/commercial/organics/>. Accessed February 2025.

set for 2020 at 50 percent organic waste reduction from 2014 baseline (11.5 million tons allowed landfill disposal of organic waste), and for 2025 at 75 percent organic waste reduction from 2014 baseline (5.75 million tons allowed landfill disposal of organic waste). The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Natural Gas

California Public Utilities Commission

The California Public Utilities Commission (CPUC) General Order 112E, which is based upon the Federal Department of Transportation Guidelines contained in Part 192 of the Federal Code of Regulations, specifies a variety of design, construction, inspection and notification requirements. The CPUC conducts annual audits of pipeline operations to ensure compliance with these safety standards. In addition, SoCalGas has a safety program which has reduced the risk of gas distribution fires by improving welds on the larger diameter (24- to 30-inch) pipelines and by replacing old distribution pipes with flexible plastic pipes. According to SoCalGas staff, high-pressure gas mains are common in developed areas throughout the country, and SoCalGas lines are inspected regularly and must comply with CPUC mandated safety requirements.

Electricity

California Energy Commission

The California Energy Commission (CEC) was created as the State's principal energy planning organization in 1974, in order to meet the energy challenges facing the State in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing State energy policy:

- Forecasting statewide electricity needs;
- Licensing power plants to meet those needs;
- Promoting energy conservation and efficiency measures;
- Developing renewable energy resources and alternative energy technologies;
- Promoting research, development, and demonstration; and
- Planning for and directing State response to energy emergencies.

Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings

Title 24, Part 6, of the California Code of Regulations (CCR) contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

Title 20, CCR, Sections 1601 et seq: Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

Assembly Bill 1890

The CPUC regulates investor-owned electric power and natural gas utility companies in the State of California. AB 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., SCE) was decoupled. All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The utilization of alternative energy applications in development projects, while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of State and federal tax credits, as well as reduced energy bills, provide a favorable basis.

California Independent System Operator

The California Independent System Operator (ISO) is an independent public benefit corporation responsible for operating California's long-distance electric transmission lines. California ISO is led by a five-member board appointed by the Governor and is also regulated by FERC. While transmission owners and private electric utilities own their lines, California ISO operates the transmission system independently to ensure that electricity flows comply with federal operational standards. California ISO analyzes current and future electrical demand and plans for any needed expansion or upgrade of the electric transmission system.

Regional

Water

Integrated Regional Water Management Plan

The Greater Los Angeles County Region Integrated Regional Water Management (GLACR IRWM) group serves as a collaborative entity that brings together multiple stakeholders, including government agencies, non-profits, and community groups to work towards cohesive and comprehensive water resource management in the Greater Los Angeles County region. The IRWM Plan, adopted in 2014, is a regional plan designed to improve collaboration in water resources management. The first IRWM Plan for GLACR IRWM was published in 2006 following a multi-year effort among water retailers, wastewater agencies, stormwater and flood managers, watershed groups, the business community, tribes, agriculture, and non-profit stakeholders to improve water resources planning in the Los Angeles Basin. It provides a mechanism for: 1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; 2) identifying specific regional and watershed-based priorities for implementation projects; and 3) providing funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders.

Metropolitan Water District Southern California 2020 Urban Water Management Plan of Southern California

Metropolitan Water District (MWD) of Southern California is a public agency and regional water wholesaler that is a voluntary cooperative of 26 member agencies that purchase some or all of their water from Metropolitan Water District of Southern California. The mission of Metropolitan Water District of Southern California is to provide its 5,200 square mile service area with adequate and reliable supplies of

high-quality water to meet present and future needs.²⁹ Metropolitan Water District of Southern California meets water demand through assessments of projected supply and demand through 2040 that are presented in Metropolitan Water District of Southern California's regional UWMP. These assessments consider projections for average year conditions, single dry year conditions, and multiple dry year conditions. The 2020 Regional UWMP shows that Metropolitan Water District of Southern California can provide reliable water supplies under all conditions through 2045.³⁰

MWD also prepares an Integrated Water Resources Plan (IRP) which is updated about every five years. The IRP anticipates how much water Southern California can expect from its imported and local supplies, and forecasts regional water demands. The most recent update to the IRP was published in 2020.³¹ The IRP includes a number of strategies to meet future water demand.

Solid Waste

County of Los Angeles Countywide Integrated Waste Management Plan

Pursuant to AB 939, each County is required to prepare and administer a ColWMP, including preparation of an Annual Report. The ColWMP is to comprise of the various counties' and cities' solid waste reduction planning documents, plus an Integrated Waste Management Summary Plan (Summary Plan) and a Countywide Siting Element. The Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The County's Department of Public Works is responsible for preparing and administering the Summary Plan and the Countywide Siting Element.

The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity. The most recent annual report, the CoIWMP 2020 Annual Report, published in October 2021, provides disposal analysis and facility capacities for 2020, as well as projections to the CoIWMP's horizon year of 2035. As stated in the CoIWMP 2020 Annual Report, the County is anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions. However, under other scenarios, including meeting CalRecycle's statewide disposal target, meeting Senate Bill 1383 organic waste disposal reduction targets, and all solid waste management options considered become available, a shortfall in disposal capacity is not expected to occur during this scenario during the horizon year of 2035.

Local

City of Irwindale General Plan

The City of Irwindale General Plan guides development in the City through a set of integrated policies and programs. The General Plan includes the following policies related to utilities:

²⁹ Metropolitan Water District of Southern California (MWD). 2024. *Achievements in Conservation, Recycling, and Groundwater Recharge*. February 2025.

³⁰ Metropolitan Water District of Southern California (MWD). 2021. *2020 Urban Water Management Plan*. June 2021.

³¹ Metropolitan Water District of Southern California (MWD). 2016. *Integrated Water Resources Plan 2015 Update*. Report No. 1518. January 2016.

Issue Area – Maintenance of Service Standards. City of Irwindale will continue to maintain the highest levels of public service to respond to the existing and future demands for such services.

The City of Irwindale will continue to cooperate with those utility providers in the City to ensure that sufficient infrastructure capacity is available to meet current and future service demands.

City of Irwindale Storm Water and Urban Runoff Prevention Ordinance

Chapter 8.28 of the of the Irwindale Municipal Code (IMC) codifies the City’s Storm Water and Urban Runoff Pollution Prevention Ordinance which includes regulations to protect and improve water quality of receiving waters by:³²

- Reducing illicit discharges to the municipal storm water system to the maximum extent practicable;
- Eliminating illicit connections to the municipal storm water system;
- Eliminating spillage, dumping, and disposal of pollutant materials into the municipal storm water system; and
- Reducing pollutant loads in storm water and urban runoff, from land uses and activities identified in the municipal National Pollutant Discharge Elimination System (NPDES) permit.

The regulations included in the Storm Water and Urban Runoff Pollution Prevention Ordinance are applicable to new development and redevelopment projects such as those that may be constructed under the Project.

4.14.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance and Methodology

Thresholds of Significance

The thresholds used to determine the significance of impacts related to utilities and service systems are based on Appendix G of the CEQA Guidelines. A project would have a significant impact related to utilities and service systems if the project would:

- Threshold UTL-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, the construction or relocation of which could cause significant environmental effects;
- Threshold UTL-2:** Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- Threshold UTL-3:** 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;

³² City of Irwindale. City of Irwindale. 2024. Irwindale Municipal Code, Chapter 8.28: Stormwater and urban runoff pollution. Website last updated June 5, 2024.
https://library.municode.com/ca/irwindale/codes/code_of_ordinances?nodeId=TIT8HESA_CH8.28STWAURRUPO. Accessed July 2024.

Threshold UTL-4: 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

Threshold UTL-5: Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Methodology

Potential impacts to utilities and service systems are discussed based on the CEQA significance thresholds included in Appendix G of the CEQA Guidelines as listed above. The analysis considers existing demand, provides projected demand based on growth that would occur under the Project, and compares the demand to the capacity.

Residential development projects that could result from implementation of the Project would be regulated by the various laws, regulations, and policies summarized above in Section 4.14.2, *Regulatory Setting*. Compliance with applicable federal, State, regional, and local laws and regulations is assumed in this analysis and local and State agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

Project Impact Analysis

Threshold UTL-1: The Project would have a significant impact to utilities and service systems if it would require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Impact UTL-1: Implementation of the Project would not result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, Project impacts would be less than significant.

Implementation of the Project would provide for future development, including the housing units on the five Housing Sites, that would result in an increase in demand for water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunications facilities. Individual projects may require utility infrastructure improvements to extend services to future project sites; however, all of the five Housing Sites are infill in nature and are in areas that have been urbanized and developed for many decades. Extension of utilities infrastructure would likely occur in existing adjacent roadways and, aside from short-term construction disturbance, would not result in any unusual or further environmental impacts than identified elsewhere in this Draft PEIR for overall construction activity associated with the Project. Individual projects developed under the Project would also pay applicable development and utility capacity fees to pay their fair share towards any necessary utility system facility upgrades.

The Project is projected to accommodate 1,008 new residents and 279 new housing units through the 2029 horizon year. These increases would result in an increased demand for water, wastewater treatment, storm drainage, electric power, natural gas, and telecommunication services which may require the construction

or relocation of facilities which could cause significant environmental impacts. Each service is discussed separately below.

Water

As discussed in Section 4.14.1, *Environmental Setting*, Azusa Light & Water, San Gabriel Valley Water Company, and Valley County Water District provide water services to the Housing Sites that could be developed under the Project. As discussed below in Threshold UTL-2, the City and local water providers have water conservation measures and programs to reduce water demand. While growth under the Project was not accounted for in the 2020 UWMP for each local water provider, Azusa Light & Water, San Gabriel Valley Water Company, and Valley County Water District would be required to account for this projected growth during the next UMWP update cycle in 2025.

Future development of the five Housing Sites that could be constructed under the Project would undergo environmental review, as necessary. In the event that additional facilities are required to serve the five Housing Sites, separate environmental analysis pertaining to each individual project would be required. As part of the environmental review process, project applicants would be required to ensure that each provider has sufficient capacity to provide water as specific development projects are proposed. Projects would also be subject to each providers' water connection fee, which pays for each project's fair share of capital facilities including those that serve the entire water systems such as the aqueducts and raw water facilities, regional facilities such as treatment plants and distribution facilities, and future water supply upgrades needed to meet long-term increases in water demand created by new customers.

In addition, development under the Project would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code requires that irrigation controllers be weather- or soil moisture-based and automatically account for rainfall or be attached to a rainfall sensor. Implementation of water conservation and efficiency measures would minimize the potable water demand generated and lessen the need for capacity or other improvements to the water system.

Wastewater

The City's Maintenance Division is responsible for ensuring that sanitation sewers are installed, repaired, and/or properly maintained. The City's local sewers discharge into larger facilities owned and maintained by the Los Angeles County Sanitation Districts for conveyance, treatment, and disposal. Future projects would rely on the existing wastewater network, which has sufficient capacity throughout the City. Furthermore, in order for the Los Angeles County Sanitation District, which would serve the five identified Housing Site, to conform to the requirements of the federal Clean Air Act, the capacities of wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All proposed expansions to facilities must be sized and service phased in a manner that would be consistent with SCAG's regional growth forecast.

In addition, future projects developed under the Project would be required to comply with all applicable federal, State, and local laws, regulations, and policies. Such regulations including, but are not limited to, the latest adopted edition of the California Plumbing Code and CALGreen Code, including the provisions for water-efficient fixtures and toilets, which would reduce the amount of effluent entering the wastewater

system. If future developments under the Project would require the construction and operation of new or expanded wastewater facilities, construction or expansion of such facilities would be subject to project-level environmental review in accordance with CEQA at the time it is proposed.

Stormwater

As discussed above, future development projects would undergo environmental review when proposed, as necessary. This process would ensure that the storm drainage systems within the City have adequate capacity to serve the specific proposed future projects. Future development under the Project would also be subject to stormwater connection fees, which funds improvements to existing drainage facilities and infrastructure and designating and constructing future drainage facilities and infrastructure resulting from the demand on the system created by development.

Development that would occur under the Project would be required to comply with the City's Storm Water and Urban Runoff Pollution Prevention Ordinance as contained in the IMC. The ordinance includes measures to control pollutants from construction activities as well as from residential development that could occur under the Project. Compliance with these requirements would reduce stormwater pollution and urban runoff.

Electricity, Natural Gas & Telecommunications

SCE provides electricity and SoCalGas provides natural gas to the City. Telecommunications services are provided by a variety of retailers including Verizon, AT&T, and T-Mobile. As discussed above, future development projects under the Project would be required to undergo environmental review when proposed. This process would ensure that adequate electricity, natural gas, and telecommunications facilities are provided at the time that specific development projects are proposed. New meter and service connections would be coordinated with the provider at the time that the new development is proposed. Furthermore, as discussed in Chapter 4.5, *Energy*, future development would be subject to a suite of programs and regulations that would reduce energy use during construction and operation of future projects under the Project.

Summary

All of the Housing Sites are infill in nature and are in areas that have been urbanized and developed for many decades. As such, it is not anticipated that environmental impacts would occur beyond those identified elsewhere in this Draft PEIR for overall construction activity associated with development under the Project. As such, the implementation of the Project would not require or result in the relocation or construction of new and expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The impact of the Project with respect to utility infrastructure would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities

Threshold UTL-2: The Project would have a significant impact to utilities and service systems if it would not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Impact UTL-2: The water providers serving the Housing Sites would have sufficient water supplies available to serve the developments and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, impacts would be less than significant.

The Project is projected to result in the development of 279 new housing units with an associated population growth of 1,008 new residents through the horizon year of 2029. This increase in development would result in an increase demand for potable water. As discussed above, the Housing Sites are served by Azusa Light & Water, San Gabriel Valley Water Company, and Valley County Water District. These purveyors obtain imported water on wholesale from the Upper San Gabriel Valley Metropolitan Water District. As stated in the Upper San Gabriel Valley Municipal Water District's UWMP, the Upper San Gabriel Valley Municipal Water District provides water service to an area with a current population of about 876,069 and its service area is projected to have a population of approximately 949,791 by 2045. These growth projections are based on the growth projections provided by SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The Upper San Gabriel Valley Municipal Water District's total water demands over the past 10 years have ranged from approximately 15,563 acre feet (af) to 52,410 af, with an average of 35,170 af. The Upper San Gabriel Valley Municipal Water District's water supply sources include treated imported water, untreated imported water, and recycled water. Upper San Gabriel Valley Municipal Water District's member agencies also rely on groundwater to meet their demands. The reliability of future supplies of imported water historically has been impacted by the sources of supply available to Metropolitan Water District of Southern California. As discussed in the UWMP, Metropolitan Water District of Southern California has sufficient water supplies to meet all of its member agencies projected supplemental demand for the next twenty years, even during five consecutive year drought periods.³³

In addition to importing water, water purveyors for the City obtain groundwater resources from the Main San Gabriel Basin. The Main San Gabriel Basin is managed by the Main Basin Watermaster. The Main San Gabriel Basin is replenished by stream runoff, rainfall, subsurface inflow from Raymond and Puente Basin, and return flow from water applied for overlying uses. The Main San Gabriel Basin is also replenished with imported water.³⁴ The Upper San Gabriel Valley Municipal Water District is one of the Responsible Agencies from which Watermaster purchases imported water to be used for groundwater replenishment. DWR Bulletin 118 does not identify the Main Basin as being in overdraft.³⁵

Furthermore, Azusa Light & Water, San Gabriel Valley Water Company, and Valley County Water District promote water conservation through rebates, retrofit programs, and conservation initiatives. In addition, as discussed under Impact UTL-1, development under the Project would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code

³³ Upper San Gabriel Valley Municipal Water District. 2021. *2020 Urban Water Management Plan*. Final. June 2021.

³⁴ Valley County Water District. 2021. *2020 Urban Water Management Plan*. June 2021.

³⁵ Upper San Gabriel Valley Municipal Water District. 2021. *2020 Urban Water Management Plan*. Final. June 2021.

requires that irrigation controllers be weather- or soil moisture-based and automatically account for rainfall or be attached to a rainfall sensor. Implementation of water conservation and efficiency measures would minimize the potable water demand generated and would ensure that new development associated with implementation of the proposed Project would establish water conservation features.

In the event of a water shortage, the Upper San Gabriel Valley Municipal Water District would rely on their Water Shortage Contingency Plan (WSCP), which are to be engaged in the case of a water shortage event, such as a drought or supply interruption. The WSCPs for the Upper San Gabriel Valley Municipal Water District includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage, and identifies a suite of shortage response actions to implement at each level.³⁶

For these reasons, sufficient water supply would be available to serve future development allowed under the Project during normal, dry, and multiple dry years. Therefore, the impact with respect to water supply would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Threshold UTL-3: The Project would have a significant impact to utilities and service systems if it would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact UTL-3: The Project would result in an increase in wastewater generated thereby increasing the demand for treatment. However, sufficient wastewater treatment capacity exists to serve the projected demand in addition to the provider's existing commitments. Therefore, impacts would be less than significant.

The Project would result in 279 new housing units that would accommodate 1,008 new residents through the horizon year of 2029. Future development would result in an increase in the generation of wastewater and demand for wastewater treatment capacity. As the demand for wastewater treatment capacity increases, there may be a need to increase wastewater conveyance and treatment facilities, the construction of which could cause environmental impacts.

As discussed above, wastewater generated within the City is treated at the San Jose Creek Water Reclamation Plant located adjacent to the City of Industry. San Jose Creek Water Reclamation Plant is operated by the Sanitation Districts of Los Angeles County and provides primary, secondary, and tertiary treatment and has a design capacity of 150 million gallons of wastewater per day (MGD), and treats up to 100 MGD. The San Jose Creek Water Reclamation Plant serves a residential population of 1,000,000 people

³⁶ Upper San Gabriel Valley Municipal Water District. 2021. *2020 Urban Water Management Plan*. Final. June 2021.

and currently processes an average of 58.5 mgd.³⁷ **Table 4.14-1, Projected Wastewater Generation**, shows that the Project would result in approximately 0.21 mgd (0.235 acre-feet per year [AFY]) by the horizon year of 2029.³⁸ Based on the 150 million mgd design capacity of the Sanitation Districts of Los Angeles County and the average 58.5 mgd capacity at the San Jose Creek Water Reclamation Plant, there is a remaining capacity of 149.79 mgd and 58.29 mgd, respectively. Given that the Project would generate approximately 0.21 mgd, the remaining treatment capacity at the Sanitation Districts of Los Angeles County and the San Jose Creek Water Reclamation Plant would be sufficient to accommodate the increase in wastewater demand generated by the development that would occur as a result of the Project, and no major improvements would be required.

**TABLE 4.14-1
PROJECTED WASTEWATER GENERATION**

Housing Sites	Targeted Housing Type	Quantity (Units)	Wastewater Generation Factor (gpd/unit) ^a	Total Wastewater Generation (gpd)	Total Wastewater Generation (mgd)
Site 1- Allen Drive ^c	Townhouse/Single Family ^b	120	260	31,200	0.031
Site 2- 12881 Ramona	Apts./Condos	21	195	4,095	0.004
Site 3- 13021 Ramona	Apts./Condos	84	195	16,380	0.164
Site 4- Gold Line Reliance II	Apts./Condos	21	195	4,095	0.004
Site 5- Irwindale/Padilla	Apts./Condos	21	195	4,095	0.004
	Townhomes	12	260	3,120	0.003
Project Total		279 units		62,985 gpd	0.21 mgd

NOTES: gpd = gallons per day; mgd = million gallons per day.

a. Wastewater generation factors provided in Table 1, Loadings for Each Class of Land Use, of the LACSDs' Will Serve Program Instructions. Available online at: <https://www.lacsd.org/home/showpublisheddocument/3644/637644575489800000>, accessed February 20, 2025.

b. The generation factor for single family is applied to be conservative.

c. To convert gpd to mgd, divide the number of gallons by 1,000,000.

SOURCE: ESA, 2025.

In addition, future development that would occur as a result of the Project would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. Implementation of water conservation and efficiency measures would reduce the wastewater generated.

Future development would implement water conservation measures that would reduce wastewater generation. Therefore, implementation of the Project would have a less than significant impact with respect to wastewater treatment capacity.

Mitigation Measures

None required.

³⁷ Los Angeles County Sanitation Districts. 2024. "San Jose Creek Water Reclamation Plant" [webpage]. <https://www.lacsd.org/services/wastewater-sewage/facilities/san-jose-creek-water-reclamation-plant>. Accessed March 2024.

³⁸ 0.21 million gallons per day x 365 days = 76.65 million gallons per year / 325,851 gallons in one acre-foot = 0.235 acre-feet per year (AFY).

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to adequate wastewater treatment capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

Threshold UTL-4: The Project would have a significant impact to utilities and service systems if it would generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Impact UTL-4: The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, Project impacts would be less than significant.

The Project would result in 279 new housing units and a projected population increase of 1,008 residents through the horizon year of 2029. Development and growth in the city would increase the generation of solid waste (both construction and operational waste) which could exceed state or local standards, exceed local infrastructure capacity, or otherwise impair the attainment of solid waste reduction goals.

Construction waste would be required to be diverted from landfills in accordance with the IMC Section 8.20.312. As required, a minimum of 75 percent of the nonhazardous construction and demolition debris from new development or redevelopment would be recycled and/or salvaged for reuse. Construction-related waste including, but not limited to, soil, asphalt, wood, paper, glass, plastic, metals, and cardboard would be disposed of in one of a number of inert debris engineered fill operations that are located throughout the county. Any contaminated soil that is found during excavation would be assumed to be disposed of in a facility that could accept such waste.

As shown in **Table 4.14-2, *Estimated Solid Waste Generation***, future development allowed under the Project would generate approximately 55 daily tons and 20,075 annual tons. Based on the 5,000 daily tons of solid waste processed at the City of Industry Recycling Facility and the new projected capacity of the new MRF in Irwindale with an annual diversion target of nearly 200,000 tons, there is a remaining capacity of 4,945 daily tons and 179,925 annual tons, respectively. The solid waste generated as a result of the Project would represent approximately 0.011 percent of the daily remaining capacity of the City of Industry Recycling Facility and 0.1 percent of the annual remaining capacity of the new Irwindale MRF.

**TABLE 4.14-2
ESTIMATED SOLID WASTE GENERATION**

Category	Net New	Disposal Rate ^{a,b} (pounds/person/day)	Solid Waste Generation (daily)		Annual Tons ^e
			Pounds/Capita/Day ^c	Tons ^d	
Residents ^c	1,008	109.13	110,003	55	20,075
Total			110,003	55	20,075

NOTES:

- CalRecycle. 2023a. Disposal Rate Calculator. Available online at: <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed February 20, 2025.
- CalRecycle. 2023b. Jurisdiction Diversion/Disposal Rate Detail. Available online at: <https://www2.calrecycle.ca.gov/LGCentral/%20DiversionProgram/JurisdictionDiversionDetail/220/Year/2023>, accessed March 4, 2025.
- 1008 new residents x 109.13 pounds/person/day = 110,003.04 = 110,003 pounds/capita/day (rounded).
- 110,003 pounds/capita/day / 2,000 pounds in one ton = 55.0015 = 55 tons (rounded).
- 55 daily tons x 365 days = 20,075 annual tons (rounded).

SOURCE: CalRecycle 2023a, 2023b; ESA, 2025.

In terms of landfill disposal capacity, Athens Services transports remaining waste from the MRF to landfills in San Bernardino County, including Barstow Landfill, Victorville Landfill, Mid-Valley (Rialto) Landfill, San Timoteo (Redlands) Landfill, and Landers Landfill. In addition, there are numerous State and local goals and efforts regarding waste reduction underway that would serve to reduce waste disposed of at landfills.

Consistent with IMC Section 8.20.312 and applicable State requirements, 75 percent of construction waste would be diverted from landfills. The diversion requirement may be met through direct facility recycling, reuse of the materials on site, or donation to reuse and salvage businesses. During operation, development facilitated by the Project would be required to comply with existing solid waste reduction requirements, including applicable federal, State and local solid waste statutes and regulations during operation. Compliance with existing policies and regulations, including the CALGreen building and State recycling and organic material diversion requirements, would reduce the non-renewable sources of solid waste, and minimize the solid waste disposal from development under the Project.

Although a precise quantity of construction and demolition debris cannot be specifically determined at this time, mandatory compliance with all applicable State and local regulations governing solid waste, source reduction, and recycling would reduce the amount of construction waste entering landfills. As a result, construction and operation of development projects facilitated by the Project are not expected to generate substantial amounts of solid waste. Therefore, construction and operation associated with development under the Project would not contribute excessive amounts of solid waste to landfills and would not impair the attainment of State-level or local waste reduction goals. The impact of the Project on solid waste during construction would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to 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.

Threshold UTL-5: The Project would have a significant impact to utilities and service systems if it would conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.

Impact UTL-4: The Project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

Future residential development that would occur under the Project would be required to comply with federal, State, and local solid waste reduction standards identified in Section 4.14.2, *Regulatory Setting*, such as the California Integrated Waste Management Act, AB 939, the CALGreen Code, AB 341 and AB 1826, and SB 1383. Athens Services is the waste hauler for the City and would serve future development that would occur under the Project. Athens Services assists with keeping the City in compliance with State-mandated recycling requirements (AB 341 and AB 1826), including the recycling of organics. As a result,

future development under the Project would not conflict with applicable waste reduction and diversion policies. Furthermore, future projects that are developed under the Project would be required to comply with the construction waste diversion requirements as included in the CALGreen Code. Therefore, implementation of the Project would be consistent with applicable federal, State, and local regulations related to solid waste and the impact would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation: Not applicable. The Project would result in less than significant impacts related to a conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste.

4.14.5 Cumulative Impacts Analysis

The Project, in combination with past, present, and reasonably foreseeable future projects in the vicinity would incrementally increase the demand for utilities and service systems. As discussed above, the Project would be served by existing utilities and service systems including water services, wastewater and stormwater infrastructure, electricity, natural gas, and telecommunication systems. Given there is sufficient capacity and the future developments would comply with applicable regulatory requirements, impacts would be less than significant. Similar to the future projects that could be constructed under the Project, cumulative development would be subject to capacity fees and applicable regulations that contribute to long-term utilities and capacity planning improvements. Therefore, when considered in the cumulative context, the Project impacts to utilities and service systems would not be cumulatively considerable and the cumulative impact of the Project would be less than significant.

CHAPTER 5

Alternatives

5.1 Introduction to Alternatives

The California Environmental Quality Act (CEQA) requires a lead agency to analyze a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic objectives of the project while substantially reducing or eliminating significant environmental impacts and evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The State CEQA Guidelines direct that the selection of alternatives be governed by “a rule of reason” (14 CCR 15126.6[a] and [f]). As defined by the State CEQA Guidelines (14 CCR 15126.6[f]):

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. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

Under these principles, an EIR needs to describe and evaluate only those alternatives necessary to permit a reasonable choice and “to foster meaningful public participation and informed decision making” (State CEQA Guidelines Section 15126.6[f]). Consideration of alternatives focuses on those that can either eliminate significant adverse environmental impacts or substantially reduce them. Alternatives considered in this context may include those that are costlier and those that could impede to some degree the attainment of the project objectives (Section 15126.6[b]). CEQA does not require that the alternatives be evaluated at the same level of detail as the proposed project. Rather, the discussion of alternatives must include sufficient information about each alternative to allow “meaningful evaluation, analysis, and comparison with the proposed project” (State CEQA Guidelines, Section 15126.6[d]).

The State CEQA Guidelines Section 15126.6 also requires an EIR to evaluate a “no project” alternative to allow decision-makers to compare impacts of approving a project with the impacts of not approving it. The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact “feasible.” The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Chapter 5.2, *Project Objectives*, below) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This chapter describes the key considerations used to identify and screen potential alternatives, explains why some potential alternatives were eliminated from further consideration, and describes the alternatives

that were carried forward for more detailed analysis. This chapter also compares the environmental impacts of the Project and alternatives evaluated in detail. This comparison is based on the analysis of environmental impacts of the Project, provided in Chapter 4, *Environmental Introduction and Impact Analysis*, and the alternatives that were carried forward for more detailed review in this chapter.

5.2 Project Objectives

The purpose of the Project is to implement the policies and programs included in the 2021–2029 Housing Element (Housing Element), Safety Element, and Environmental Justice (EJ) Element. The Project would replace the existing Housing and Safety Elements of the current General Plan and would add an EJ Element to the General Plan. The Zoning Code provides the mechanism to implement the City’s General Plan. The Project would also amend the zoning of the identified properties and the Municipal Code to allow the densities identified in the Housing Element Site Inventory.

The Project includes the following goals and objectives:

1. Facilitate new housing opportunities throughout the City in response to the State’s need for more affordable and market rate housing as well as develop housing solutions to meet the City’s 6th Cycle RHNA.
2. Meet the City’s housing needs by encouraging a variety of housing development affordable at all income levels, especially for extremely low- and very-low income households, including construction of Accessory Dwelling Units (ADUs), subdivision/lot split opportunity sites, and other housing choices on identified opportunity sites.
3. Reduce, remove, and/or streamline potential governmental constraints and barriers to housing development and promote equal housing opportunities for all people; incorporate best practices related to land use, racial equity, mobility, housing affordability, safety, environmental justice, community services, and healthy neighborhoods.
4. Affirmatively further fair housing to address special housing needs, primarily for seniors and people living with disabilities, promote fair housing choice, eliminate disparities in housing opportunities, and foster inclusive communities free from discrimination.
5. Embrace technology and innovative practices to create sustainable, energy efficient, and healthy communities and adaptable infrastructure systems.
6. Develop a Safety Element that meets all the requirements under Government Code Section 65302(g)(1) through (g)(9), and which reflects State and local regulations for specific hazards, with the intent of protecting people and key infrastructure from damage resulting from an environmental hazard.
7. Develop an Environmental Justice Element that meets all requirements under Government Code Sections 65302(h)(1) through 65302(h)(2), and which reflects State, and local regulations for evaluating environmental hazards, pollution, health risks and social challenges in disadvantaged communities.

5.3 Significant and Unavoidable Impacts

As evaluated throughout Chapter 4, *Environmental Impact Analysis*, of this Draft PEIR, the following impacts related to the City's Housing Element and General Plan Update (proposed Project or Project) have been determined to be significant and unavoidable after implementation of all feasible mitigation measures (MMs):

- **Air Quality (refer to Chapter 4.2, *Air Quality*, for detailed discussion)**

Significant and unavoidable impacts could occur with implementation of the Project, where development facilitated under the Project would result in direct and cumulative impacts related to conflicting or obstructing an applicable air quality plan, result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard, and expose sensitive receptors to substantial pollutant concentrations.

- **Cultural Resources (refer to Chapter 4.4, *Cultural Resources*, for detailed discussion)**

Significant and unavoidable impacts could occur with implementation of the Project, where development facilitated under the Project would result in direct, indirect, and cumulative impacts related to causing a substantial adverse change in the significance of a historic resource.

- **Noise (refer to Chapter 4.9, *Noise*, for detailed discussion)**

A significant and unavoidable impact could occur with implementation of the Project, where development facilitated under the Project would result in impacts related to construction noise associated with future projects developed under the Project.

5.4 Alternatives Considered and Rejected

The State CEQA Guidelines Section 15126.6(c) provides that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by State CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to a project, State CEQA Guidelines Section 15126.6(f)(1) states that 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.

In determining what alternatives should be considered in the Draft PEIR, it is important to acknowledge the objectives of the Project, the Project's significant effects, and unique Project considerations. In determining an appropriate range of Project alternatives to be evaluated in this Draft PEIR, two possible alternatives were initially considered and then rejected in accordance with the criteria established in Section 15126.6(c) of the State CEQA Guidelines. A description of each potential alternative considered but rejected along with the rationale for rejection is provided below.

5.4.1 Reduced Development Alternative

The City considered an alternative that would reduce or eliminate the number of candidate parcels proposed as Housing Sites, which would include zoning and land use overlays, as a way to reduce environmental impacts compared to the Project. However, the Reduced Development Alternative was rejected as it would not allow for the increase in designated residential uses throughout the City that is necessary to accommodate the City's share of the regional housing needs allocation (RHNA) established by the Southern California Association of Governments (SCAG) for the 6th Cycle Regional Housing Needs Assessment (RHNA). For this reason, the Reduced Development Alternative was considered but rejected from further evaluation within this Draft PEIR.

5.4.2 Increased Accessory Dwelling Units Alternative

The City considered an alternative that would rely on an increased amount of accessory dwelling units (ADU) to assist in meeting the City's 6th Cycle RHNA. However, this Alternative was rejected because the City has not had sufficient ADU developments in the past to rely on an increased amount of ADUs to reach the City's RHNA goal. Therefore, the Increased Accessory Dwelling Units Alternative was considered but rejected from further evaluation within this Draft PEIR.

5.5 Alternatives Selected for Further Analysis in this PEIR

This section discusses a reasonable range of alternatives to the Project, including a No Project Alternative, as required by State CEQA Guidelines Section 15126.6(e). The alternatives evaluated in this chapter have been formulated to reduce the magnitude of the Project's environmental impacts and to inform the decision-making process. The alternatives analyzed in this PEIR include the following:

- Alternative 1 – No Project Alternative
- Alternative 2 – Las Casitas Site Alternative
- Alternative 3 – Increased Area at Reliance II Site Alternative

Pursuant to Section 15126.6(d) of the State CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project Objectives would be substantially achieved.

5.5.1 Alternative 1: No Project Alternative

Alternative 1 Description

Section 15126.6(e) of the State CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the State CEQA Guidelines, the purpose of describing and analyzing a No Project Alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. As specified in Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan or policy or an ongoing operation, the No Project Alternative (Alternative 1) will be the continuation of the existing plan, policy, or operation into the future.

Therefore, the No Project Alternative, as required by the State CEQA Guidelines, analyzes the effects of not adopting and implementing the Housing Element Update as well as the adoption of the Safety and EJ Elements. Future development under the No Project Alternative would continue to be guided by the existing General Plan, current land use and zoning designations as well as existing policies. The No Project Alternative would result in the continuation of existing conditions and planned development within the City as no land use or zoning overlays would be processed under this alternative. No amendments to the General Plan, including the updated Housing and Safety Element and the creation of the EJ Element, would occur under this alternative.

Comparison of the Effects of Alternative 1 to the Project

Aesthetics

As discussed in Chapter 4.1, *Aesthetics*, implementation of the Project would result in less than significant impacts related to conflicts with applicable zoning and other regulations governing scenic quality. Future development under Alternative 1 would generally continue in a manner similar to the proposed Project though the five Housing Sites would not be developed with residential units and less residential units would be allowed under Alternative 1. Under Alternative 1, amendments to the Community Development Element and Land Use Map, including the proposed overlays, would not occur, and amendments to Title 17 of the Irwindale Municipal Code (IMC) and Zoning Map would also not occur. Under Alternative 1, the proposed Safety Element and EJ Element would not be implemented. For these reasons, Alternative 1 would result in less than significant impacts related to aesthetics, similar to the Project.

Air Quality

As discussed in Chapter 4.2, *Air Quality*, implementation of the Project would result in significant and unavoidable impacts to air quality (conflict with any applicable air quality plan, policy, or regulation, cumulatively considerable net increase of a criteria pollutant, and exposure of sensitive receptors to substantial pollutant concentrations).

Under Alternative 1, future development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations and the Safety Element and EJ Element would not be implemented. Similar to the Project, future development would be proposed and evaluated for environmental impacts on a project-by-project basis during the project entitlement process. During an individual environmental review process, potential air quality impacts would be identified and compared against relevant thresholds to determine significance. It is reasonable to assume that since future development under this Alternative would be consistent with the City's existing General Plan land use and zoning designations, future projects would also demonstrate consistency with the applicable air quality plans, policies, and regulations as those projects would result in growth already accounted for in SCAG's regional growth projections for the City. Therefore, impacts regarding conflicts with applicable air quality plans, policies, and regulations would be less than significant under Alternative 1, which would substantially reduce impacts compared to the Project.

Similar to the Project, even with mandatory compliance with CARB and SCAQMD rules regulations, it is possible that some future development projects could be large enough in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that

construction period emissions could exceed the SCAQMD significance thresholds under Alternative 1. Therefore, as with the Project, impacts would remain significant and unavoidable under Alternative 1.

Similar to the Project, construction of future developments under Alternative 1 may occur within close proximity to sensitive receptors. Because the exact nature, location, and operation of the future developments are unknown, quantification of potential health risks would be speculative. Therefore, impacts would remain significant and unavoidable under Alternative 1.

Similar to the Project, construction and operations under Alternative 1 would comply with all CARB and SCAQMD rules and regulations. Through adherence to mandatory compliance rules and regulations, Alternative 1 construction and operations would not create objectionable odors. Therefore, project-related construction and operational activities would not result in a significant air quality impact with respect to other emissions and impacts would remain less than significant under Alternative 1.

Biological Resources

As discussed in Chapter 4.3, *Biological Resources*, implementation of the Project would result in potentially significant impacts to critical habitat for southwestern willow flycatcher at Housing Site #4. Additionally, Housing Site #1 and #4 have a moderate potential to support Crotch's bumble bee, American bumble bee, and burrowing owl. Impacts would be reduced to a less than significant level with incorporation of MM BIO-1 through MM BIO-4. All other biological impacts would be less than significant, and no mitigation is required.

Under Alternative 1, the Safety Element and EJ Element would not be implemented. Under Alternative 1, future development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Any development on Sites #1 and #4 would have the potential to impact the biological resources discussed above, and therefore, impacts would remain the same under Alternative 1.

Cultural Resources

As discussed in Chapter 4.4, *Cultural Resources*, implementation of the Project would result in significant and unavoidable impacts related to a substantial adverse change in the significance of a historic resource, even with implementation of MM CUL-1. The Project would result in less than significant impacts to human remains, and less than significant impacts to archeological resources with implementation of MM CUL-2.

Under Alternative 1, the Safety Element and EJ Element would not be implemented. Under Alternative 1, future development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Even though future development would be consistent with the existing land use and zoning designations, future projects' potential to impact cultural resources would be determined on a site-by-site basis and would be evaluated during individual environmental review process in accordance with CEQA. Since a Project's potential to impact cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all federal, State and local requirements for protecting cultural resources. Similar to the Project, individual projects under Alternative 1 would also be required to incorporate and implement all feasible mitigation measures to

reduce impacts to cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, impacts to historic resources under Alternative 1 would remain significant and unavoidable and impacts to archeological resources and human remains would remain less than significant, similar to those identified for the Project.

Energy

As discussed in Chapter 4.5, *Energy*, implementation of the Project would result in less than significant impacts with respect to energy. Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. While future development projects would be constructed and operated in accordance with existing land use and zoning designations, these activities would still be regulated by the same laws, regulations, plans, and policies related to energy use and savings as the Project. Compliance with the existing energy laws, regulations, plans, and policies would mandate that future projects incorporate similar energy efficiency and saving designs and strategies for both the construction and operation phases. Under Alternative 1, the Safety Element and EJ Element would not be implemented. Therefore, future projects developed under Alternative 1 would result in less than significant impacts related to energy, similar to those identified for the Project.

Geology and Soils

As discussed in Chapter 4.6, *Geology and Soils*, implementation of the Project would result in less than significant impacts to paleontological resources with implementation of MMs GEO-1 through GEO-3. All other geological impacts were scoped out within the Initial Study. Under Alternative 1, the Safety Element and EJ Element would not be implemented. Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Similar to the Project, individual projects under Alternative 1 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to paleontological resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, future projects developed under Alternative 1 would result in less than significant impacts related to paleontological resources with mitigation incorporated, and therefore, impacts would remain the same under Alternative 1.

Greenhouse Gas Emissions

As discussed in Chapter 4.7, *Greenhouse Gas Emissions*, implementation of the Project would result in less than significant impacts with respect to greenhouse gas emissions (GHG). Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Even though future development would be consistent with the existing land use and zoning designations, future projects' potential to generate GHG emissions would be dependent on the construction and operation characteristics of individual projects, where impacts would be determined on a project-by-project basis and would be evaluated during an individual environmental review process in accordance with CEQA. Similar to the Project, if future development under Alternative 1 could demonstrate consistency with applicable GHG reduction plans, policies, and regulations, then impacts related to GHG emissions would be considered to be less than significant. Under Alternative 1, the Safety Element and EJ Element would not be implemented. Therefore, future projects developed under Alternative 1 would result in less than significant impacts related to greenhouse gas emission, similar to those identified for the Project.

Land Use and Planning

As discussed in Chapter 4.8, *Land Use and Planning*, implementation of the Project would result in less than significant impacts with respect to conflicting with any land use plan, policy or regulation. Under Alternative 1, development would occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Residential uses are not currently allowed at the identified Housing Sites under their existing land use and zoning designations. Alternative 1 would not add residential overlays to housing opportunity sites identified in the Draft 2021–2029 Housing Element to meet the RHNA goals for the City. Without the adoption of the 2021-2029 Housing Element the City would not be in compliance with the State requirements and the City would not implement the programs to increase housing to meet the 6th Cycle RHNA allocation. Alternative 1 would also not implement updates to the General Plan Community Development Element and Safety Element (previously named Public Safety Element) as well as the create a new EJ Element. All future development under this Alternative would occur under existing land use and zoning designations and would be developed as currently planned for in the adopted General Plan. Therefore, impacts related to conflict with the intent of regional plans or impacts that preclude the attainment of regional plans' primary goals would be significant under Alternative 1 and greater than under the Project.

Noise

As discussed in Chapter 4.9, *Noise*, implementation of the Project would result in less than significant impacts to noise with implementation of MM NOI-1 and MM NOI-2. However, impacts related to construction noise associated with future projects developed under the Project are considered significant and unavoidable.

Under Alternative 1, the Safety Element and EJ Element would not be implemented. Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Even though future development would be consistent with the existing land use and zoning designations, future projects' potential to generate excessive noise and vibration levels during construction and operation would be dependent on the construction and operation characteristics of individual projects and individual project sites. Noise and vibration impacts would be determined on a project-by-project basis and would be evaluated during their environmental review process in accordance with CEQA. If development projects can demonstrate compliance with the City's established noise and vibration thresholds, with or without mitigation measures incorporated, then impacts related to noise and vibration would be considered less than significant. However, similar to the Project, impacts related to construction noise associated with future projects developed under Alternative 1 are considered significant and unavoidable. Therefore, noise and vibration impacts would remain the same as the Project under Alternative 1.

Population and Housing

As discussed in Chapter 4.10, *Population and Housing*, while implementation of the Project would result in increases in density and development intensity and would result in population growth, this growth would not be unplanned and would be generally consistent with existing SCAG regional planning documents' assumptions regarding population growth. Therefore, impacts related to unplanned growth and displacement would be less than significant.

Under Alternative 1, development would occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Since development would occur in accordance with the current land use and zoning designation, development under Alternative 1 would not generate new unplanned population growth outside of what is currently planned for in the existing land use and zoning designation. Therefore, impacts related to unplanned population growth and removal of housing causing displacement would be less than significant under Alternative 1, similar to the Project. However, the severity of impacts would be less under this Alternative than the Project because implementation of Alternative 1 would not incorporate the proposed residential overlays as identified in the Housing Element to meet the RHNA goals for the City. Thus, population growth under this Alternative would continue as in existing conditions and would occur slower than under the Project.

Public Services

As discussed in Chapter 4.11, *Public Services*, implementation of the Project would result in less than significant impacts to public services. Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Higher residential densities would not occur under Alternative 1, and all residential development would continue to occur as currently planned under the existing General Plan, which would occur at a slower rate and at fewer sites than under the Project. Similar to the Project, all future development would also be required to pay all applicable development fees and taxes to support funding of public services in time as development occurs. In addition, all future development would be required to demonstrate consistency with the policies and processes related to public services contained in the adopted General Plan and other applicable regional planning documents. Therefore, impacts to public services would be less than significant under Alternative 1, similar to the Project. Under Alternative 1, the Safety Element and EJ Element would not be implemented.

While growth under Alternative 1 would occur at a slower rate than projected for the Project, which would in turn reduce future demands on existing public services, the reduction in development would also reduce the amount of development fees and taxes the City could use to provide additional services. For this reason, the severity of impacts associated with Alternative 1 would be similar as the Project since the slower growth balances out the reduction in available development fees and taxes used to provide for additional services.

Transportation

As discussed in Chapter 4.12, *Transportation*, implementation of the Project would result in less than significant impacts due to a conflict with a program, plan, ordinance, or policy addressing the circulation system, increase hazards due to a geometric design feature, and inadequate emergency access. The Project would result in potentially significant impacts regarding conflict with CEQA Guidelines Section 15064.3. However, implementation of Mitigation Measure MM TRA-1 would reduce impacts on VMT to a level less than significant. Under Alternative 1, the Safety Element and EJ Element would not be implemented. Development could occur in the same areas as the Project under Alternative 1 but would be in accordance with existing zoning and land use designations. Higher residential densities would not occur under Alternative 1 and all residential development would continue to occur as currently planned where population growth within the City would continue as currently projected. Even though future development facilitated under this Alternative would be consistent with the existing land use and zoning designations, future projects' potential to impact transportation would be dependent on the construction and operation characteristics of individual projects. Transportation impacts, especially VMT, would be determined on a

project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. Future development would be required to comply with all State and local requirements related to transportation. Since development under Alternative 1 would be governed by the City's General Plan, future projects would be subject to all applicable General Plan goals and policies identified for transportation as well as project specific mitigation measures to reduce potential impacts. It is speculative to assume that all future projects would be able to reduce their impacts to transportation to a less than significant level under Alternative 1 even with incorporation of all applicable mitigation measures and compliance with State and local requirements. Therefore, impacts to transportation under Alternative 1, specifically VMT impacts, would remain significant and unavoidable.

Tribal Cultural Resources

As discussed in Chapter 4.13, *Tribal Cultural Resources*, implementation of the Project would result in less than significant impacts to tribal cultural resources with implementation of MM CUL-2.

Under Alternative 1, development would occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Even though future development would be consistent with the existing land use and zoning designations, future projects' potential to impact tribal cultural resources would be determined on a site-by-site basis and would be evaluated during their individual environmental review process in accordance with CEQA. Since a Project's potential to impact tribal cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all federal, State and local requirements for protecting cultural resources, including conducting tribal consultation in accordance with AB 52 and SB 18, as necessary, prior to approving a project. AB 52 and SB 18 (as applicable) tribal consultation requirements would ensure that tribal cultural resources are properly identified and that mitigation measures are implemented to reduce impacts on these resources. Similar to the Project, individual projects under Alternative 1 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to tribal cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project (MM CUL-2). Under Alternative 1, the Safety Element and EJ Element would not be implemented. Therefore, Alternative 1 would result in less than significant impacts to tribal cultural resources. Impacts under this Alternative would be similar to those identified for the Project.

Utilities and Service Systems

As discussed in Chapter 4.14, *Utilities and Service Systems*, implementation of the Project would result in less than significant impacts to utilities and service systems. Under Alternative 1, development could occur in the same areas as the Project but would be in accordance with existing zoning and land use designations. Similar to the Project, development under Alternative 1 would not induce population growth beyond current City projections as development would be guided by the existing General Plan. Therefore, development would continue as in existing conditions and demand on utilities would incrementally increase in proportion to SCAG's population growth projections, which would ensure that utility providers would be able to continue to serve the City. Therefore, impacts to utilities and service systems would be less than significant, similar to the Project. Under Alternative 1, the Safety Element and EJ Element would not be implemented. While growth under Alternative 1 would occur at a slower rate than projected for the Project, which would in turn reduce future demands on existing utility and service systems, the reduction in development would also reduce the amount of development fees the utility providers could use to provide additional services.

For this reason, the severity of impacts associated with Alternative 1 would be similar as the Project since the slower growth balances out the reduction in available development fees used to provide for additional services.

Summary of Impacts under Alternative 1 Compared to the Project

Implementation of Alternative 1 would result in similar impacts for the majority of issue areas as identified for the Project, with the exception of air quality, land use and planning, population and housing, and transportation. Alternative 1 would reduce the air quality impact of conflicting with applicable air quality plans to a less than significant level because development would be consistent with the City's existing General Plan land use and zoning designations. Impacts related to population and housing would be lessened because Alternative 1 would not add the proposed residential overlays to the identified Housing Sites. However, Alternative 1 would have a greater land use and planning impact because Alternative 1 would not be able to meet the City's RHNA goal and would not implement the necessary Safety and EJ Elements.

5.5.2 Alternative 2: Las Casitas Site Alternative

Alternative 2 Description

Under the Las Casitas Site Alternative, an additional approximately 22,860 square-foot site would be included as an additional Housing Site. The Las Casitas site is located on the southern side of Arrow Highway between Ayon Avenue and Allen Drive. The Las Casitas site was formerly operated by Dominguez Construction Inc as contractor storage and has been vacant since 2021. The site is located just east of the Las Casitas Senior Housing complex. Alternative 2 would be able to accommodate an additional 12 units. With 12 units being relocated to the Las Casitas Site, Alternative 2 would reduce the amount of future development planned for Housing Sites 1 and 3 by 12 units.

Similar to the Project, Alternative 2 would include amendments to the City's General Plan and Zoning Code to implement the 2021–2029 Housing Element, would include updates to the Safety Element, and would include the creation of a new EJ Element.

Comparison of the Effects of Alternative 2 to the Project

Aesthetics

As discussed in Chapter 4.1, *Aesthetics*, implementation of the Project would result in less than significant impacts related to conflict with applicable zoning and other regulations governing scenic quality. Future development under Alternative 2 would generally continue in a manner similar to the proposed Project with the residential overlays and zoning overlays applied to the identified Housing Sites. Under Alternative 2, amendments to the Land Use Element and Land Use Map would occur in a manner similar to the Project, with the addition of the Las Casitas site. Additionally, amendments to Title 17 of the IMC and Zoning Map would occur in a manner similar to the Project, with the addition of the Las Casitas site. For these reasons, Alternative 2 would result in less than significant impacts related to aesthetics, similar to the Project.

Air Quality

As discussed in Chapter 4.2, *Air Quality*, implementation of the Project would result in significant and unavoidable impacts to air quality (conflict with any applicable air quality plan, policy, or regulation, cumulatively considerable net increase of a criteria pollutant, and exposure of sensitive receptors to substantial pollutant concentrations).

Under Alternative 2, future development would occur in the same areas as the Project with the addition of the Las Casitas site. Similar to the Project, future development would be proposed and evaluated for environmental impacts on a project-by-project basis during the project entitlement process. During the environmental review process, potential air quality impacts would be identified and compared against relevant thresholds to determine significance. It is reasonable to assume that future projects would have to demonstrate consistency with the applicable air quality plans, policies, and regulations. Therefore, impacts with conflicting with applicable air quality plans, policies, and regulations would remain significant and unavoidable under Alternative 2, similar to the Project.

Similar to the Project, even with mandatory compliance with CARB and SCAQMD rules regulations, it is possible that some future development projects could be large enough in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that construction period emissions could exceed the SCAQMD significance thresholds under Alternative 2. Therefore, impacts would remain significant and unavoidable under Alternative 2.

Similar to the Project, construction and operation of future developments under Alternative 2 may occur within close proximity to sensitive receptors. Because the exact nature, location, and operation of the future developments are unknown, quantification of potential health risks would be speculative. Therefore, impacts would remain significant and unavoidable under Alternative 2.

Similar to the Project, construction and operations under Alternative 2 would comply with all CARB and SCAQMD rules and regulations. Through adherence to mandatory compliance rules and regulations, Alternative 2 construction and operations would not create objectionable odors. Therefore, project-related construction and operational activities would not result in a significant air quality impact with respect to other emissions and impacts would remain less than significant under Alternative 2.

Biological Resources

As discussed in Chapter 4.3, *Biological Resources*, implementation of the Project would result in potentially significant impacts to critical habitat for southwestern willow flycatcher at Housing Site #4. Additionally, Housing Site #1 and #4 have a moderate potential to support Crotch's bumble bee, American bumble bee, and burrowing owl. Impacts would be reduced to a less than significant level with incorporation of MMs AQ-1 through AQ-4. All other biological impacts would be less than significant, and no mitigation is required for those impacts.

Under Alternative 2, future development would occur in the same areas as the Project and would also include the Las Casitas Site. Future development would be reduced at Housing Site #1, and although the Las Casitas Site has not been analyzed for biological resources, the site is fully developed and has very low likelihood to contain sensitive biological resources. Therefore, with implementation of MMs BIO-1 through BIO-4, impacts under Alternative 2 would be similar to the Project. Although the Las Casitas site has fewer

biological resources onsite or in the vicinity, the other Housings Sites would still be developed. Therefore, similar to the Project, biological impacts would be less than significant with incorporation of mitigation measures.

Cultural Resources

As discussed in Chapter 4.4, *Cultural Resources*, implementation of the Project would result in significant and unavoidable impacts related to a substantial adverse change in the significance of a historic resource, even with implementation of MM CUL-1. The Project would result in less than significant impacts to human remains, and less than significant impacts to archeological resources after implementation of MM CUL-2.

Under Alternative 2, future development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar to the Project, future projects' potential to impact cultural resources would be determined on a site-by-site basis and would be evaluated during their individual environmental review process in accordance with CEQA. Since a Project's potential to impact cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all federal, State and local requirements for protecting cultural resources. Similar to the Project, individual projects under Alternative 2 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, impacts to historic resources under Alternative 2 would remain significant and unavoidable and impacts to archeological resources and human remains would remain less than significant, similar to those identified for the Project.

Energy

As discussed in Chapter 4.5, *Energy*, implementation of the Project would result in less than significant impacts with respect to energy. Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Construction and operation activities would still be regulated by the same laws, regulations, plans, and policies related to energy use and savings as the Project. Compliance with the existing energy laws, regulations, plans, and policies would mandate that future projects incorporate similar energy efficiency and saving designs and strategies for both the construction and operation phases. Therefore, future projects developed under Alternative 2 would result in less than significant impacts related to energy, similar to those identified for the Project.

Geology and Soils

As discussed in Chapter 4.6, *Geology and Soils*, implementation of the Project would result in less than significant impacts to paleontological resources with implementation of MMs GEO-1 through GEO-3. All other geological impacts were scoped out within the Initial Study. Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar to the Project, individual projects under Alternative 2 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to paleontological resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, future projects developed under Alternative 2 would result in less than significant impacts related to paleontological resources with mitigation incorporated, and therefore, impacts would remain the same as under the Project.

Greenhouse Gas Emissions

As discussed in Chapter 4.7, *Greenhouse Gas Emissions*, implementation of the Project would result in less than significant impacts with respect to GHG. Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar to the Project, future projects' potential to generate GHG emissions would be dependent on the construction and operation characteristics of individual projects, where impacts would be determined on a project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. Similar to the Project, if future development under Alternative 2 could demonstrate consistency with applicable GHG reduction plans, policies, and regulations, then impacts related to GHG emissions would be considered to be less than significant. Therefore, future projects developed under Alternative 2 would result in less than significant impacts related to GHG emission, similar to those identified for the Project.

Land Use and Planning

As discussed in Chapter 4.8, *Land Use and Planning*, implementation of the Project would result in less than significant impacts with respect to conflicts with any land use plan, policy or regulation. Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar to the Project, Alternative 2 would implement the Draft 2021-2029 Housing Element of the City's General Plan and it would add residential overlays to housing opportunity sites identified within the Draft 2021–2029 Housing Element to meet the RHNA allocation for the City. Alternative 2 would also implement updates to the General Plan Community Development Element and Safety Element (previously named Public Safety Element) as well as the create a new EJ Element. Therefore, impacts related to conflict with the intent of regional plans or impacts that preclude the attainment of regional plans' primary goals would be less than significant under Alternative 2, similar to the Project.

Noise

As discussed in Chapter 4.9, *Noise*, implementation of the Project would result in less than significant impacts to noise with implementation of MM NOI-1 and MM NOI-2. However, impacts related to construction noise associated with future projects developed under the Project are considered significant and unavoidable.

Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar to the Project, future projects' potential to generate excessive noise and vibration levels during construction and operation would be dependent on the construction and operation characteristics of individual projects and individual project sites. Noise and vibration impacts would be determined on a project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. If development projects can demonstrate compliance with the City's established noise and vibration thresholds, with or without mitigation measures incorporated, then impacts related to noise and vibration would be considered to be less than significant. However, similar to the Project, impacts related to construction noise associated with future projects developed under Alternative 2 are considered significant and unavoidable. Therefore, noise and vibration impacts under Alternative 2 would be similar to the Project, but would be slightly increased due to the addition of the sensitive receptor of the Las Casitas Senior Complex.

Population and Housing

As discussed in Chapter 4.10, *Population and Housing*, while implementation of the Project would result in increases in density and development intensity which could result in population growth, this growth would not be unplanned and would be generally consistent with existing SCAG regional planning documents' assumptions regarding population growth. Therefore, impacts related to unplanned growth and displacement would be less than significant.

Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Since future development would occur in a manner similar to the Project, development under Alternative 2 would not generate new unplanned population growth outside of what is currently planned for in the SCAG regional planning documents. Therefore, impacts related to unplanned population growth and removal of housing causing displacement would be less than significant under Alternative 2, similar to the Project. Additionally, implementation of Alternative 2 would incorporate the proposed residential overlays as identified in the Housing Element to meet the RHNA goals for the City. Thus, population growth under this Alternative would be similar to the Project.

Public Services

As discussed in Chapter 4.11, *Public Services*, implementation of the Project would result in less than significant impacts to public services. Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar residential densities would occur under Alternative 2 and residential development would continue to occur as currently planned under the Project, which would occur at the same rate as the Project. Similar to the Project, all future development would also be required to pay all applicable development fees and taxes to support funding of public services in time as development occurs. In addition, all future development would be required to demonstrate consistency with the policies and processes related to public services contained in the Project and other applicable regional planning documents. Therefore, impacts to public services would be less than significant under Alternative 2, similar to the Project.

Transportation

As discussed in Chapter 4.12, *Transportation*, implementation of the Project would result in less than significant impacts due to a conflict with a program, plan, ordinance, or policy addressing the circulation system, increase hazards due to a geometric design feature, and inadequate emergency access. The Project would result in potentially significant impacts regarding conflict with CEQA Guidelines Section 15064.3. However, implementation of Mitigation Measure MM TRA-1 would reduce impacts on VMT to a level less than significant.

Under Alternative 2, development would occur in the same areas as the Project and would also include the Las Casitas Site. Similar residential densities would occur under Alternative 2 and residential development would continue to occur as currently planned under the Housing Element Update, which would occur at the same rate as the Project. Similar to the Project, future projects' potential to impact transportation would be dependent on the construction and operation characteristics of individual projects. Transportation impacts, especially VMT, would be determined on a project-by-project basis and would be evaluated during the individual environmental review process in accordance with CEQA. Future development would be required to comply with all State and local requirements related to transportation. Future projects under Alternative

2 would be subject to all applicable General Plan goals and policies identified for transportation as well as project specific mitigation measures to reduce potential impacts. Even with incorporation of all applicable mitigation measures and compliance with State and local requirements, it is speculative to assume that all future projects would be able to reduce their impacts to transportation to a less than significant level under Alternative 2. However, since 12 units would be diverted to the Las Casitas Site, the amount of potential units at Sites 1 and 3 would be reduced under Alternative 2, which in turn would lower VMT at the sites that are currently above the threshold. Therefore, impacts to transportation would be less than significant, but less than those identified for the Project.

Tribal Cultural Resources

As discussed in Chapter 4.13, *Tribal Cultural Resources*, implementation of the Project would result in less than significant impacts to tribal cultural resources with implementation of MM CUL-2.

Under Alternative 2, development would occur in the same areas as the Project and would include the Las Casitas Site. Similar to the Project, future projects' potential to impact tribal cultural resources would be determined on a site-by-site basis and would be evaluated during their individual environmental review process in accordance with CEQA. Since a Project's potential to impact tribal cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all federal, State and local requirements for protecting cultural resources, including conducting tribal consultation in accordance with AB 52 and SB 18, as necessary, prior to approving a project. AB 52 and SB 18 (as applicable) tribal consultation requirements would ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. Similar to the Project, individual projects under Alternative 2 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to tribal cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project (MM CUL-2). Therefore, Alternative 2 would result in less than significant impacts to tribal cultural resources. Impacts under this Alternative would be similar to those identified for the Project.

Utilities and Service Systems

As discussed in Chapter 4.14, *Utilities and Service Systems*, implementation of the Project would result in less than significant impacts to utilities and service systems. Under Alternative 2, development would occur in the same areas as the Project and would include the Las Casitas Site. Similar to the Project, development under Alternative 2 would not induce population growth beyond SCAG projections as development would be guided by SCAG's RHNA allocation for the City. Therefore, development would continue as in existing conditions and demand on utilities would incrementally increase in proportion to SCAG's population growth projections, which would ensure that utility providers would be able to continue to serve the City. Therefore, impacts to utilities and service systems would be less than significant, similar to the Project.

Summary of Impacts of Alternative 2 Compared to the Project

Implementation of Alternative 2 would result in similar impacts for the majority of issue areas as identified for the Project, with the exception of transportation. Alternative 2 would lessen the impacts to transportation because it would reduce the planned density at Housing Sites 1 and 3.

5.5.3 Alternative 3: Increased Area at Reliance II Site Alternative

Alternative 3 Description

Under Alternative 3, Housing Site 4 (also called Gold Line Reliance II) would be expanded from one acre to a two-acre site that would be able to accommodate an additional 20 housing units. With 20 units being relocated to Housing Site 4, Alternative 3 would reduce the amount of future development planned for Housing Sites 1 and 3. The increase in units at Housing Site 4 will shift 20 units from Housing Sites 1 and 3, while maintaining an estimated total capacity of 279 housing units. The geographical shift in units would provide an increased number of units in closer proximity to public transit.

Similar to the Project, Alternative 3 would include amendments to the City's General Plan and Zoning Code to implement the City's 6th Cycle Housing Element, would include updates to the Safety Element, and would include the creation of a new EJ Element.

Comparison of the Effects of Alternative 3 to the Project

Aesthetics

As discussed in Chapter 4.1, *Aesthetics*, implementation of the Project would result in less than significant impacts related to conflict with applicable zoning and other regulations governing scenic quality. Future development under Alternative 3 would generally continue in a manner similar to the proposed Project. Under Alternative 3, amendments to the Land Use Element and Land Use Map would occur in a manner similar to the Project, but with an expanded area at Housing Site 4. Additionally, amendments to Title 17 of the IMC and Zoning Map would occur in a manner similar to the Project, with an expanded Housing Site 4. For these reasons, Alternative 3 would result in less than significant impacts related to aesthetics, similar to the Project.

Air Quality

As discussed in Chapter 4.2, *Air Quality*, implementation of the Project would result in significant and unavoidable impacts to air quality (conflict with any applicable air quality plan, policy, or regulation, cumulatively considerable net increase of a criteria pollutant, and exposure of sensitive receptors to substantial pollutant concentrations).

Under Alternative 3, future development would occur in the same areas as the Project with an expanded Housing Site 4. Similar to the Project, future development would be proposed and evaluated for environmental impacts on a project-by-project basis during the project entitlement process. During its individual environmental review process, potential air quality impacts would be identified and compared against relevant thresholds to determine significance. It is reasonable to assume that future projects would have to demonstrate consistency with the applicable air quality plans, policies, and regulations. Therefore, impacts associated with conflicting with applicable air quality plans, policies, and regulations would remain significant and unavoidable under Alternative 3, similar to the Project.

Similar to the Project, even with mandatory compliance with CARB and SCAQMD rules regulations, it is possible that some future development projects could be large enough in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that

construction period emissions could exceed the SCAQMD significance thresholds under Alternative 3. Therefore, impacts would remain significant and unavoidable under Alternative 3.

Similar to the Project, construction and operation of future developments under Alternative 3 may occur within close proximity to sensitive receptors. Because the exact nature, location, and operation of the future developments are unknown, quantification of potential health risks would be speculative. Therefore, impacts would remain significant and unavoidable under Alternative 3.

Similar to the Project, construction and operations under Alternative 3 would comply with all CARB and SCAQMD rules and regulations. Through adherence to mandatory compliance rules and regulations, Alternative 3 construction and operations would not create objectionable odors. Therefore, project-related construction and operational activities would not result in a significant air quality impact with respect to other emissions and impacts would remain less than significant under Alternative 3.

Biological Resources

As discussed in Chapter 4.3, *Biological Resources*, implementation of the Project would result in potentially significant impacts to critical habitat for southwestern willow flycatcher at Housing Site #4. Additionally, Housing Site #1 and #4 have a moderate potential to support Crotch's bumble bee, American bumble bee, and burrowing owl. Impacts would be reduced to a less than significant level with incorporation of MMs BIO-1 through BIO-4. All other biological impacts would be less than significant, and no mitigation is required.

Under Alternative 3, future development would occur in the same areas as the Project with an expanded Housing Site 4. While future development would be reduced at Housing Site #1, the larger area at Housing Site 4 could result in more severe impacts, even with implementation of MMs BIO-1 through BIO-4. Therefore, biological impacts would be less than significant under Alternative 3, but greater than the Project.

Cultural Resources

As discussed in Chapter 4.4, *Cultural Resources*, implementation of the Project would result in significant and unavoidable impacts related to a substantial adverse change in the significance of a historic resource, even with implementation of MM CUL-1. The Project would result in less than significant impacts to human remains, and less than significant impacts to archeological resources after implementation of MM CUL-2.

Under Alternative 3, future development would occur in the same areas as the Project with a larger area for Housing Site 4. Similar to the Project, future projects' potential to impact cultural resources would be determined on a site-by-site basis and would be evaluated during their individual environmental review process in accordance with CEQA. Since a Project's potential to impact cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all federal, State and local requirements for protecting cultural resources. Similar to the Project, individual projects under Alternative 3 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, impacts to cultural resources under Alternative 3 would

remain significant and unavoidable and impacts to archeological resources and human remains would remain less than significant, similar to those identified for the Project.

Energy

As discussed in Chapter 4.5, *Energy*, implementation of the Project would result in less than significant impacts with respect to energy. Under Alternative 3, development would occur in the same areas as the Project with an expanded Housing Site 4. Construction and operation activities would still be regulated by the same laws, regulations, plans, and policies related to energy use and savings as the Project. Compliance with the existing energy laws, regulations, plans, and policies would mandate that future projects incorporate similar energy efficiency and saving designs and strategies for both the construction and operation phases. Therefore, future projects developed under Alternative 3 would result in less than significant impacts related to energy, similar to those identified for the Project.

Geology and Soils

As discussed in Chapter 4.6, *Geology and Soils*, implementation of the Project would result in less than significant impacts to paleontological resources with implementation of MMs GEO-1 through GEO-3. All other geological impacts were scoped out within the Initial Study. Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar to the Project, individual projects under Alternative 3 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to paleontological resources, which could include but would not be limited to the same mitigation measures identified for the Project. Therefore, future projects developed under Alternative 3 would result in less than significant impacts related to paleontological resources with mitigation incorporated, similar to those identified for the Project.

Greenhouse Gas Emissions

As discussed in Chapter 4.7, *Greenhouse Gas Emissions*, implementation of the Project would result in less than significant impacts with respect to GHG. Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Future projects' potential to generate GHG emissions would be dependent on the construction and operation characteristics of individual projects, where impacts would be determined on a project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. Similar to the Project, if future development under Alternative 3 could demonstrate consistency with applicable GHG reduction plans, policies, and regulations, then impacts related to GHG emissions would be considered to be less than significant. Therefore, future projects developed under Alternative 3 would result in less than significant impacts related to greenhouse gas emission, similar to those identified for the Project.

Land Use and Planning

As discussed in Chapter 4.8, *Land Use and Planning*, implementation of the Project would result in less than significant impacts with respect to conflicts with any land use plan, policy or regulation. Under Alternative 3, development would occur in the same areas as the Project with an expanded Housing Site 4. Similar to the Project, Alternative 3 would implement the 2021-2029 Housing Element of the City's General Plan and it would add residential overlays to housing opportunity sites identified in the 2021–2029 Housing Element to meet the RHNA goals for the City. Alternative 3 would also implement updates to the General Plan Community Development Element and Safety Element (previously named Public Safety

Element) as well as the new EJ Element. Therefore, impacts related to conflict with the intent of regional plans or preclude the attainment of regional plans' primary goals would be less than significant under Alternative 3, similar to the Project.

Noise

As discussed in Chapter 4.9, *Noise*, implementation of the Project would result in less than significant impacts to noise with implementation of MM NOI-1 and MM NOI-2. However, impacts related to construction noise associated with future projects developed under the Project are considered significant and unavoidable.

Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar to the Project, future projects' potential to generate excessive noise and vibration levels during construction and operation would be dependent on the construction and operation characteristics of individual projects and individual project sites. Noise and vibration impacts would be determined on a project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. If development projects can demonstrate compliance with the City's established noise and vibration thresholds, with or without mitigation measures incorporated, then impacts related to noise and vibration would be considered to be less than significant. However, similar to the Project, impacts related to construction noise associated with future projects developed under Alternative 3 are considered significant and unavoidable. Therefore, noise and vibration impacts under Alternative 3 would remain the same as the Project.

Population and Housing

As discussed in Chapter 4.10, *Population and Housing*, while implementation of the Project would result in increases in density and development intensity which could result in population growth, this growth would not be unplanned and would be generally consistent with existing SCAG regional planning documents' assumptions regarding population growth. Therefore, impacts related to unplanned growth and displacement would be less than significant.

Under Alternative 3, development would occur in the same areas as the Project with an expanded Housing Site 4. Since future development would occur in a manner similar to the Project, development under Alternative 3 would not generate new unplanned population growth outside of what is currently planned for in the SCAG regional planning documents. Therefore, impacts related to unplanned population growth and removal of housing causing displacement would be less than significant under Alternative 3, similar to the Project. Additionally, implementation of Alternative 3 would incorporate the proposed residential overlays as identified in the Housing Element to meet the RHNA goals for the City. Thus, population growth under this Alternative would be similar to the Project.

Public Services

As discussed in Chapter 4.11, *Public Services*, implementation of the Project would result in less than significant impacts to public services. Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar residential densities would occur under Alternative 3 and residential development would continue to occur as currently planned under the Housing Element Update, which would occur at the same rate as the Project. Similar to the Project, all future development would also be required to pay all applicable development fees and taxes to support funding of public

services in time as development occurs. In addition, all future development would be required to demonstrate consistency with the policies and processes related to public services contained in the Project and other applicable regional planning documents. Therefore, impacts to public services would be less than significant under Alternative 3, similar to the Project.

Transportation

As discussed in Chapter 4.12, *Transportation*, implementation of the Project would result in less than significant impacts due to a conflict with a program, plan, ordinance, or policy addressing the circulation system, increase hazards due to a geometric design feature, and inadequate emergency access. The Project would result in potentially significant impacts regarding conflict with CEQA Guidelines Section 15064.3. However, implementation of Mitigation Measure MM TRA-1 would reduce impacts on VMT to a level less than significant.

Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar residential densities would occur under Alternative 3 and residential development would continue to occur as currently planned under the Housing Element Update, which would occur at the same rate as the Project. Similar to the Project, future projects' potential to impact transportation would be dependent on the construction and operation characteristics of individual projects. Transportation impacts, especially VMT, would be determined on a project-by-project basis and would be evaluated during their individual environmental review process in accordance with CEQA. Future development would be required to comply with all federal, State and local requirements related to transportation. Future projects under Alternative 3 would be subject to all applicable General Plan mitigation measures identified for transportation as well as project specific mitigation measures to reduce potential impacts. Even with incorporation of all applicable mitigation measures and compliance with federal, State and local requirements, it is speculative at this time to assume that all future projects would be able to reduce their impacts to transportation to a less than significant level under Alternative 3. However, since 20 units would be transferred to Housing Site 4, the number of potential units at Sites 1 and 3 would be reduced under Alternative 3, which in turn would lower VMT since Housing Site 4 is in close proximity to the Gold Line Irwindale station. Therefore, impacts to transportation under Alternative 3, specifically VMT, would be less than significant, but less than those identified for the Project.

Tribal Cultural Resources

As discussed in Chapter 4.13, *Tribal Cultural Resources*, implementation of the Project would result in less than significant impacts to tribal cultural resources with implementation of MM CUL-2.

Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar to the Project, future projects' potential to impact tribal cultural resources would be determined on a site-by-site basis and would be evaluated during their individual environmental review process in accordance with CEQA. Since a Project's potential to impact tribal cultural resources is site-dependent, future development under this Alternative would have the same potential to impact cultural resources as the Project. Future development under this Alternative would also be required to comply with all Federal, State and local requirements for protecting cultural resources, including conducting tribal consultation in accordance with AB 52 and SB 18, as necessary, prior to approving a project. AB 52 and SB 18 (as applicable) tribal consultation requirements would ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. Similar

to the Project, individual projects under Alternative 3 would also be required to incorporate and implement all feasible mitigation measures to reduce impacts to tribal cultural resources, which could include but would not be limited to the same mitigation measures identified for the Project (MM CUL-2). Therefore, Alternative 3 would result in less than significant impacts to tribal cultural resources. Impacts under this Alternative would be similar to those identified for the Project.

Utilities and Service Systems

As discussed in Chapter 4.14, *Utilities and Service Systems*, implementation of the Project would result in less than significant impacts to utilities and service systems. Under Alternative 3, development would occur in the same areas as the Project but with an expanded Housing Site 4. Similar to the Project, development under Alternative 3 would not induce population growth beyond SCAG projections as development would be guided by SCAG's RHNA allocation for the City. Therefore, development would continue as in existing conditions and demand on utilities would incrementally increase in proportion to SCAG's population growth projections, which would ensure that utility providers would be able to continue to serve the City. Therefore, impacts to utilities and service systems would be less than significant, similar to the Project.

Summary of Impacts of Alternative 3 Compared to the Project

Implementation of Alternative 3 would result in similar impacts for the majority of issue areas as identified for the Project, with the exception of biological resources and transportation. Alternative 3 would result in a less than significant impact to biological resources but would be slightly greater than the Project because Site 4 was identified as being potentially significant to biological resources. Alternative 3 would lessen the impacts to transportation because it would reduce the planned density at Housing Sites 1 and 3; however, impacts to VMT would remain significant and unavoidable.

5.6 Summary of Alternatives to the Proposed Project

The Project and Alternatives are considered and evaluated within this Draft PEIR. As suggested in State CEQA Guidelines Section 25126.6(d), a matrix summarizing and comparing the impacts of the Alternatives with those of the Project has been included in **Table 5-1, *Summary of Alternative Impacts Compared to the Proposed Project***, below. As illustrated in Table 5-1, Alternative 1 would reduce one significant and unavoidable Project impact (air quality) while Alternative 2 and 3 would result in the same significant and unavoidable impacts as the Project. However, Alternative 1 would result in a significant and unavoidable land use and planning impact as the City would not adopt the 2021-2029 Housing Element and amend the General Plan and zoning designations necessary to implement the Housing Element resulting in the City not being in compliance with State requirements.

In addition, **Table 5-2, *Ability of Alternatives to Meet Project Objectives***, compares the Project Alternatives in terms of whether the alternative would meet the Project's objectives. As shown in the table below, Alternatives 2 and 3 would be able to fully achieve the Project's Objectives.

TABLE 5-1
SUMMARY OF ALTERNATIVE IMPACTS COMPARED TO THE PROPOSED PROJECT

Issue Areas	Proposed Project	Alternatives to the Proposed Project		
		Alternative 1: No Project	Alternative 2: Las Casitas Site	Alternative 3: Increased Area at Reliance II Site
4.1 Aesthetics	LTS	=	=	=
4.2 Air Quality	SU	▼ ▼	=	=
4.3 Biological Resources	LTSM	=	=	▲
4.4 Cultural Resources	SU	=	=	=
4.5 Energy	LTS	=	=	=
4.6 Geology and Soils	LTSM	=	=	=
4.7 GHG Emissions	LTS	=	=	=
4.8 Land Use and Planning	LTS	▲ ▲	=	=
4.9 Noise	SU	=	▲	=
4.10 Population and Housing	LTS	▼	=	=
4.11 Public Services	LTS	=	=	=
4.12 Transportation	LTSM	▲ ▲	▼	▼
4.13 Tribal Cultural Resources	LTSM	=	=	=
4.14 Utilities and Service Systems	LTS	=	=	=

NOTES:

- ▲ ▲ Alternative would result in greater issue area impacts when compared to the Project and the difference would be significant.
 ▲ Alternative would result in greater issue area impacts when compared to the Project; however, this difference would be negligible and would not change the significance conclusion.
 = Alternative would result in similar issue area impacts when compared to the Project.
 ▼ Alternative would result in reduced issue area impacts when compared to Project; however, this difference would be negligible and would not change the significance conclusion.
 ▼ ▼ Alternative would result in reduced issue area impacts when compared to the Project and the difference would be significant.
 NI = No Impact.
 LTS = Less than Significant Impact; No Mitigation is Required.
 LTSM = Less than Significant Impact with Mitigation.
 SU = Significant and Unavoidable Impact.

5.6.1 Environmentally Superior Alternative

As stated in the State CEQA Guidelines, an EIR must identify an “environmentally superior” alternative and if the No Project Alternative is identified as environmentally superior, then the EIR is required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As shown in the tables above, the No Project Alternative would reduce the Project’s significant and unavoidable air quality impact but would not meet any of the Project’s Objectives. Therefore, this alternative is not the environmentally superior alternative.

TABLE 5-2
ABILITY OF ALTERNATIVES TO MEET PROJECT OBJECTIVES

Project Objectives	Alternative 1: No Project	Alternative 2: Las Casitas Site	Alternative 3: Increased Area at Reliance II Site
Objective 1: Facilitate new housing opportunities throughout the City in response to the State's need for more affordable and market rate housing as well as develop housing solutions to meet the City's 6th Cycle RHNA.	No	Yes	Yes
Objective 2: Meet the City's housing needs by encouraging a variety of housing development affordable at all income levels, especially for extremely low- and very-low income households, including construction of Accessory Dwelling Units (ADUs), subdivision/lot split opportunity sites, and other housing choices on identified opportunity sites.	No	Yes	Yes
Objective 3: Reduce, remove, and/or streamline potential governmental constraints and barriers to housing development and promote equal housing opportunities for all people; incorporate best practices related to land use, racial equity, mobility, housing affordability, safety, environmental justice, community services, and healthy neighborhoods.	No	Yes	Yes
Objective 4: Affirmatively further fair housing to address special housing needs, primarily for seniors and people living with disabilities, promote fair housing choice, eliminate disparities in housing opportunities, and foster inclusive communities free from discrimination.	No	Yes	Yes
Objective 5: Embrace technology and innovative practices to create sustainable, energy efficient, and healthy communities and adaptable infrastructure systems.	No	Yes	Yes
Objective 6: Develop a Safety Element that meets all the requirements under Government Code Section 65302(5), and which reflects State and local regulations for specific hazards, with the intent of protecting people and key infrastructure from damage resulting from an environmental hazard.	No	Yes	Yes
Objective 7: Develop an Environmental Justice Element that meets all requirements under Government Code Sections 65302(h)(1) through 65302(h)(2), and which reflects State, and local regulations for evaluating environmental hazards, pollution, health risks and social challenges in disadvantaged communities.	No	Yes	Yes

Alternative 2 and 3 would result in similar impacts and would achieve the Project objectives. However, Alternative 3 would not reduce any of the Project's significant and unavoidable impacts to a less than significant level. Alternative 3 would have more severe biological impacts due to Housing Site 4 being identified as having moderate potential for special status species. Alternative 3 would also not reduce any of the Project's significant and unavoidable impacts to a less than significant level and would not have any increased impacts for the other issue areas. Alternative 2 would result in similar impacts to all other issue areas as compared to the Project. Therefore, Alternative 2 would be considered the environmentally superior alternative.

CHAPTER 6

Other CEQA Considerations

This chapter addresses environmental topics required by the California Environmental Quality Act (CEQA) that are not covered within the other chapters of this Draft Program Environmental Impact Report (Draft PEIR), including: significant unavoidable impacts; irreversible environmental changes; growth inducing impacts; potential secondary effects related to Project mitigation measures; and environmental effects found not to be significant. In addition, reasons for implementation of the Project, notwithstanding potentially significant unavoidable impacts identified, are addressed in this chapter.

6.1 Significant and Unavoidable Impacts

CEQA Guidelines Section 15126.2(a) requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less-than-significant level. The environmental effects of the proposed Housing Element and General Plan Update (proposed Project or Project), along with recommended mitigation measures, are discussed in detail in Chapter 4, *Environmental Impact Analysis*, of this Draft PEIR and summarized in the Executive Summary. The Project would result in the following significant unavoidable impacts.

6.1.1 Air Quality

The Project would result in a potentially significant impact related to a conflict with or obstruction of the applicable air quality plan due to growth that could exceed demographic assumptions for the City of Irwindale. While implementation of mitigation would serve to reduce the severity of the effects, the impacts would remain significant and unavoidable.

The Project would result in a cumulatively considerable net increase of criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. While implementation of mitigation would serve to reduce the severity of the effects, this impact would remain significant and unavoidable.

The Project would result in a potentially significant impact related to exposing sensitive receptors to substantial pollutant concentrations during construction. While implementation of mitigation measures would serve to reduce the severity of the effects, construction impacts would remain significant and unavoidable.

The cumulative analysis of air quality impacts follows SCAQMD's guidance such that construction or operational Project emissions would be considered cumulatively considerable if Project-specific emissions exceed an applicable SCAQMD recommended significance threshold. Future development that may occur under the Project may result in construction or operational emissions that could exceed the SCAQMD

significance thresholds. Implementation of Mitigation Measure(s) MM AQ-1 through MM AQ-6 would help to reduce the severity of the impacts. However, even with implementation of these measures, the cumulative impact would remain significant and unavoidable.

6.1.2 Cultural Resources

The Project would result in a potentially significant impact related to causing a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Future development proposals initiated under the Project that include construction, demolition, or alteration of buildings/structures/objects/landscape features have the potential to cause a substantial adverse change to historical resources as defined by CEQA Guidelines Section 15064.5. Implementation of MM CUL-1 would reduce the severity of this impact. However, it is impossible to know if future development would avoid substantial adverse impacts on historical resources without information on specific future projects. Therefore, even with the implementation of MM CUL-1, this impact would remain significant and unavoidable.

With regard to potential cumulative impacts, the City has not been subject to a comprehensive citywide historic resources survey and all historic-age structures are potential historical resources. Therefore, there is the possibility that future development under the Project could adversely affect historical resources and there is uncertainty that all impacts on historical resources can be mitigated to less than significant levels. Therefore, even with implementation of General Plan policies, as well as applicable regulations, and MM-CUL-1, the Project could contribute to a cumulatively significant impact to historic resources.

6.1.3 Noise

The Project would result in a potentially significant impact due to the generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Future development under the Project has the potential to exceed the significance threshold during construction. Implementation of MM NOI-1 would reduce the future construction noise impacts. However, even with implementation of MM NOI-1, impacts would be significant and unavoidable.

6.2 Reasons the Project is Being Proposed Notwithstanding its Significant Unavoidable Impacts

In addition to identification of the Project's significant unavoidable impacts, Section 15126.2(c) of the State CEQA Guidelines requires a description of the reasons why a Project is being proposed, notwithstanding significant unavoidable impacts associated with the Project. The reasons why the Project has been proposed are grounded in the underlying purpose of the Project and the Project's basic objectives, both of which are identified in Chapter 2, Project Description, of this Draft PEIR. As identified therein, the underlying purpose of the Project is to implement the policies and programs included in the 2021-2029 Housing Element, Safety Element, and Environmental Justice (EJ) Element.

As discussed above, the Project would result in significant and unavoidable impacts with respect to air quality, cultural resources (historic), and noise. However, notwithstanding these significant and unavoidable environmental impacts, the Project is proposed so that the City has an updated Housing

Element that includes implementation programs identified to help the City meet its 6th Cycle RHNA. The Project also includes updates to the City's Safety Element (previously named the Public Safety Element) to implement the Housing Element and reflect recent changes in State law as well as the creation of a new EJ Element. The Housing Element Update specifically guides the evolution of land use patterns to accommodate affordable housing growth through infill development and redevelopment. The Project would achieve the following benefits:

1. Facilitate new housing opportunities throughout the City in response to the State's need for more affordable and market rate housing as well as develop housing solutions to meet the City's 6th Cycle RHNA.
2. Meet the City's housing needs by encouraging a variety of housing development affordable at all income levels, especially for extremely low- and very-low income households, including construction of Accessory Dwelling Units (ADUs), subdivision/lot split opportunity sites, and other housing choices on identified opportunity sites.
3. Reduce, remove, and/or streamline potential governmental constraints and barriers to housing development and promote equal housing opportunities for all people; incorporate best practices related to land use, racial equity, mobility, housing affordability, safety, environmental justice, community services, and healthy neighborhoods.
4. Affirmatively further fair housing to address special housing needs, primarily for seniors and people living with disabilities, promote fair housing choice, eliminate disparities in housing opportunities, and foster inclusive communities free from discrimination.
5. Embrace technology and innovative practices to create sustainable, energy efficient, and healthy communities and adaptable infrastructure systems.
6. Develop a Safety Element that meets all the requirements under Government Code Section 65302(g)(1) through (g)(9), and which reflects State and local regulations for specific hazards, with the intent of protecting people and key infrastructure from damage resulting from an environmental hazard.
7. Develop an Environmental Justice Element that meets all requirements under Government Code Sections 65302(h)(1) through 65302(h)(2), and which reflects State, and local regulations for evaluating environmental hazards, pollution, health risks and social challenges in disadvantaged communities.

6.3 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires a discussion of a proposed project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This includes consideration of projects that would remove obstacles to population growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. Under CEQA, growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth is considered a significant impact only if it can be demonstrated that the potential growth, in some other way, significantly affects the environment. In general, a project may foster physical, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project results in the urbanization of land in a remote location (i.e., leapfrog development);

- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area);
- The project establishes a precedent-setting action that could lead to physical adverse changes in the environment (e.g., a change in zoning or general plan amendment approval);
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc.).

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure, such as sewer and water facilities or roadways, or encourage premature or unplanned growth.

6.3.1 Population and Housing Growth

As discussed in Chapter 4.10, *Population and Housing*, of this Program EIR, Irwindale's 2021 population was estimated to be 1,441 people. As part of the General Plan Update process, the City projects an increase in population of approximately 1,008 people, which translates to an approximately 70 percent increase in growth. As discussed in Chapter 4.8, *Land Use and Planning*, and Chapter 4.10, existing land uses within the City include the Santa Fe Dam (31.58 percent); active and inactive quarries and plants (26.82 percent); truck/equipment storage yards (5.67 percent); industrial uses (7.6 percent); commercial uses (1.5 percent); office and business park uses (1.35); residential uses (1 percent); and civic, institutional, and other public uses (10.45 percent). Vacant parcels account for approximately 5.38 percent of the City's total land area. Under the Project, no significant land use changes would occur in the City other than the proposed land use and zoning overlays. These overlays would allow for the residential development as indicated in the 2021-2029 Housing Element to be constructed on Housing Sites 1 through 5 thereby increasing population and housing within the City. Implementation of the Project would generally facilitate residential development in areas that are either currently vacant or are developed with non-residential uses. This development would be consistent with the goals and policies of the Housing Element intended to balance increased intensity of use and housing throughout the City. Future residential development facilitated by the Project would be planned in accordance with the Housing Element, and therefore would not result in substantial unplanned population growth.

As the potential growth in the City under the Project consists of infill development and new residential and mixed-use opportunities on properties identified in the Housing Sites Inventory, the Project would not result in urbanization of land in remote locations. Development allowed under the Project would locate housing within the City and would constitute redevelopment of areas already served by infrastructure and would not require extensions of utilities, roads, or other infrastructure. As no new major roads or highways have been proposed to provide new access to the City, the Project would not remove an impediment to growth. Instead, development allowed under the Project would accommodate growth that will occur in the Southern California region, as anticipated by SCAG projections for the City. Therefore, the Project would not be growth inducing or set new precedent for growth but would involve development in anticipation of expected growth in the City.

6.3.2 Employment Growth

Implementation of the Project would generate short-term employment opportunities during construction activities associated with future development. The Project would not be considered growth inducing as future development allowed under the Project would draw from the existing supply of construction workers in the Southern California workforce. The Project would result in an increase in housing within the City and therefore would not provide employment opportunities.

6.3.3 Removal of Obstacles to Growth

The Project encourages the reuse and intensification of previously developed areas of the City rather than the extension of urban development into undeveloped areas of the City. Development under the Project would occur for areas of the City that are developed and are served by a network of roadways, electricity, water, sewer, storm drain and other infrastructure sized to accommodate or allow for existing and planned growth. Minor connections would be needed to accommodate new development allowed under the Project. Since no new major roads or highways would be implemented to provide new access to the City, the Project would not facilitate development in any undeveloped areas where development could not already occur under existing City plans or ordinances. Instead, the Project would result in infill development and mixed-use opportunities to provide more housing units within proximity of jobs and services. Therefore, the Project would not result in the removal of obstacles to growth that would result in growth-inducing development.

6.4 Significant Irreversible Environmental Effects

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Specifically, Section 15126.2(d) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Construction activities related to future development facilitated by the proposed Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment, and energy used in manufacturing construction materials. The proposed Project would involve the use of building materials and energy, some of which are non-renewable resources, to construct future development facilitated by the proposed Project. Because the proposed Project does not in and of itself propose individual development projects, it is not possible to estimate the size of each subsequent development project or the amount of resources and non-renewable energy they would consume. However, consumption of these resources would occur with any development in the region and are not unique to the proposed Project. As discussed in Chapter 4.5, *Energy*, use of such resources would not be unusual as compared to common construction projects and would not substantially affect the availability of such resources.

Once constructed, the proposed Project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands of the proposed Project. Development facilitated by the proposed Project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Consequently, development facilitated by the proposed Project, would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Again, consumption of these resources would occur with any development in the region and is not unique to the proposed Project.

Resources that would be consumed as a result of operation of future development facilitated by the proposed Project include water. However, as discussed in Chapter 4.14, *Utilities and Service Systems*, the amount and rate of water consumption would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources.

The proposed Project would also require a commitment of law enforcement and fire protection public services. However, as discussed in Chapter 4.11, *Public Services*, impacts associated with public services would not be significant.

Additional vehicle trips associated with the proposed Project would incrementally increase local traffic and regional air pollutant and GHG emissions. As discussed in Chapter 4.2, *Air Quality*, development and operation of the Project would generate air quality emissions that may result in a potentially significant impact. However, impacts from the Project associated with GHG emissions and transportation would not result in a less than significant impact with incorporation of mitigation measures discussed in Chapter 4.7, *Greenhouse Gas Emissions* and Chapter 4.12, *Transportation*.

6.5 Potential Secondary Effects Related to Project Mitigation Measures

CEQA Guidelines Section 15126.4(a)(1)(D) requires that if a mitigation measure proposed to address the significant effects of the Project would cause one or more significant effects in addition to those caused by the Project, the effects of the mitigation measure shall be discussed but, in less detail, than the significant effects of the Project. Accordingly, the mitigation measures proposed to address significant Project impacts were evaluated to determine if significant secondary impacts associated with their implementation would occur. The following provides a discussion of the subject areas in which mitigation measures are required, as well as any potential secondary significant effects that could occur as a result of their implementation. For the reasons stated below, implementation of the Project mitigation measures would not result in significant secondary impacts.

6.5.1 Air Quality

Mitigation Measures MM AQ-1 and MM AQ-2 require that construction projects use equipment meeting the USEPA Tier 4 final emissions standards for diesel-powered equipment over 50 horsepower, and maintain an equipment list for verification; and use Low-VOC or Super-Compliant VOC architectural and industrial maintenance coatings to keep emissions below the SCAQMD significance threshold. In addition, Mitigation Measures MM AQ-3 through MM AQ-5 require that new development projects must install Energy Star-certified appliances or equivalent energy-efficient appliances; incorporate electric vehicle charging infrastructure as specified in the CALGreen Code; and provide preferential parking for low-emitting vehicles and install facilities to support future electric vehicle charging. Furthermore, Mitigation Measure MM AQ-6 requires new development projects within 1,320 feet of sensitive land uses to submit a construction-related air quality study to the City of Irwindale Planning Department before a building permit is issued, which evaluates potential localized construction-related air quality impacts and, specifically assessing criteria air pollutants, and evaluates potential health risk impacts related to air quality during construction.

These mitigation measures for air quality would implement emissions control strategies during construction and operation that would reduce impacts. However, even with implementation of Mitigation Measures MM AQ-1 and MM AQ-2, the growth projections under the Project would exceed the current SCAG growth forecast for the City of Irwindale and impacts would be significant and unavoidable. In addition, implementation of Mitigation Measures MM AQ-1 through MM AQ-5 would reduce impacts with respect to a cumulatively considerable increase of a criteria pollutant for which the region is non-attainment under an applicable federal or State air quality standard; however, impacts would remain significant and unavoidable. Lastly, implementation of Mitigation Measures MM AQ-6 and MM AQ-7 would help reduce the severity of impacts with respect to the exposure of sensitive receptors to substantial pollutant concentrations during construction and operations due to potential development generating substantial emissions in proximity to sensitive receptors.

Since the air quality mitigation measures are designed to reduce or avoid impacts, these mitigation measures would not result in significant secondary impacts on the environment.

6.5.2 Biological Resources

Mitigation Measures MM BIO-1 through MM BIO-3 require that all measures aim to protect specific species (bumble bees, burrowing owls, and nesting birds); prepare a habitat assessment by a qualified biologist to determine the presence or suitability of habitats for the species in question, conduct surveys to determine the presence or absence of the species; with ongoing monitoring to ensure protection during construction activities; if the species are detected, implement measures to avoid or minimize disturbances, such as establishing buffer zones or altering construction scheduled; and prepare and submit reports to review and approved by relevant authorities, ensuring compliance with established protocols. Lastly, Mitigation Measure MM BIO-4 requires that prior to approval of the Housing Site #4, a qualified biologist must assess for jurisdictional aquatic resources, which should be delineated and avoided during construction. If avoidance isn't possible, obtain necessary permits and implement a 2:1 ratio of mitigation measures for impacted resources.

These mitigation measures for biological resources would implement protection strategies during construction and operation that would reduce impacts on wildlife, and impacts would be reduced to a level less than significant with their implementation. As a result, these mitigation measures would not result in significant secondary impacts on the environment.

6.5.3 Cultural Resources

Mitigation Measure MM CUL-1 requires that, before developing, projects that may affect properties older than 45 years and subject to CEQA review, the project proponent must hire a qualified architectural historian. This historian will conduct a historic resources assessment, including a records search, field survey, and technical report. Identified historic resources will be evaluated for potential direct or indirect effects, and recommendations for mitigation will be provided. The City will use CEQA thresholds to determine the impact on historical resources and require appropriate mitigation if significant impacts are likely. In addition, Mitigation Measure MM CUL-2 require a project proponent to hire a qualified archaeologist to conduct an archaeological resources assessment. This includes a records search, a Sacred Lands File search, a pedestrian field survey, and a subsurface investigation. Identified archaeological resources will be assessed for potential direct or indirect effects, and recommendations for protection or mitigation will be provided. The assessment must be documented in a technical report, and significant resources must be evaluated before the City's approval of project plans.

Mitigation Measure MM CUL-1 would help to reduce the severity of impacts on historical resources without information on specific future projects. However, even with implementation of this measure, the impact would remain significant and unavoidable. In addition, Mitigation Measure MM CUL-2 would reduce impacts with respect to archaeological resources during construction and impacts would be less than significant.

Since the cultural mitigation measures are designed to reduce or avoid impacts, these mitigation measures would not result in significant secondary impacts on the environment.

6.5.4 Geology and Soils – Paleontological Resources

Mitigation Measure MM GEO-1 requires hiring a qualified paleontologist to prepare a paleontological resources assessment report and monitor ground-disturbing activities based on sensitivity levels. In addition, MM GEO-2 requires paleontological resources sensitivity training for all construction workers before beginning such activities. Lastly, MM GEO-3 ensures that if fossils are discovered, activities are temporarily diverted, appropriate buffer zones are established, and a paleontological salvage program is implemented for significant finds. These measures collectively aim to protect and manage paleontological resources during construction, ensuring compliance with professional standards and regulatory requirements. These mitigation measures would ensure impacts on paleontological resources and impacts would be reduced to a level less than significant. Based on the above, further impacts would not occur with implementation of the above mitigation measures. Therefore, these mitigation measures would result in no significant secondary impacts on the environment.

6.5.5 Noise

Mitigation Measure MM NOI-1 requires a noise study for new development projects within 500 feet of noise-sensitive receptors to ensure construction noise complies with the City's Noise Ordinance. Noise-reduction measures, such as installing sound barriers and equipping construction equipment with mufflers, must be incorporated and implemented during construction. In addition, Mitigation Measure MM NOI-2 requires a vibration impact evaluation for new development projects within 300 feet of groundborne vibration receptors, listing construction equipment and predicting potential vibration impacts. If standards are exceeded, project-specific measures must be implemented to ensure compliance.

Implementation of Mitigation Measure MM NOI-1 would reduce the potentially significant construction-related impacts from a substantial temporary increase in ambient noise levels in the vicinity of the future development projects. However, even with implementation of Mitigation Measure NOI-1, construction noise impacts could exceed the significant thresholds and impacts would be significant and unavoidable. In addition, implementation of Mitigation Measure MM NOI-2 would reduce the severity of the impacts to excessive groundborne vibration or groundborne noise, and impacts would be reduced to a level less than significant.

Based on the above, further environmental impacts would not occur with implementation of the above mitigation measures. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

6.5.6 Transportation

Mitigation Measure MM TRA-1 requires demonstration of compliance with VMT screening criteria identified within the City's Guidelines for Housing Sites 1, 3, and 5. The criteria includes limits on floor area ratio, parking limitations, consistency with the applicable Sustainable Communities Strategy, and inclusion of affordable residential units. Implementation of MM TRA-1 and compliance with the City's Guidelines for VMT screening would reduce potentially significant VMT impacts to a level of less than significant.

Based on the above, further impacts would not occur with the implementation of the above mitigation measure. Therefore, the mitigation measure would not result in significant secondary impacts on the environment.

6.5.7 Tribal Cultural Resources

As discussed above in Chapter 6.5.3, Mitigation Measure MM CUL-2 requires a project proponent to hire a qualified archaeologist to conduct an archaeological resources assessment. This includes a records search, a Sacred Lands File search, a pedestrian field survey, and a subsurface investigation. Identified archaeological resources will be assessed for potential direct or indirect effects, and recommendations for protection or mitigation will be provided. The assessment must be documented in a technical report, and significant resources must be evaluated before the City's approval of project plans. Implementation of MM CUL-2 would not result in a significant secondary environmental impact.

6.6 Effects Found Not to Be Significant

CEQA Guidelines Section 15128 states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a Project were determined not to be significant and were not discussed in detail in the Draft EIR. This section discusses those issue areas that were determined not to require further analysis in this Draft PEIR. For further discussion of these issues and more detailed evaluation of potential impacts found not to be significant refer to the Initial Study provided in Appendix A of this Draft PEIR.

As noted in the Initial Study, the Project includes updates to the Safety Element, which would provide additional consistency with the 2021–2029 Housing Element and conform with recent State legislation and guidelines. The Project also includes the addition of an EJ Element, which would address the unique or compounded health risks in disadvantaged communities, serve to promote civic engagement in the public decision-making process, and prioritize improvements and programs that address the needs of these disadvantaged communities. The Safety Element Update and EJ Element are policy documents that do not include any physical development and as such, would not affect the environment.

6.6.1 Aesthetics

a) Have a substantial adverse effect on a scenic vista?

According to the City’s General Plan, there are no designated scenic vistas within the City.¹ However, the San Gabriel Mountains located to the north of the Project site are scenic resources and an important part of the local scenery and contribute to the overall aesthetic setting of the region. Long-range views of the San Gabriel Mountains are provided throughout the City.

Implementation of the 2021–2029 Housing Element would encourage the development of residential uses on the identified Housing Sites. Since there are no designated scenic vistas in the City, implementation of the 2021–2029 Housing Element would not impact locally-designated scenic vistas. While the building heights of the proposed residential development would vary on a project-by-project basis limited by the parameters of the sites, underlying land use and zoning designations, and building heights would be similar to existing development throughout the City and would not cause a substantial obstruction of long-range views of the San Gabriel Mountains. Long-range views of the San Gabriel Mountains would still be available throughout the City at various locations with the development of the proposed Housing Sites.

Furthermore, the City’s visual landscape primarily consists of industrial and mining operations in combination with urban uses, where the development of the Housing Sites would be consistent with the existing visual landscape and would not change the quality of the visual landscape of the City. Therefore, implementation of the 2021–2029 Housing Element would result in less than significant impacts to scenic vistas.

¹ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. June 2008.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The California State Scenic Highway System Map indicates that no existing or proposed State scenic highways are located in Irwindale.² The nearest designated scenic highway is State Route (SR-) 2, located approximately 10.6 miles north of the City, and the nearest eligible scenic highway is SR-39, located approximately one mile east of the City. Therefore, future development allowed under the 2021–2029 would not result in substantial damage to scenic resources in a State scenic highway.

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

Given the urbanized and industrial nature of the City, there are numerous existing sources of light and glare. Sources of glare in the City occur with the reflection of sunlight from polished surfaces, such as window glass or reflective materials, or potentially from broad expanses of light-colored surfaces on building windows and facades. Existing light-generating uses in the City include exterior and interior lighting of various residential and commercial buildings, streetlights, and signage lighting. Vehicles, particularly headlights, are also sources of light and glare.

The residential development that would occur under the 2021–2029 Housing Element would include new lighting sources associated with exterior lights, such as nighttime and security lighting, interior lights, and additional vehicle headlights. However, all development encouraged under the Housing Element would be required to comply with the lighting standards established in the Irwindale Municipal Code, which would require specific shielding, orientation, and installation measures to minimize offsite light pollution and spillover. Furthermore, the new light sources would be consistent in nature and design with the existing light sources throughout the City and as such, would not create more intensive light sources.

Potential new sources of glare associated with new residential development encouraged by the 2021–2029 Housing Element would consist of glazing (i.e., windows) on the façades and other reflective materials used in the façade of the proposed structures. However, all development encouraged under the Housing Element would be required to comply with the glare and glazing standards established in the Irwindale Municipal Code, which would ensure that offsite glare would be minimized to the greatest extent feasible. Therefore, with compliance with the Irwindale Municipal Code, impacts related to light and glare associated with the Project would be less than significant.

² California Department of Transportation (Caltrans). 2018. “California State Scenic Highway System Map” [digital GIS map]. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed June 2023.

6.6.2 Agricultural and Forestry Resources

- a) **Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland production zone (as defined by Government Code Section 51104(g))?**

There are no parcels zoned for forestland or timber within the City limits as the City is comprised primarily of industrial and commercial uses. As such, the Project would not conflict with existing zoning for forest land or timberland. No Project-specific or cumulative impacts would occur.

- b) **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

As stated above, no forest land exists within the City. As such, implementation of the Project would not result in the loss of forest land or conversion of forest land to non-forest use. No Project-specific or cumulative impacts would occur.

- c) **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 or conversion of forest land to non-forest use?**

As discussed above, there would be less than significant impacts associated with agricultural lands and no impacts associated with forest lands. Implementation of the Project would not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. No Project-specific or cumulative impacts would occur.

6.6.3 Geology and Soils

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**
- i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;**
 - ii. **Strong seismic ground shaking;**
 - iii. **Seismic-related ground failure, including liquefaction;**
 - iv. **Landslides.**

None of the proposed five Housing Sites are located within an identified Alquist-Priolo Zone or within 50 feet of a known earthquake fault. Future residential development encouraged by 2021–2029 Housing Element’s goals, policies, strategies, and implementation actions could be affected by strong seismic ground shaking. However, construction of new structures would be subject to the standards and requirements included in the most current version of the California Building Code (CBC) and the Irwindale Municipal Code, including the Building Code (which is derived from the CBC and the County of Los Angeles Building

Code). Compliance with the applicable building codes would ensure that impacts related to strong ground shaking would be minimized to the greatest extent feasible.

New residential development encouraged by the 2021–2029 Housing Element would comply with all applicable requirements and standards related to liquefaction and lateral spreading established in the CBC and Irwindale Municipal Code. Such compliance would reduce hazards from seismic-related ground failure, including liquefaction and settlement, to a less than significant level.

As required by the Safety Element, any development identified with structural hazards caused by seismic activity, including risk of landslides and slope instability, would be required to mitigate through appropriate methods, such as excavating and refilling land with engineered fill, slope stabilization, and other appropriate mitigation. Therefore, impacts related to landslides would be less than significant and no Project-specific or cumulative impacts would occur.

b) Result in substantial soil erosion or the loss of topsoil.

Future development resulting from the Project would include construction activities, such as excavation, grading, and other ground disturbing activities, that could result in substantial soil erosion or the loss of topsoil. Future development that would disturb one or more acres would be subject to the National Pollutant Discharge and Elimination System (NPDES) provisions as well as regulated under the Los Angeles County MS4 Permit. In addition, the Construction General Permit under NPDES requires implementation of Best Management Practices to control stormwater run-on and run-off from construction work sites. Therefore, impacts related to soil erosion and loss of topsoil would be considered less than significant. No Project-specific or cumulative impacts would occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Compliance with the applicable building codes would ensure that each future development has undergone a project-specific geotechnical review prior to issuance of grading permits, whereby project-specific geotechnical hazards would be identified and the specific design criteria would be incorporated into individual project design plans. Geotechnical design criteria are incorporated into geotechnical reviews to verify the stability of nearby slopes and soils, and to provide recommendations to protect developments from causing or being affected by liquefaction, lateral spreading, landslides, and subsidence. Compliance with project-specific geotechnical design recommendations and all applicable building code standards and requirements would ensure that future projects do not cause substantial adverse effects, including loss, injury, or death involving on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. As such, impacts related to unstable geologic units would be considered less than significant. No Project-specific or cumulative impacts would occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

The CBC and Irwindale Municipal Code require geotechnical reviews to include soil testing, which identify the presence of a variety of geotechnical constraints related to soil quality, including the expansion potential

of the soil. The Safety Element also requires compliance with all applicable building codes as well as geotechnical and structural investigation and review prior to obtaining a building permit. Therefore, compliance with State and local laws and the City's General Plan would ensure impacts related to expansive soils would be less than significant. No Project-specific or cumulative impacts would occur.

f) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The City is served by existing municipal wastewater infrastructure. New residential development that would occur under the Project would connect to existing mainlines and service lines, which are largely located in surrounding roadways. As such, future residential developments would not use septic tanks or alternative wastewater disposal systems. No Project-specific or cumulative impacts would occur.

6.6.4 Hazards and Hazardous Materials

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Compliance with the applicable local, State, and federal laws and regulations would ensure that the risks associated with the transport, storage, use, and disposal of hazardous materials would be minimized to the greatest extent feasible. No Project-specific or cumulative impacts would occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Future residential development projects encouraged by the 2021–2029 Housing Element could require compliance with the Construction General Permit (or related stormwater permit), and if so, would be subject to the protections included in a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP would outline BMPs to contain a potential release and prevent any such release from reaching an adjacent waterway or stormwater collection system (e.g., erosion control, sediment control, and waste management). Therefore, compliance with applicable federal, State, and local laws and regulations would ensure that any impact resulting from the Project would be less than significant. No Project-specific or cumulative impacts would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are various schools, hospitals, and other sensitive receptors located throughout the City which are located within an 0.25-mile radius of the five Housing Sites. However, while there are sensitive receptors in the vicinity of the Housing Sites, future residential development projects encouraged by the Project would be required to comply with the applicable federal, State, and local laws and regulations regarding hazardous materials, including the policies of the proposed Safety Element Update. Compliance with the applicable local, State, and federal laws and regulations related to the handling of hazardous materials or the release of hazardous emissions within one-quarter mile of a sensitive receptor would ensure any

potential impacts to sensitive receptors from future residential projects are less than significant. No Project-specific or cumulative impacts would occur.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

While the Housing Sites are not listed as hazardous materials sites, compliance with all applicable local, State, and federal laws and regulations, including the goals and policies of the proposed Safety Element Update, would further ensure risks associated with hazardous materials are reduced to the greatest extent possible. No Project-specific or cumulative impacts would occur.

- e) For a project located within an airport land 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?**

Future residential development encouraged by the 2021–2029 Housing Element would not increase airport hazard risks at the San Gabriel Valley Airport. In addition, all air traffic within the City would be subject to stringent Federal Aviation Administration (FAA) and Caltrans regulations to protect the public from potential aircraft hazards or other safety concerns. No Project-specific or cumulative impacts would occur.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Future residential development would be required to comply with the goals and policies of the proposed Safety Element Update, which require compliance with applicable fire and building codes, emergency evacuation plans, and with regulations related to handling hazardous materials as well as establishes procedures and inter-agency coordination protocols during emergencies. No Project-specific or cumulative impacts would occur.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

The northern portion of the City, including Housing Site 4 identified in the 2021–2029 Housing Element, is located in a Very High Fire Hazard Severity Zone (VHFHSZ) as mapped by CAL FIRE.³ However, future residential development encouraged by the 2021–2029 Housing Element would be required to be constructed according to the fire protection requirements of the County’s Fire Code, California Fire Code, and Uniform Building Code (UBC) and would be subject to review and approval by the Los Angeles County Fire Department (LACFD) to ensure the risks of wildfire are minimized to the greatest extent feasible. In addition, Policies SAF15.1 through SAF15.15 of the proposed Safety Element Update would regulate development and reduce impacts relating to wildland fire risks. No Project-specific or cumulative impacts would occur.

³ California Department of Forestry and Fire Protection (CAL FIRE). 2011. “Very High Fire Hazard Severity Zones in LRA, as Recommended by CAL FIRE: Irwindale” [map]. Scale 1:14,000. September 2011.

6.6.5 Hydrology and Water Quality

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Implementation of the 2021–2029 Housing Element would encourage the development of residential uses on the five identified Housing Sites. While the 2021–2029 Housing Element itself does not include measures or actions that would degrade surface or groundwater quality or violate any water quality standards or waste discharge requirements, future residential development projects encouraged by the Project would have the potential to include activities that could impact surface or groundwater quality. To address the potential impacts to water quality, future residential development projects would be required to comply with the independently enforceable requirements of the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities Order 2022-0057-DWQ (Construction General Permit) and the Los Angeles County Municipal Separate Storm Water System (MS4) Permit (CAS004004, Order No. R4-2021-0105) (2021 MS4 Permit). Therefore, impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Water supply is provided to the City by the San Gabriel Valley Water Company, Azusa Light and Water, California American Water, Golden State Water Company, Monrovia Water Division, and Valley County Water District. All of these water providers use groundwater as part of their water supplies. Therefore, future development encouraged by the 2021–2029 Housing Element would utilize groundwater supplies during construction and operation, which has the potential to decrease groundwater supplies. However, the pumping and use of groundwater is highly regulated where each water provider is authorized to pump a specific amount of groundwater from their respective groundwater aquifers per year. In addition to groundwater supplies, water providers also complete their overall water supplies with other sources of surface water. Due to the highly regulated nature of water rights and water supply, none of the City’s water providers could provide additional groundwater supplies beyond what they are currently authorized, which would ensure that groundwater supplies are not substantially depleted. For this reason, future development encouraged by the 2021–2029 Housing Element would not substantially decrease groundwater supplies.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- i. result in substantial erosion or siltation on- or off-site;**
- ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- 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?**

While the 2021–2029 Housing Element itself does not include measures or actions that would alter drainage patterns resulting in erosion, on- or off-site flooding, or increased stormwater runoff, future residential development projects encouraged by the 2021–2029 Housing Element would have the potential to include activities that could result in alterations to existing drainage patterns.

According to FEMA’s Flood Insurance Rate Maps (FIRMs), the City does not contain any flood hazard areas.⁴ Even though there are no flood hazards areas within the City, new residential development encouraged would still be required to comply with Section 1612, *Flood Loads*, and Appendix G, *Flood-Resistant Construction*, of the CBC as well as Policy SAF8.3 of the Safety Element Update.

Future residential development encouraged by the 2021–2029 Housing Element could include grading, excavation, and other types of earth-moving activities, which could alter existing drainage patterns resulting in erosion, on- or off-site flooding, or increased stormwater runoff. Construction activities associated with future residential development would be required to comply with all applicable requirements and regulations related to altering drainage patterns, including but not limited to the NPDES General Construction Permit, preparation and implementation of a project-specific SWPPP, City’s LID standards and BMPs, and the Irwindale Municipal Code, which incorporates by reference the updated Los Angeles County BMP Guidebook, Los Angeles County SUSMP Guidance Manual, and Los Angeles County LID Impact Design Manual. New residential development allowed under the 2021–2029 Housing Element would not be anticipated to substantially alter drainage patterns or alter drainage patterns to an extent that would result in substantial erosion, siltation, or flooding on- or off-site.

a) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Santa Fe Dam, which is located within the City, is a flood risk management dam located on the San Gabriel River that is owned and operated by the United States Army Corps of Engineers (USACE) in the Los Angeles District. The primary purpose of the Santa Fe Dam is to reduce the risk of flood damage for the densely populated area between the dam and Whittier Narrows Reservoir. According to Map 2-13 of the City’s HMP, Housing Sites 2 and 3 identified in the 2021–2029 Housing Element are located within the downstream inundation area of for the Santa Fe Dam.⁵

Future residential development encouraged by the 2021–2029 Housing Element would be similar or improved in design, engineering, and construction as existing structures within the flood inundation area. In addition, future residential development projects encouraged by the 2021–2029 Housing Element would be required to comply with the goals and policies related to dam inundation preparedness and emergencies of the City’s General Plan, including the proposed Safety Element Update, which would reduce impacts relating to dam failure. Therefore, exposure of the general public and structures to inundation hazards would remain the same relative to existing conditions.

⁴ Federal Emergency Management Agency (FEMA). 2021. “National Flood Hazard Layer (NFHL) Viewer” [digital GIS map]. Data refreshed December 2021. <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed June 21, 2023.

⁵ City of Irwindale. 2012. *City of Irwindale 2012 Hazard Mitigation Plan*. November 20, 2012.

b) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The 2021–2029 Housing Element would not contain any policies that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. In addition, new residential development would be required to comply with the applicable regulations discussed above, including during construction and operation, and would not otherwise substantially degrade water quality.

6.6.6 Mineral Resources

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Mining operations occupy approximately 39 percent of the City’s total productive land area and range in size from 80 to 500 acres with permitted depths up to 440 feet. Of the 22 quarries located in Irwindale, six are actively being mined, five open pit mines have already been backfilled, and six open pit mines are in the process of being backfilled.⁶ These mining operations also include four processing plants, each capable of producing approximately 1,000 tons of aggregate per hour. Approximately one-third of the aggregate produced in the San Gabriel Valley comes from quarries located in Irwindale, and a total of 320,000,000 tons of aggregate have been mined in the City since 1960.⁷ Housing Site 3 is zoned as Quarry Overlay in the City’s current General Plan.⁸ Implementation of the 2021–2029 Housing Element does not propose any mineral resources extraction activities within the City but rather would encourage the development of residential uses on the five identified Housing Sites. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Since the City would not be able to fully accommodate its 6th cycle RHNA with the identified Housing Sites’ existing zoning, the 2021–2029 Housing Element also includes a program to redesignate and rezone the identified Housing Sites for residential development via new residential development overlay zones. Since the increase in densities would be achieved through a residential overlay zone, the base zoning for the five Housing Sites would remain the same as in existing conditions. Therefore, while residential uses would be able to be developed on the five identified Housing Sites, the Project would not preclude the extraction of mineral resources on Housing Site 3. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan.

⁶ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*.

⁷ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*.

⁸ City of Irwindale. 2008. *City of Irwindale 2020 General Plan*.

6.6.7 Recreation

- a) **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?**

The City has nine different parks and open spaces totaling approximately 1,222 acres. The majority of park acreage comes from the Santa Fe Dam Recreation Area, located in the middle portion of the City, which provides various recreation amenities such as boating, swimming, hiking, camping, equestrian trails, concerts in the park, and volleyball courts.⁹ According to the California Department of Finance (DOF), the City has an estimated population of 1,441 residents with an average household size of 3.61 persons for the year 2023.¹⁰ The Resource Management Element of the City's General Plan establishes a citywide parkland level of service goal of a minimum of one acre of parkland per 2,500 residents.

Future residential development encouraged under the 2021–2029 Housing Element would increase the City's population and could increase the use of existing City parks and open spaces. As shown in Table 2-4 of this Draft PEIR the 2021–2029 Housing Element could accommodate up to 279 new residential units in the City. Based on an average household size of 3.61 persons, the Project could generate a population increase of up to 1,008 residents, resulting in a total population of 2,449 residents. Even with the potential population increase of 1,008 residents, the City would still be achieving its parkland standard of providing 1 acre per 2,500 residents as there would be 1,222 acres for 2,449 residents, which equates to approximately 2 acres of parkland per resident.¹¹ Therefore, development under the 2021–2029 Housing Element would not result in substantial deterioration of existing recreation facilities.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

The Resource Management Element of the City's General Plan establishes a citywide parkland level of service goal of a minimum of one acre of parkland per 2,500 residents.¹² New residential development allowed under the 2021–2029 Housing Element would increase the population of the City by an estimated 1,008 residents by 2029, resulting in a total population of approximately 2,449 residents. Even with implementation of the 2021–2029 Housing Element, the City would still provide 1,222 acres of parkland for 2,449 residents. This ratio would still meet the City's goal of a minimum of one acre of parkland per 2,500 residents and therefore, new or expanded park facilities would not be required.

⁹ City of Irwindale. 2023. *Environmental Justice Element*. Draft. June 2023.

¹⁰ California Department of Finance. 2023. "E-5 Population and Housing Estimates for Cities, Counties and the State – January 1, 2021–2023" [Excel spreadsheet data]. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/>. Accessed June 21, 2023.

¹¹ 2,449 projected population growth by 2029 / 1,222 existing open space acres in the City = 2 acres.

¹² City of Irwindale. 2008. "Section 5: Resource Management Element." In *City of Irwindale 2020 General Plan*, pp. 102–125. June 2008.

6.6.8 Wildfire

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The northern portion of the City, including Housing Site 4 proposed, is located in a Very High Fire Hazard Severity Zone (VHFHSZ) as mapped by CAL FIRE.¹³ The 2021–2029 Housing Element could encourage the development of up to 279 additional residential units, which could accommodate approximately 1,008 residents based on the 2021 average household size of 3.61 persons per household. As future residential development is constructed, the City’s VMT could also increase, which could have a significant impact on an adopted emergency response plan or emergency evacuation plan. In addition, traffic created by future residential development encouraged under the Project would not interfere with an evacuation plan as future residential development projects would be required to comply with the City’s General Plan Safety Element and LHMP policies and strategies, including Policies SAF15.2 and SAF16.2 of the Safety Element Update, to ensure effective and coordinated response to disasters within the City and to further strengthen the City’s preventative measures. The five identified Housing Sites are already served by existing roadways with close access to major regional roadways, which could be used during an emergency, and all of the Housing Sites are provided access to the local and regional transportation systems via two or more access points. The major streets and highways within the City maintain minimum right-of-way widths and would continue to ensure that various evacuation routes are accessible to residents and businesses.

In the event of a wildfire, implementation of Los Angeles County’s Operational Area Emergency Response Plan (OAERP) would coordinate all County facilities and personnel, along with jurisdictional resources of the cities and special districts within the County, into an efficient organization capable of managing emergency evacuation for affected areas. LACFD would be responsible for ensuring that future residential development allowed under the 2021–2029 Housing Element does not impair adopted emergency response or evacuation plans. Lastly, the 2021–2029 Housing Element would not introduce features or policies that would preclude implementation of or alter these policies or procedures, and Policies SAF15.1 through SAF15.12 and SAF16.1 through SAF16.10 of the Safety Element Update would improve policies and regulations associated with emergency response or evacuation plans, including those for wildland fires.

b, d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? 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?

As discussed above, the northern portion of the City, including Housing Site 4 proposed under the 2021–2029 Housing Element, is located in a VHFHSZ. Properties located within a VHFHSZ, as mapped by CAL FIRE, are required to comply with requirements of Government Code Section 51175 et seq., including the

¹³ California Department of Forestry and Fire Protection (CAL FIRE). 2011. “Very High Fire Hazard Severity Zones in LRA, as Recommended by CAL FIRE: Irwindale” [map]. Scale 1:14,000. September 2011.

minimization of fire risks during the high fire season through vegetation clearance and the maintenance of landscape vegetation to minimize fuel supply that would spread the intensity of a fire.¹⁴

The 2021–2029 Housing Element would incentivize residential development on infill sites within the City, including near high quality public transit. All development would be subject to applicable emergency response plans and would be required to comply with all existing City and County regulations. In the event of a wildfire, the County’s OAERP would coordinate all the facilities and personnel, along with the jurisdictional resources of the surrounding cities, into an efficient organization capable of managing emergency evacuation for affected areas. Furthermore, site-specific project development would be required to be constructed according to the County’s Fire Code, CFC, and UBC requirements for fire-protection and would be subject to review and approval by LACFD.

As new residential development allowed under the 2021–2029 Housing Element would be required to comply with fire safety provisions established by the City’s General Plan and Irwindale Municipal Code as well as is the County’s Code of Ordinances, residential development under the 2021–2029 Housing Element would not pose a substantial risk to people or structures due to wildland fires.

c) 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?

New residential development would occur in areas that are well-served by existing roadways and utilities infrastructure. In addition, as discussed above, site-specific project development would be required to be constructed according to the City and County’s Fire Code, CFC, and UBC requirements for fire-protection and would be subject to review and approval by LACFD. Therefore, new residential development allowed under the 2021–2029 Housing Element would not require additional roads, fuel breaks, emergency water sources, power lines or other utilities that would exacerbate fire risk.

¹⁴ County of Los Angeles. 2017. Code of Ordinances, Title 32, Fire Code, Section 4907.1: General. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances/349596?nodeId=TIT32FICO_4907.1GE. Accessed February 25, 2025.

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CHAPTER 7

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CHAPTER 8

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Executive Summary

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Chapter 1. Introduction

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Chapter 2. Project Description

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Chapter 3. Environmental Setting

No references were used in this chapter.

Chapter 4. Environmental Impact Analysis

No references were used in this chapter.

Section 4.1. Aesthetics

No references were used in this chapter.

Section 4.2. Air Quality

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Chapter 7. Report Preparers

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