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ASCENT

INITIAL STUDY/ NEGATIVE DECLARATION

CITY OF BAKERSFIELD

Climate Action Plan

JULY 2023



Public Review Draft
Initial Study/Proposed Negative Declaration

for the

Bakersfield Climate Action Plan

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July 2023

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LIST OF ABBREVIATIONS

2022 RTP/SCS	2022 Regional Transportation Plan/Sustainable Communities Strategy
AB	Assembly Bill
BAU	business-as-usual
BCSD	Bakersfield City School District
BFD	Bakersfield Fire Department
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEC	California Energy Commission
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
City	City of Bakersfield
CH_4	methane
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	dioxide equivalent
COG	Kern Council of Governments
CPUC	California Public Utilities Commission
dB	decibels
EAP	Energy Action Plan
EIR	Environmental Impact Report
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
EV	electric vehicles
FHSZ	Fire Hazard Severity Zones
FTA	Federal Transit Administration

GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GDF	Gasoline Dispensing Facility
GHG	greenhouse gas
GSP	groundwater sustainability plan
HCP	habitat conservation plans
I-5	Interstate-5
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IS/Proposed ND	Initial Study/Proposed Negative Declaration
ISR	Indirect Source Rule
KernCOG	Kern Council of Governments
KHSD	Kern High School District
L_{dn}	Day-Night Noise Level
L_{eq}	Equivalent Noise Level
L_{max}	Maximum Noise Level
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MBITP	Metropolitan Bakersfield Urban Development Incidental Take Permit
MPO	metropolitan planning organizations
MRZ	Mineral Resource Zones
MS4	municipal separate storm sewer system
$MTCO_2e$	metric ton of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Commission
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
OIMP	odor impact minimization plan
OPR	Governor's Office of Planning and Research
PG&E	Pacific Gas and Electric
PM	diesel particulate matter
PM_{10}	respirable particulate matter with aerodynamic diameter of 10 micrometers or less
$PM_{2.5}$	fine particulate matter with aerodynamic diameter of 2.5 or less
PPV	peak particle velocity
PRC	Public Resources Code
RMS	root-mean-square

RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	sustainable communities strategies
SIP	state implementation plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SR	State Route
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
VdB	vibration decibels
VMT	vehicle miles traveled
ZEV	zero-emission vehicles

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1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Proposed Negative Declaration (IS/Proposed ND) has been prepared by the City of Bakersfield (City) to evaluate potential environmental effects resulting from implementation of the City's proposed Climate Action Plan (CAP). Section 2 "Project Description" presents the detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The Initial Study shows that there is no substantial evidence…that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

1.2 WHY THIS DOCUMENT?

As described in the environmental checklist (Chapter 3), the proposed CAP would not result in any unmitigated significant environmental impacts. Therefore, an IS/Proposed ND is the appropriate document for compliance with the requirements of CEQA. This IS/Proposed ND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The City of Bakersfield is the CEQA lead agency because they are responsible for adopting and implementing the proposed CAP. The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. This draft IS/Proposed ND will be circulated for a 30-day public review period, from July 10, 2023. Comments on this draft IS/Proposed ND must be received by 5:00 PM on August 10, 2023. Comments can be emailed to Kassandra Gale at kgale@bakersfieldcity.us or sent to the following address:

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City of Bakersfield
Planning Division
1715 Chester Avenue
Bakersfield, CA 93301-5210

Comments received on the draft IS/Proposed ND will be considered and responded to before consideration of adoption of the draft IS/Proposed ND. The draft IS/Proposed ND, along with comments received by the date provided above, will be considered by the City in conjunction with consideration of adoption of the proposed CAP.

1.3 SUMMARY OF FINDINGS

Chapter 3, "Environmental Checklist," contains the analysis and discussion of potential environmental impacts of the proposed CAP. The Environmental Checklist for this draft IS/Proposed ND includes the checklist questions from Appendix G of the State CEQA Guidelines. The analysis of Chapter 3 demonstrates that the proposed CAP would have either no impact or a less-than-significant impact for the following environmental topics:

- Aesthetics,
- Agriculture and Forestry Resources,
- Air Quality,
- Biological Resources,
- Cultural Resources,
- Energy,
- Geology and Soils,
- Greenhouse Gas Emissions,
- Hazards and Hazardous Materials,
- Hydrology and Water Quality,
- Land Use and Planning,
- Mineral Resources,
- Noise,
- Population and Housing,
- Public Services,
- Recreation,
- Transportation,
- Tribal Cultural Resources,
- Utilities and Service Systems, and
- Wildfire.

No potentially significant impacts were identified for any of the environmental topics; and no mitigation measures were deemed necessary to reduce impacts to a less-than-significant level.

1.4 DOCUMENT ORGANIZATION

This draft IS/Proposed ND is organized as follows:

Chapter 1: Introduction. This chapter introduces the environmental review process. It describes the purpose and organization of the draft IS/Proposed ND and presents a summary of findings.

Chapter 2: Project Description. This chapter provides an overview and background information for the proposed CAP, lists the project objectives, and provides a detailed description of the proposed CAP.

Chapter 3: Environmental Checklist. This chapter presents an analysis of the range of environmental topics identified in the Environmental Checklist and determines if implementation of the proposed CAP would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any potentially significant impacts could not be reduced to less than significant, an EIR would be required.

Chapter 4: References. This chapter lists the references used in preparation of this draft IS/Proposed ND.

Chapter 5: List of Preparers. This chapter identifies report preparers.

2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

This chapter presents a detailed description of the proposed Climate Action Plan (CAP), which the City of Bakersfield (City) has prepared to serve as a comprehensive roadmap to community sustainability and resilience. The purposes of the CAP are to identify strategies and measures the City can take to reduce greenhouse gas (GHG) emissions to levels that align with the State of California's goals and set forth strategies to adapt and promote resilience to the impacts of climate change. The proposed CAP does not include any development proposals and would not directly result in physical environmental effects because of the construction or operation of facilities. The City is the lead agency for the proposed CAP under the California Environmental Quality Act (CEQA).

2.2 PROJECT LOCATION

As shown in Figures 1 and 2, the City is located in Kern County at the southern end of the San Joaquin Valley. Kern County is bound by Kings, Tulare, and Inyo counties to the north; San Bernardino County to the east; Los Angeles and Ventura counties to the south; and Santa Barbara and San Luis Obispo counties to the west. City limits extend to the Sequoia National Forest to the northeast. The City is located east of Interstate-5 (I-5) and at the junction of State Route (SR) 99 and SR 58. To the south lie the Tehachapi Mountains and to the west is the Temblor Range.

2.3 PROJECT BACKGROUND

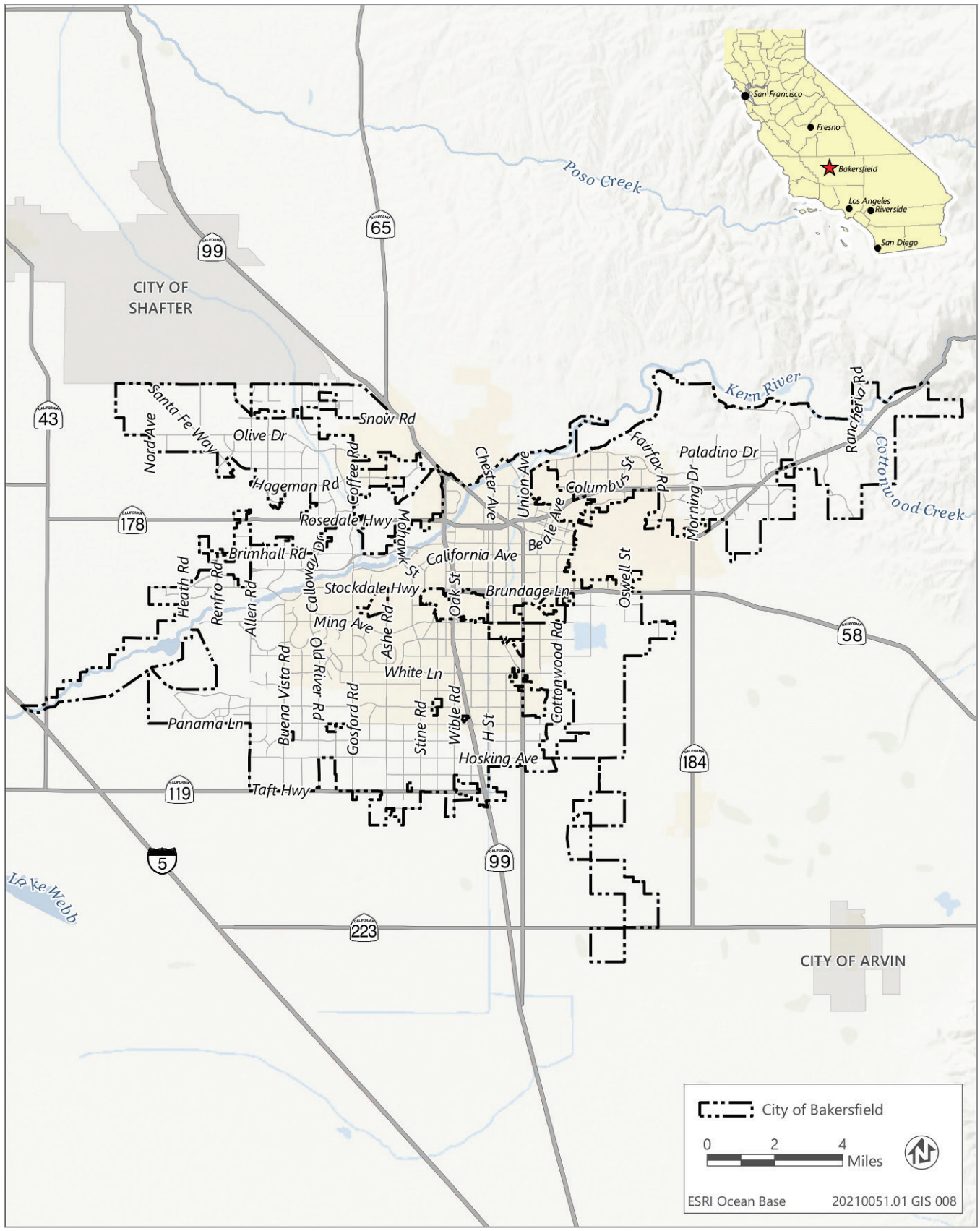
Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emissions targets established by State law include reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32) and to net zero levels as soon as possible, but no later than 2045, with statewide anthropogenic GHG emissions reduced to at least 85 percent below 1990 levels by 2045 (Assembly Bill [AB] 1279). In December 2022, the California Air Resources Board (CARB) adopted an update to its Climate Change Scoping Plan, the 2022 Scoping Plan for Achieving Carbon Neutrality, which presents a pathway showing how California can surpass its 2030 target and reduce anthropogenic GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality no later than 2045.

The CAP is intended to support the City with staying on track to a locally adjusted GHG reduction target for 2030 that is aligned with the State's legislated statewide targets in SB 32 and AB 1279. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected. The objectives and contents of the CAP are described in the following sections.



Sources: adapted by Ascent in 2023

Figure 1 Regional Location



Sources: adapted by Ascent in 2023

Figure 2 Project Location

2.4 PROJECT OBJECTIVES

The fundamental purposes of the proposed CAP are to set forth a plan for reducing the city's communitywide GHG emissions to levels in alignment with statewide targets and increasing the city's resilience to existing and anticipated climate change hazards. The City has developed the following objectives for the proposed CAP:

- Prepare a baseline GHG emissions inventory of sources of emissions in the city, and forecast the potential growth of these emissions over time;
- Establish a local target for 2030 and a local goal for 2045 aligned with the statewide targets of SB 32 and AB 1279;
- Develop and quantify actions the City can take to reduce communitywide emissions to levels that meet or exceed its 2030 target and make substantial progress towards its 2045 goal;
- Meet the requirements of State CEQA Guidelines Section 15183.5 (b)(2) regarding "Plans for the Reduction of Greenhouse Gas Emissions" to provide streamlining of GHG emissions analysis for future projects that are consistent with the proposed CAP; and
- Identify the city's vulnerabilities to existing and anticipated climate change hazards and set forth actions the City can take to protect people and property by adapting to these hazards and improving resilience.

2.5 PROJECT DESCRIPTION

The CAP is organized into the following six chapters:

- Chapter 1 introduces the city, outlines the context and purpose of the CAP, and describes the development process of the CAP and the community outreach conducted.
- Chapter 2 provides a background to climate change science, local climate impacts, and existing legislation and efforts aimed at addressing climate change.
- Chapter 3 summarizes and identifies trends from the City's GHG emissions inventory, forecast of future emissions, and GHG reduction targets.
- Chapter 4 presents an overview of the climate action planning process and a summary of the City's climate change vulnerability assessment.
- Chapter 5 provides the climate action (i.e., GHG emissions reduction and climate adaptation) strategies and measures of the CAP, organized into eight sectors: Buildings, Infrastructure, Land Use and Mobility, Materials and Waste, Health and Resilience, Natural and Urban Landscapes, Green Economy, and Education and Monitoring.
- Chapter 6 provides a framework for implementing and monitoring the CAP and includes guidance for future climate action planning efforts.

In developing the CAP, the City evaluated the amount of emissions generated in a baseline year (2019) and identified City-specific targets and goals that determine the amount of emissions that need to be reduced in Bakersfield to align with the statewide GHG reduction targets for 2030 and 2045. The City then developed GHG reduction measures to achieve the City's 2030 target and make substantial progress towards the City's 2045 goal. Additionally, in preparation of the CAP, the City conducted a climate change vulnerability assessment to better understand its vulnerability to climate hazards. This was then used to inform and develop a set of strategies, objectives, and actions to improve community resilience in the context of climate change. Successful implementation and administration of the CAP would reduce emissions and reduce climate related risks in the city, as well as provide other co-benefits like strengthening the city's economy, improving risk management, cleaning the environment, and improving the health and wellness of residents.

2.5.1 CAP Development

The development of this CAP was driven by a desire to create increased sustainability and climate action strategies within the City that are consistent with the ongoing Bakersfield General Plan Update, current and future Housing Element updates, and Municipal Services/Sphere of Influence Review(s). The combination of these efforts would create a comprehensive pathway for the City government to accommodate anticipated growth in an economically, environmentally, and socially responsible way. Engagement with members of the public, government officials, and other stakeholders was conducted throughout the entirety of the project.

2.5.2 Community Engagement

The City hosted several public workshops to engage stakeholders, residents, and other interested organizations and individuals. These workshops provided an opportunity for the community to participate in the CAP planning process and focus on targeting traditionally underrepresented groups. The public workshops provided residents and stakeholder groups the opportunity to contribute to CAP development.

The first public workshop discussed key hazards and identified community vulnerabilities and strengths. The second workshop presented the GHG inventory and forecast, results of the vulnerability assessment, and discussed how to prioritize the GHG emissions reduction measures for implementation. At each public workshop, members of the public provided feedback and comments that were incorporated into the CAP. Additionally, the City hosted an online forum for individuals to prioritize and comment on each proposed climate action strategy, which was available after the second workshop.

2.5.3 GHG Emissions Inventory

A "production-based" GHG inventory identifies the sources, activities, and sectors that are producing emissions and the relative contributions of each, while also providing a baseline for future emissions projections. The proposed CAP is based on the inventory of these GHG emissions, which identifies and quantifies the sources and amounts of GHG emissions that are generated from activities within the city in one calendar year (i.e., annual emissions). Conducting an inventory of emissions provides a baseline of GHG emissions from which future changes in emissions can be forecasted.

The GHG emissions inventory is presented for the City's baseline emissions levels in 2019. The 2019 baseline emission levels are then used by the City to determine its GHG reduction targets. The inventory is organized into GHG emissions sectors, which represent a distinct subset of a market, society, industry, or economy whose components share similar characteristics. The eight major GHG emissions sectors are shown in order of contribution, which include the following:

- On-Road Transportation: On-road transportation emissions are associated with vehicle miles traveled.
- Residential Building Energy: Residential building energy emissions are associated with the consumption of electricity and onsite combustion of natural gas in homes within the city.
- Solid Waste: Solid waste emissions are associated with the decomposition of community-generated mixed and organic waste in landfills.
- Nonresidential Building Energy: Nonresidential building energy emissions are associated with the consumption of electricity, liquid propane gas, natural gas, and diesel in nonresidential buildings within the city.
- Off-Road Vehicles and Equipment: Off-road emissions are associated with gasoline and diesel fuel use in construction, entertainment, industrial, lawn and garden, commercial, and recreation equipment, as well as pleasure craft, railyard operations, transportation refrigeration units, and portable equipment.
- Wastewater Treatment: Wastewater treatment emissions are associated with the combustion of digester gas treatment process(es), population served, biological oxygen demand load, and daily nitrogen load from the city's two centralized wastewater treatment plants.

- Agriculture: Agriculture emissions are associated with livestock (i.e., enteric fermentation, manure management), fertilizer application, and the use of agricultural equipment.
- Water Supply: Water emissions are associated with the electricity used to supply, convey, treat, and distribute water in the city.

Carbon dioxide (CO_2) is the largest contributor to climate change and the most recognized GHG; however, there are five other primary GHGs that must be addressed to meet State-mandated reduction targets, including: methane (CH_4); nitrogen dioxide (N_2O); and, three types of fluorinated gases (F-gases), which are hydrofluorocarbons (HFCs), per fluorocarbons (PFCs), and hexafluoride (SF_6). To simplify discussion of these emissions collectively, climate action plans use a measurement known as carbon dioxide equivalent (CO_2e). The CO_2e measurement translates each GHG to CO_2 by weighing it by its relative global warming potential (GWP). For example, according to the Intergovernmental Panel on Climate Change (IPCC), CH_4 and N_2O are 25 and 298 times more potent, respectively, than CO_2 in their ability to trap heat in the atmosphere (IPCC 2007). Converting these gases into CO_2e allows consideration of all the gases in comparable terms and makes it easier to communicate how various sources and types of GHG emissions contribute to global warming. A metric ton of carbon dioxide equivalent ($MTCO_2e$) is the standard measurement of the amount of GHG emissions produced and released into the atmosphere.

In 2019, the baseline inventory estimated that the community emissions were approximately 2,551,100 $MTCO_2e$ (presented in Table 2.1). Emissions from on-road transportation, which included emissions from fossil fuel (e.g., gasoline and diesel) combustion in vehicles, accounted for approximately 63 percent of community emissions. The second-largest sector, residential building energy, contributed approximately 13 percent of community GHG emissions in 2019, and the solid waste sector generated 10 percent of the city's emissions. Nonresidential building energy and off-road vehicles and equipment accounted for 9 percent and 6 percent, respectively, and wastewater treatment contributed 1 percent of the total emissions. Agriculture and water supply each contributed less than 1 percent of the total emissions

Table 2.1 City of Bakersfield 2019 Community Greenhouse Gas Emissions Inventory by Sector

Sector	GHG emissions ($MTCO_2e$)	Percent of Total
On-Road Transportation	1,597,941	63%
Residential Building Energy	320,315	13%
Solid Waste	244,383	10%
Nonresidential Building Energy	222,659	9%
Off-Road Vehicles and Equipment	141,272	6%
Wastewater Treatment	13,407	1%
Agriculture	7,808	<1%
Water Supply	3,302	<1%
Total	**2,551,089**	**100%**

Notes: Totals may not sum exactly due to independent rounding. $MTCO_2e$ = metric tons of carbon dioxide.

Source: Ascent 2023.

2.5.4 GHG Emissions Projections

GHG emissions projections provide an estimate of future emissions levels in the absence of climate action measures. The proposed CAP uses two projections, referred to as the "business-as-usual" (BAU) and legislative-adjusted BAU. Emissions projections were prepared for the BAU scenarios based on the 2019 baseline. Based on 2019 GHG emissions levels, the BAU forecast estimates annual GHG emissions in the city to increase steadily and rise by approximately 71 percent in 2045. This projected increase in BAU emissions is due to anticipated growth in population and employment within the city, consistent with the growth contemplated in the recent Bakersfield General Plan Update.

The City prepared both BAU and legislative-adjusted BAU scenarios for 2030, 2040, and 2045. The BAU emissions scenario is based on projected population, housing, and employment growth anticipated in the city, assuming no actions would be taken to reduce emissions by federal, State, or local agencies pursuant to AB 32 or other legislation. The BAU scenario represents theoretical "worst-case future conditions while the "BAU with legislative adjustments" forecasts accounts for future emissions reductions pursuant to AB 32 and other legislation in California from a variety of regulations and programs, including the Renewables Portfolio Standard (RPS), improving vehicle fuel economy standards because of the Advanced Clean Cars Program, and other State and federal policies that reduce the level of GHG emissions associated with activities in the City.

As shown in Table 2.2 under the legislative-adjusted BAU forecast scenario, GHG emissions are forecasted to decrease by approximately 14 percent by 2030, 18 percent by 2040, and 20 percent by 2045 compared to 2019 emissions.

Table 2.2 City of Bakersfield Greenhouse Gas Emissions Projections by Sector ($MTCO_2e$/year)

Sector	2019	2030	2040	2045
On-Road Transportation	1,597,941	1,766,784	1,774,462	1,828,205
Residential Building Energy	320,315	376,457	380,338	356,199
Solid Waste	244,383	317,430	384,852	426,167
Nonresidential Building Energy	222,659	250,489	221,999	182,192
Off-Road Vehicles and Equipment	141,272	179,283	216,530	238,847
Wastewater Treatment	13,407	17,415	21,114	23,380
Agriculture	7,808	5,944	4,542	3,891
Water Supply	3,302	3,555	1,928	0
Total	**2,551,089**	**2,917,356**	**3,005,765**	**3,058,881**
Percent Change from 2019 Levels	—	*14%*	*18%*	*20%*
BAU Emissions (without legislative adjustments)	**2,551,089**	**3,412,360**	**4,046,043**	**4,357,020**

Notes: Total may not sum exactly due to independent rounding. BAU = business-as-usual; $MTCO_2e$ = metric tons of carbon dioxide.

Source: Ascent 2023.

2.5.5 GHG Emissions Reduction Targets

The proposed CAP provides a course of action for the City to reduce GHG emissions consistent with statewide GHG emissions targets. As directed in SB 32 and AB 1279, the State aims to reduce annual GHG emissions to:

- 40 percent below 1990 levels by 2030,
- 85 percent below 1990 levels by 2045, and
- Net zero GHG emissions by 2045.

The State's targets are in line with the scientifically established levels needed to limit the rise in global temperature to no more than 2 degrees Celsius (equivalent to 3.6 degrees Farenheit), the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected. These targets also pursue efforts to limit the global temperature increase even further to no more than 1.5 degrees Celsius (equivalent to 2.5 degrees Farenheit) (United Nations 2015:3).

The City aims to reduce GHG emissions in proportion to the State's targets and goals. Community emissions levels from 1990 are not available, which is the case for most local jurisdictions in California. Therefore, community GHG reduction targets for the City's CAP were developed relative to the City's emissions in 2019 and established in proportion with statewide reduction for all emissions sectors relevant to the City's jurisdiction, consistent with CARB guidance. Estimating equivalent reductions needed from the 2019 baseline, the City aims to reduce emissions to:

- 45 percent below 2019 levels by 2030,

- 67 percent below 2019 levels by 2040, and
- 79 percent below 2019 levels by 2045.

The City's 2030 target requires GHG emissions to be reduced to 1,408,667 $MTCO_2e$ in 2030. The 2040 target, which the City has set based upon the trajectory necessary to meet the 2045 goal, requires that community emissions be reduced to 834,146 $MTCO_2e$ in 2040. In 2045, GHG emissions will need to be reduced to 546,886 $MTCO_2e$. Achievement of the 2045 target will require significant investments at the State level to transform the transportation and energy sectors to low- and zero-carbon, as well as improvements in and deployment of carbon removal technologies.

Table 2.3 includes the summary of the targets, along with estimated reductions required to achieve the targets.

Table 2.3 City of Bakersfield Local Emissions Gap ($MTCO_2e$)

Emissions Scenario	2019	2030	2040	2045
Business-as-Usual Emissions	2,551,089	3,412,360	4,046,043	4,357,020
Legislative-Adjusted Business-as-Usual Emissions	2,551,089	2,917,356	3,005,765	3,058,881
Target Percent Reduction below 2019 Levels	---	45%	67%	79%
Target Annual Emissions	---	1,408,667	834,146	546,886
Local Emissions Gap	---	1,508,689	2,171,619	2,511,996

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: CARB 2022; Ascent 2023.

As shown in Table 2.3, the City would not be able to achieve the GHG emissions reductions targets through compliance with State and federal regulations alone. The City needs to implement additional actions to close the remaining "local emissions gap" and achieve its reduction targets.

2.5.6 GHG Emissions Reduction Strategies, Measures, and Actions

To achieve the 2030 target and to make substantial progress toward the 2045 goal, the proposed CAP includes a framework consisting of 28 strategies, 53 measures, and actions. These climate action strategies serve as the foundation for reducing GHG emissions and building resilience to climate change in the city. Within each strategy are one or more measures that serve as more specific expressions of the overarching strategies. Measures are further evaluated with specific actions that define activities, programs, policies, or projects that the City government will implement or support to achieve CAP goals.

Table 2.4 presents the summary of communitywide emissions growth with and without emissions reduction measures identified in the CAP.

Table 2.4 Summary of Bakersfield Greenhouse Gas Emissions Reductions

	2019	2030	2040	2045
Legislative-Adjusted Business-as-Usual Emissions ($MTCO_2e$)	2,551,089	2,917,356	3,005,765	3,058,881
Target Percent Reduction below 2019 Levels	-	27%	61%	79%
Reduction Needed to Meet Target ($MTCO_2e$)	-	1,044,875	2,017,014	2,511,995
Total Reductions from Measures ($MTCO_2e$)	-	**1,068,757**	**1,736,549**	**2,193,466**
Remaining Gap to Target ($MTCO_2e$)	-	(23,881)[1]	280,465	318,529
Target Met?	-	**Yes**	**No**	**No**

Notes: Totals may not sum exactly due to independent rounding. $MTCO_2e$ = metric tons of carbon dioxide equivalent.

[1] Indicates target has been achieved with a surplus of reductions.

Source: Calculations conducted by Ascent in 2023.

The strategies and measures included in the CAP are summarized in Table 2.5 below. The framework contains additional information like annual emissions reduced, percent of the city's total reductions, performance targets, and supporting actions identified by the City to assist in achieving each strategy's performance target. The additional details are presented in CAP Chapter 5, and GHG reduction calculation details are included in CAP Appendix C.

Table 2.5 Summary of Bakersfield CAP Measures to Reduce GHG Emissions

Measure Number	Strategy	Measure	GHG Reductions ($MTCO_2e$)		
			2030	2040	2045
Building Energy					
BE-1.1	Clean/Renewable Energy	Decarbonize existing residential and nonresidential buildings.	15,253	27,487	48,130
BE-1.2		Decarbonize new residential and nonresidential buildings.	15,073	67,823	114,024
BE-2.1	Energy Efficiency and Reliability	Improve energy efficiency in existing residential and nonresidential buildings.	NA	NA	NA
BE-2.2		Reduce plug loads in existing residential and nonresidential buildings.	NA	NA	NA
BE-3.1	Resilient Buildings	Improve resilience of residential and nonresidential buildings to natural hazards.	NA	NA	NA
BE-3.2		Develop anti-displacement policies to protect disadvantaged communities from potential unintended consequences from building retrofits.	NA	NA	NA
		Building Energy Subtotal	*30,326*	*95,310*	*162,54*
Infrastructure					
IN-1.1	Clean and Reliable Energy	Transition to 100 percent clean electricity.	280,307	169,160	0
IN-1.2		Increase decentralized clean energy resources.	NA	NA	NA
IN-1.3		Develop innovative approaches to energy generation, distribution, and storage.	NA	NA	NA
IN-1.4		Install clean emergency backup generators for critical facilities and essential services.	NA	NA	NA
IN-2.1	Low- and Zero-Emission Vehicles	Increase EV charging infrastructure.	383,212	963,710	1,412,309
IN-2.2		Increase EV and low-carbon vehicle adoption.			
IN-3.1	Low- and Zero-Emission Equipment	Increase use of electricity and alternative fuels in construction equipment.	22,316	39,129	50,637
IN-3.2		Transition to electric-powered landscaping equipment.	619	2,448	4,190
IN-3.3		Transition to electric or alternatively fueled agricultural equipment.	540	725	697
IN-3.4		Transition to zero-emission or low-carbon irrigation pumps	18	37	42
IN-4.1	Water Conservation	Reduce water consumption in buildings.	6,066	6,580	0
IN-4.2		Reduce water consumption for irrigation and landscaping.	NA	NA	NA
IN-4.3		Increase the capture and use of recycled water.	NA	NA	NA
IN-5.1	Wastewater	Establish methane recovery in wastewater treatment facilities.	871	2,111	4,676
IN-6.1	Resilient and Equitable Infrastructure	Improve energy sector resilience.	NA	NA	NA
IN-6.2		Improve water and wastewater sector resilience.	NA	NA	NA
IN-6.3		Protect vulnerable transportation infrastructure, services, and systems from hazards exacerbated by climate change.	NA	NA	NA
		Infrastructure Subtotal	*693,948*	*1,183,900*	*1,472,551*

Measure Number	Strategy	Measure	GHG Reductions ($MTCO_2e$)		
			2030	2040	2045
Land Use and Mobility					
LU-1.1	Safe, Accessible, and Reliable Active Transportation	Improve pedestrian and biking infrastructure, prioritizing investments in disadvantaged communities.	53,535	52,842	53,223
LU-1.2		Improve safety for pedestrians and cyclists.	NA	NA	NA
LU-1.3		Improve access to bicycling through support services.	NA	NA	NA
LU-2.1	Safe, Accessible, and Reliable Public Transportation	Partner with Golden Empire Transit District to improve reliability and convenience of existing transit services through increased frequency, expanded service areas, extended service hours, and better facilities. Prioritize improvements in disadvantaged communities.	77,261	65,984	63,987
LU-2.2		Identify alternate routes for transit in case of hazard-related closures.	NA	NA	NA
LU-3.1	Equitable Shared Mobility	Develop programs and incentives that promote shared mobility in disadvantaged communities and increase access to health services, food, education, and employment.	NA	NA	NA
LU-4.1	Sustainable Land Use Planning	Increase residential density near transit, prioritizing affordable housing development.	54,086	95,326	118,386
LU-4.2		Increase implementation of transportation demand management strategies.			
LU-5.1	Smart Mobility	Increase smart mobility throughout the city.	NA	NA	NA
LU-6.1	Parking	Strategically evaluate the parking needs of the community and consider repurposing underutilized and vacant lots.	NA	NA	NA
		Land Use and Mobility Subtotal	*184,882*	*214,152*	*235,596*
Materials and Waste					
MW-1.1	Inorganic Waste Management and Reduction	Increase recycling citywide.	NA	NA	NA
MW-1.2		Reduce the generation of construction and demolition waste.	NA	NA	NA
MW-1.3		Promote a circular economy.	NA	NA	NA
MW-2.1	Organic Waste Management and Reduction	Increase organic waste diversion citywide.	158,715	240,532	319,625
MW-2.2		Increase edible food recovery.	NA	NA	NA
MW-3.1	Zero- and Low-Carbon Development	Increase sustainable materials used in construction.	NA	NA	NA
		Material and Waste Subtotal	*158,715*	*240,532*	*319,625*
Health and Resiliency					
HR-1.1	Resilient Communities	Establish community resilience hubs.	NA	NA	NA
HR-1.2		Embed climate resiliency and adaptation across planning efforts.	NA	NA	NA
HR-1.3		Ensure basic needs are met for vulnerable populations.	NA	NA	NA
HR-1.4		Support local food production and improve food security.	NA	NA	NA
HR-2.1	Education, Outreach, and Coordination	Develop an array of accessible outreach programs that emphasize natural hazard preparedness.	NA	NA	NA
HR-2.2		Prioritize community-based solutions to improve climate resilience.	NA	NA	NA
HR-3.1	Robust Emergency Services	Ensure accessibility and adequate capacity of emergency services.	NA	NA	NA
		Health and Resiliency Subtotal	*NA*	*NA*	*NA*

Measure Number	Strategy	Measure	GHG Reductions ($MTCO_2e$)		
			2030	2040	2045
Natural and Urban Landscapes					
NU-1.1	Expanded Vegetation	Increase urban tree canopy and green spaces to reduce heat island effect and improve air quality.	885	2,655	3,540
NU-1.2		Implement widespread hazard-resistant vegetation.	NA	NA	NA
NU-1.3		Develop an Urban Tree Management Plan.	NA	NA	NA
NU-2.1	Local Parks	Make parks more accessible and comfortable for all.	NA	NA	NA
NU-3.1	Green Infrastructure	Utilize green infrastructure to reduce the impacts of natural hazards and improve community resiliency.	NA	NA	NA
		Natural and Urban Landscapes Subtotal	*885*	*2,655*	*3,540*
Green Economy					
GE-1.1	High Road, Green Workforce Development	Develop training programs and pathways to employment in quality green jobs that target workers experiencing barriers to employment.	NA	NA	NA
GE-2.1	Green Businesses	Support the development of green businesses and the transition to a clean economy.	NA	NA	NA
		Green Economy Subtotal	*NA*	*NA*	*NA*
Education and Monitoring					
EM-1.1	Climate Action Education	Increase public awareness of climate-friendly actions that can be taken by residents and businesses.	NA	NA	NA
EM-2.1	Climate Action Monitoring	Monitor implementation of CAP actions to reduce GHG emissions and enhance resiliency in Bakersfield.	NA	NA	NA
		Education and Monitoring Subtotal	*NA*	*NA*	*NA*
Total Reductions from Measures			**1,068,757**	**1,736,549**	**2,193,466**
Reduction Needed to Meet Target			1,044,875	2,017,014	2,511,995
Target Met?			Yes	No	No
Remaining Gap to Target			(23,881)	280,465	318,529

Notes: Total may not sum exactly due to independent rounding. EV = electric vehicle; GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable.

Parentheses indicate target was met with a surplus of reductions.

Source: Calculations conducted by Ascent in 2023.

2.5.7 Climate Adaptation and Vulnerability

The effects of climate change are already occurring at global, regional, and local scales and will continue to worsen existing hazards in and around the city, including extreme heat, extreme precipitation and flooding, drought, and wildfires. While these hazards have existed historically in the city and surrounding regions, the frequency, intensity, and duration of these hazards are projected to increase or change because of climate change. The level of impact from these climate hazards will vary across the city and the region due to variations in physical, social, and economic characteristics. Of the four climate hazards assessed, the city, inclusive of its populations and assets, is most vulnerable to the potential impacts of increased temperatures and extreme heat. However, the city is still vulnerable to the other three climate hazards that were assessed – extreme precipitation and flooding, drought, and wildfires – though to a lesser degree than increased temperatures and extreme heat.

2.5.8 CAP Implementation and Monitoring Strategy

Implementation of the proposed CAP would require ongoing management, oversight, and collaboration, ensuring that measures translate to real GHG emissions reductions. Successful implementation requires investment, long-term commitments, and widespread community participation. The prioritization matrix, discussed in Chapter 6 of the CAP, should be used by the City to achieve the 2030 reduction target. Changing circumstances, such as State and federal laws and programs, updates to climate science, changes in technology, evolving local, State, federal, or even global economic and social conditions, may necessitate changes to the CAP. If the CAP is not achieving the desired outcomes, the measures or actions will need to be altered or amended.

City staff will evaluate the performance of each GHG reduction action that has been implemented. Evaluating the performance requires monitoring the level of community participation, costs, and potential barriers to implementation, as well as activities that result in GHG emissions reductions like actual reductions in fuel consumption, vehicle miles traveled, energy usage, water usage, landfilled waste, etc. City staff will regularly monitor and report on adaptation and climate hazards and will update the strategies and actions when needed. By evaluating whether the implementation of an action is on track to achieve its objective, the City can identify successful actions and reevaluate or replace underperforming measures.

2.5.9 California Environmental Quality Act and the CAP

The California Environmental Quality Act (CEQA) is a statute that requires local agencies to identify significant environmental impacts of their actions and avoid or mitigate those impacts, if feasible. The 2022 Scoping Plan for Achieving Carbon Neutrality emphasizes the use of CEQA as a tool by local jurisdictions for supporting the State's climate priorities. When a local climate plan complies with CEQA requirements, individual projects that comply with the local climate plan are allowed to streamline the project-specific GHG analyses. The City plans to utilize this streamlining benefit to ensure that new development is constructed with more sustainable and low-carbon features than existing development. By following this approach, the CAP has been prepared consistent with the provisions of CEQA Guidelines Section 15183.5 ("Qualified Plan"). As a result, it provides new development project applicants in the city the opportunity to use CEQA streamlining tools for projects that are consistent with the CAP. Demonstrating consistency with the CAP establishes that a project will not result in an "additional environmental effect" related to GHG emissions. A project's consistency with the CAP will be determined through completion of a modified environmental checklist, hereafter referred to as the Consistency Checklist ("Checklist") and provided on the City's website. The Checklist contains GHG reduction measures applicable to development projects that are required to be implemented on a project-by-project basis to achieve the City's 2030 reduction target and make substantial progress toward the 2045 goal. Projects that do not demonstrate consistency may, at the City's discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements.

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. **Project Title:** City of Bakersfield Climate Action Plan
2. **Lead Agency Name and Address:** City of Bakersfield
   Planning Division
   1715 Chester Avenue
   Bakersfield, CA 93301-5210
3. **Contact Person and Phone Number:** Kassandra Gale, Assistant Planning Director
   (661) 326-3411
4. **Project Location:** The Plan Area for the City of Bakersfield Climate Action Plan encompasses approximately 143 square miles within the city limits. See Chapter 2, "Project Description," for more detailed information.
5. **Project Sponsor's Name and Address:** City of Bakersfield
   Planning Division
   1715 Chester Avenue
   Bakersfield, CA 93301-5210
6. **General Plan Designation:** Various, see Chapter 2, "Project Description," for more detailed information.
7. **Zoning:** Various, see Chapter 2, "Project Description," for more detailed information.
8. **Description of Project:**

The Climate Action Plan (CAP) has been prepared as a comprehensive roadmap to community sustainability and resilience. The purposes of the CAP are to identify strategies and measures the City of Bakersfield (City) can take to reduce greenhouse gas (GHG) emissions to levels that align with the State of California's goals and set forth strategies to adapt and promote resilience to the impacts of climate change. See Chapter 2, "Project Description," for more detailed information.

9. **Surrounding Land Uses and Setting:**

The City is located in Kern County and the southern end of the San Joaquin Valley. Kern County is bound by Kings, Tulare, and Inyo counties to the north; San Bernardino County to the east; Los Angeles and Ventura counties to the south; and Santa Barbara and San Luis Obispo counties to the west. The City limits extend to the Sequoia National Forest to the northeast. The City is located east of Interstate-5 (I-5) and at the junction of State Route (SR) 99 and SR 58. To the south lies the Tehachapi Mountains and to the west is the Temblor Range.

10. **Other public agencies whose approval is required:** (e.g., permits, financing approval, or participation agreement)

None.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

In compliance with PRC section 21080.3.1, the City provided formal written notification of the CAP to Native American tribes who have requested notification pursuant to CEQA on February 14, 2023. No responses were received with respect to the project within the timeframes mandated by CEQA and Assembly Bill (AB) 52.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards / Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance
	☒ None	☐ None with Mitigation Incorporated

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☒ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

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

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

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



July 10, 2023

Signature Date

Kassandra Gale Assistant Planning Director

Printed Name Title

City of Bakersfield

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Environmental Setting

Topography in and around the Plan Area is predominantly level and does not include any significant geologic features such as hills or ridges. Although the Plan Area contains little or no topographical relief and average slopes range from 0-5 percent, slopes exceeding 20 percent and elevations exceeding 1,000 feet can be found in the Rural Northeast and Rio Bravo areas (City of Bakersfield 2002a). Scenic vistas are located solely within the northeast portion of Bakersfield and are associated with the Kern River Corridor and elevated natural land features that provide topographical relief, including foothills and bluffs. The Kern River is one of the most significant scenic resources in Bakersfield and has been described as the single most valuable visual resource in the southern San Joaquin Valley (City of Bakersfield 2002a).

Scenic viewsheds within the Plan Area include:

- The area east of Lake Ming, north of Highway 178, and west of Rancheria Road; this scenic viewshed area is immediately north of the Kern River Corridor.
- The area along Highway 178, east of Miramonte Drive, extending to the eastern most limits of Metropolitan Bakersfield; this scenic viewshed area is immediately south of the Kern River Corridor Valley (City of Bakersfield 2002a).

There are no State designated or eligible scenic highways or corridors within the Plan Area (Caltrans 2018). However, according to the Kern County General Plan Circulation Element, there are three highways within Bakersfield that could potentially become County-designated scenic routes (City of Bakersfield 2002a); The portions of these three highways within Bakersfield include:

- Bakersfield-Glennville Road, beginning at the junction of James Road and the Bakersfield-Glennville Road and extending north to the northern boundary of Metropolitan Bakersfield;
- Highway 178 east of Alfred Harrell Highway to the eastern boundary of Metropolitan Bakersfield; and

- The Alfred Harrell Highway east of Panorama Drive and extending to Highway 178, then continuing south along Comanche Drive to Highway 58.

Light and glare conditions within developed portions of the Plan Area are typical of those associated with infrastructure in urban and suburban uses. The main sources of daytime glare in the Plan Area are from sunlight reflecting from structures with reflective surfaces such as windows, and from vehicles on major roadways. Nighttime lighting is prevalent throughout the Plan Area along roadways, parking lots, building perimeters and within residential areas. Lighting from vehicle headlights affects both urban and rural areas. Areas with substantially less night-lighting include the sparsely developed rural areas. Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, as well as glass and other shiny reflective surfaces. Nighttime light illumination primarily consists of structured illumination, streetlights, and headlights of motor vehicles (City of Bakersfield 2002a).

3.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

Less than significant. Scenic vistas are located solely within the northeast portion of Bakersfield and are associated with the Kern River Corridor and the foothills and bluffs, elevated natural land features that provide topographical relief. Municipal Code Sections 17.66.010 through 17.66.180 address development in the city's hillside areas, located around the Kern River in the northern portion of the city. The Municipal Code identifies this area as scenic and imposes restrictions to ensure the long-term scenic qualities of the area.

The implementation of the CAP would result in short-term and long-term changes to the physical environment. Long-term changes could include improvements at or near grade level of existing roadways, as well as minor changes to traffic intersections and walkways (through implementation of LU-1.1), planting of trees and hazard resistant vegetation (NU-1.1, NU-1.2), and would not otherwise involve new features of substantial height, bulk, or massing that could substantially damage scenic vistas. For example, implementation of LU-1.1 could result in the installation of new walkways at the ends of existing cul-de-sacs, new and upgraded bikeways and walkways along existing developed roadways and rights-of-way in the city, and the installation of roundabouts to control traffic within the intersections of existing developed roadways.

During the short-term, temporary construction activities associated with the implementation of the CAP, such as equipment use and staging of materials, would not result in permanent impacts to scenic vistas. Construction activities would vary depending on the type of CAP measure. For example, improving pedestrian and biking infrastructure (LU-1.1) may involve removing existing pavement; repaving roadway surfaces; painting or restriping pavement; modifying curbs; laying concrete, and installing traffic signals, lighting, landscaping, street furniture, and other amenities. Some of these improvements may require limited ground disturbance. Construction activities would be short-term and temporary, and would typically not involve equipment of substantial height, bulk, or massing that would alter existing scenic vistas. Because duration of these activities would be limited to relatively short periods of the overall construction phase, their temporary effect on scenic vistas would not be substantial. Additionally, the increase in planted trees and the development of green spaces and hazard resistant landscaping (NU-1.1, NU-1.2) would offer a permanent visual improvement to the local surrounding area and would not result in a substantial effect on a scenic vista.

In addition, enforcement of the Municipal Code Sections 17.66.010 through 17.66.180 would avoid substantial damage to scenic vistas and degradation of public views. Furthermore, Municipal Code Chapter 17.61 includes landscaping standards, and aims to promote an attractive visual harmony between the landscape and development, reduce air, noise and visual pollution, produce a healthy, vibrant, sustainable urban forest, decrease temperatures, increase comfort, and promote commerce and socialization, while promoting water use efficiency. For all of the foregoing reasons, implementation of the CAP would not have a substantial adverse effect on a scenic vista and the impact would be less than significant, and no mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. The Plan Area does not include and is not located proximate to a State or locally designated or eligible scenic highway and thus will not damage scenic resources such as trees, rock outcroppings, or historic buildings within the viewshed of such a highway. No impact would occur, and no mitigation is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant. The implementation of the CAP would result in short-term and long-term changes to the visual environment of the CAP project area. For example, installing EV charging infrastructure (IN-2.1), improving pedestrian and biking infrastructure (LU-1.1), increasing the urban tree canopy, green spaces, and hazard-resistant vegetation (NU-1.1, NU-1.2), and improving park access (NU-2.1) could result in short-term and long-term changes to the visual character within the CAP project area. Long-term changes would include improvements at or near grade level of existing roadways and would involve minor changes to traffic intersections and parking lots, increase in trees and shade-inducing vegetation, and would not otherwise involve features with substantial height, bulk, or massing that could substantially damage the existing character or quality of public views. During the short-term, temporary construction activities associated with the implementation of the CAP such as equipment use and staging of materials would not result in permanent impacts to scenic resources. Because duration of these activities would be limited to relatively short periods of the overall construction phase, their temporary effect on the visual character and quality of the city would not be substantial.

In addition, enforcement of the Municipal Code Sections 17.66.010 through 17.66.180, which address development in the city's hillside areas located around the Kern River in the northern portion of the city would avoid substantial damage to the visual character and quality of public views. Furthermore, Municipal Code Chapter 17.61 includes landscaping standards, and aims to promote an attractive visual harmony between the landscape and development, reduce air, noise and visual pollution, produce a healthy, vibrant, sustainable urban forest, decrease temperatures, increase comfort, and promote commerce and socialization, while promoting water use efficiency. For all the foregoing reasons, implementation of the CAP would not substantially degrade the visual character or quality of public views of the city and its surroundings. This impact would be less than significant, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant. The implementation of the CAP may result in the use of temporary lighting sources during construction associated with installing EV charging infrastructure (IN-2.1), improving pedestrian and biking infrastructure (LU-1.1), increasing the urban tree canopy, green spaces, and hazard-resistant vegetation (NU-1.1, NU-1.2), and improving park access (NU-2.1). In the event that nighttime construction is necessary, these facilities and improvements facilitated by CAP implementation could add minimal nighttime lighting, however it would not create new sources of substantial light or glare.

Implementation of the CAP would not involve short- or long-term physical changes that could result in new substantial sources of light and glare. Furthermore, lighting associated with CAP implementation would be generally low profile and angled down and away from nearby receptors.

Enforcement of the City's Municipal Code would regulate new sources of light and glare to avoid affecting day or light sources associated with the CAP. Construction implemented by the CAP would be required to comply with the Bakersfield Municipal Code standards for exterior lighting standards, which prevent light spillover, glare, nuisance, inconvenience, or hazardous interference of any kind on adjacent properties and streets. Mandatory compliance with Municipal Code Sections 17.71.010 to 17.71.080, "Outdoor Lighting," would ensure that pole-mounted and building-

mounted light fixtures would not introduce any design features that would cause artificial light or glare to extents that would adversely affect day or nighttime views in the area. Any development associated with CAP implementation would comply with city development standards including Title 15 (buildings and construction) as well as California Code of Regulations Title 24 (building code). These local and state requirements would ensure CAP compliance with current lighting standards that minimize unwanted light or glare from spilling over into neighboring properties. The impact would be less than significant. No mitigation is required.

3.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

Agriculture in the Bakersfield area has been extensive since the introduction of livestock in the 1860's (City of Bakersfield 2002a). Agricultural land uses within the city boundaries are controlled by the City's General Plan and City and County zoning ordinances which identify the type of land uses permitted in agricultural zones, and call out the development parameters within each agricultural land use category. The General Plan land use map designates approximately 108,667 acres (42 percent) of the city within the following agricultural categories: Intensive Agriculture (R-IA): Minimum 20-acre parcel size; and Extensive Agriculture (R-EA): Minimum 20 acre parcel size (lands under Williamson Act: minimum 80 acre parcel) (City of Bakersfield 2002b).

3.2.2 Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than significant. The implementation of the CAP would involve ground disturbing activities, including minor grading and excavation. For example, minor grading, excavation, and other ground disturbance would occur during the construction associated with installing EV charging infrastructure (IN-2.1), improving pedestrian and biking infrastructure (LU-1.1), increasing the urban tree canopy, green spaces, and hazard-resistant vegetation (NU-1.1, NU-1.2), and improving park access (NU-2.1). However, implementation of the CAP would not involve changes to policies or regulations related to land use or zoning for agricultural uses. Given the nature of the CAP, construction activities associated with the implementation would occur in already disturbed, developed areas such as roadways and parking lots that are not designated for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Further, future projects would be required to comply with General Plan Policy CON/SA-P-9 which directs the City to protect existing agricultural areas. As such, implementation of the CAP would not involve short- or long-term physical changes that could convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. For all the foregoing reasons, implementation of the CAP would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and the impact would be less than significant. No mitigation is required.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

Less than significant. The implementation of the CAP would not involve changes to policies or regulations related to land use or zoning for land under a Williamson Act contract. Given the nature of the CAP, construction activities associated with their implementation would occur in urbanized, already disturbed, developed areas that are not in agricultural use nor under a Williamson Act contract. The General Plan has identified goals and policies which are intended to provide for the planned management, conservation, and wise utilization of agricultural land in the city. Future projects would be required to comply with General Plan Policy CON/SA-P-9 which protects prime agricultural lands against unplanned urban development by adopting agricultural zoning, agricultural land use designations, and by encouraging use of the Williamson Act and the Farmland Security Zone Program and policies that provide tax and economic incentives to ensure the long-term retention of agricultural lands. Therefore, implementation of the CAP would not conflict with existing zoning for agricultural use or a Williamson Act contract and the impact would be less than significant. No mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No impact. There are no lands currently used for timber production or management in the Plan Area, and no lands that have a zoning designation for timberland or forest land. Therefore, implementation of the CAP would not conflict with existing zoning or cause rezoning of any forest land, timberland, or timber land zoned for timberland production. Additionally, CAP implementation would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur. No mitigation is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. There are no lands currently used for timber production or management in the Plan Area, and no lands that have a zoning designation for timberland or forest land. Therefore, implementation of the CAP would not conflict with existing zoning or cause rezoning of any forest land, timberland, or timber land zoned for timberland production. Additionally, CAP implementation would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur. No mitigation is required.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. The implementation of the CAP would involve ground disturbing activities, including minor grading and excavation. For example, minor grading, excavation, and other ground disturbance would occur during construction associated with installing EV charging infrastructure (IN-2.1), improving pedestrian and biking infrastructure (LU-1.1), increasing the urban tree canopy, green spaces, and hazard-resistant vegetation (NU-1.1, NU-1.2), and improving park access (NU-2.1). However, implementation of the CAP would not involve changes to policies or regulations related to land use or zoning for agricultural uses. Given the nature of the CAP, construction activities associated with the implementation would occur in already disturbed, developed areas such as roadways and parking lots that are not designated for Farmland or forestland and would not be converted to non-agricultural or non-forest use. Further, future projects would be required to comply with General Plan Policies CON/SA-P-1 through CON/SA-P-5, and CON/SA-P-9 which direct the City to protect existing agricultural areas.

Implementation of the CAP would not involve short- or long-term physical changes 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 and the impact would be less than significant. No mitigation is required.

3.3 AIR QUALITY

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

3.3.1 Environmental Setting

The City is located in Kern County which is within the San Joaquin Valley Air Basin (SJVAB). Aside from the western portion of Kern County, the SJVAB also includes all of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare Counties. Ambient concentrations of air pollutants are determined by the levels of emissions released by pollutant sources and the ability of the atmosphere to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight.

CRITERIA AIR POLLUTANTS

Concentrations of criteria air pollutants (the most prevalent air pollutants known to be harmful to human health) are used to indicate the quality of the ambient air. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}) and fine particulate matter with aerodynamic diameter of 2.5 or less ($PM_{2.5}$), and lead. The sources of criteria air pollutants and their respective acute and chronic health impacts are described in Table 3.3-1.

Table 3.3-1 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Carbon monoxide (CO)	incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO_2)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function
Sulfur dioxide (SO_2)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	irritation of upper respiratory tract, increased asthma symptoms	insufficient evidence linking SO_2 exposure to chronic health impacts
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/ developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

1. "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

2 "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases.

Source: EPA 2022a.

EXISTING AMBIENT AIR QUALITY

Criteria Air Pollutants

Concentrations of criteria air pollutants are used to indicate the quality of the ambient air. A description of key criteria air pollutants in the SJVAB and their potential impacts on human health is provided below. Emission source types and health effects are summarized in Table 3.3-2. Kern County's attainment status for the CAAQS and the NAAQS are shown in Table 3.3-3.

Table 3.3-2 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO_2)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Sulfur dioxide (SO_2)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO_2 exposure to chronic health impacts
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/ developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases.

[1] Acute health effects refer to immediate illnesses caused by short-term exposures to criteria air pollutants at fairly high concentrations. An example of an acute health effect includes fatality resulting from short-term exposure to carbon monoxide levels in excess of 1,200 parts per million.

[2] Chronic health effects refer to cumulative effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations. An example of a chronic health effect includes the development of cancer from prolonged exposure to particulate matter at concentrations above the national ambient air quality standards.

Source: CARB 2022a.

Table 3.3-3 Attainment Status Designations for Kern County

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	--	Nonattainment (1-hour)[2]
	Nonattainment (8-hour)[3] Classification=Serious	Nonattainment (8-hour)
Respirable particulate matter (PM_{10})	Attainment (24-hour)	Nonattainment (24-hour)
	--	Nonattainment (Annual)
Fine particulate matter ($PM_{2.5}$)	Nonattainment (24-hour)	--
	Nonattainment (Annual)	Nonattainment (Annual)
Carbon monoxide (CO)	Unclassified/Attainment (1-hour)	Attainment (1-hour)
	Unclassified/Attainment (8-hour)	Attainment (8-hour)
Nitrogen dioxide (NO_2)	Unclassified/Attainment (1-hour)	Attainment (1-hour)
	Unclassified/Attainment (Annual)	Attainment (Annual)
Sulfur dioxide (SO_2)[4]	Unclassified/Attainment (1-Hour)	Attainment (1-hour)
		Attainment (24-hour)
Lead (Particulate)	Unclassified/Attainment (3-month rolling avg.)	Attainment (30 day average)
Hydrogen Sulfide	No Federal Standard	Unclassified (1-hour)
Sulfates		Attainment (24-hour)
Visibly Reducing Particles		Unclassified (8-hour)
Vinyl Chloride		Attainment

Notes: CAAQS = California ambient air quality standards; CO = carbon monoxide; NAAQS = national ambient air quality standards; NO_2 = nitrogen dioxide; NO_X = oxides of nitrogen; PM = particulate matter; ROG = reactive organic gases; SO_2 = sulfur dioxide; VOCs = volatile organic compounds.

[1] Air Quality meets federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply.

[2] Per Health and Safety Code Section 40921.5(c), the classification is based on 1989–1991 data, and therefore does not change.

[3] 2015 Standard.

[4] 2010 Standard.

Sources: CARB 2022a, EPA 2023, SJVAPCD 2012

TOXIC AIR CONTAMINANTS

According to the US Environmental Protection Agency (EPA), diesel particulate matter (PM) contains complex mixtures of microscopic solids and liquids comprised of various substances that can pose a risk to human health when inhaled (EPA 2022b). Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the toxic air contaminants for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Odor sources of concern include wastewater treatment plants, landfill and composting facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, marijuana cultivation, coffee roasters, and food processing facilities.

SENSITIVE RECEPTORS

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants. Individuals who are especially sensitive to pollutants are dispersed throughout the city.

FEDERAL AND STATE AIR QUALITY PLANNING

The US Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970 and most recently amended by Congress in 1990. The CAA required EPA to establish the National Ambient Air Quality Standards (NAAQS) for the following criteria air pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. CAA also requires each State to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for States with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. Individual SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required CARB to establish its own California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases the CAAQS are more stringent than the NAAQS.

Kern County is currently designated as nonattainment for ozone and $PM_{2.5}$ with respect to the NAAQS and for ozone, PM_{10} and $PM_{2.5}$ with respect to the CAAQS (EPA 2023, CARB 2022a).

The California Department of Resources Recycling and Recovery (CalRecycle) regulates solid waste disposal and composting facilities. All compostable material handling facilities and operations are required to comply with the State minimum standards set forth in California Code of Regulations (CCR) Title 14, Division 7, Chapter 3.1, Articles 5, 6, 7, 8, and 9. An odor impact minimization plan (OIMP) is required for facilities and operations as specified in 14 CCR section 17863.4. The CalRecycle minimum standard (14 CCR section 17867(a)(2)) for odor requires that "All handling

activities shall be conducted in a manner that minimizes vectors, odor impacts, litter, hazards, nuisances, and noise impacts; and minimizes human contact with, inhalation, ingestion, and transportation of dust, particulates, and pathogenic organisms."

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Criteria Air Pollutants

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the primary agency responsible for meeting the NAAQS and CAAQS in the SJVAB. The SJVAB has been designated as nonattainment with respect to the NAAQS and CAAQS for ozone, PM_{10} and $PM_{2.5}$ (Table 3.3-3) (EPA 2023, CARB 2022a). SJVAPCD works with CARB and EPA to maintain the region's portion of the SIP for ozone, PM_{10} and $PM_{2.5}$.

SJVAPCD also enforces air quality regulations, educates the public about air quality, and implements a number of programs to provide incentives for the replacement or retrofit of older diesel engines. SJVAPCD's air quality guidance also influences land use development in the SJVAB by providing decision makers with suggested goals, policies, and science pertaining to siting receptors to known or planned locations of stationary and/or mobile sources of air pollution.

All projects are subject to adopted SJVAPCD rules and regulations in effect at the time of construction. Specific rules applicable to the project may include but are not limited to the following:

- **Regulation VIII—Fugitive Dust PM_{10} Prohibitions:** Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust and dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, and landfill operations. Compliance with Regulation VIII is mandatory and enforced through civil penalties, so compliance by the project proponent is assumed in this analysis. SJVAPCD is made aware of actions that violate their regulations and rules, such as Regulation VIII, and may investigate claims that, if found to be accurate, may incur financial penalties.
- **Rule 1177—Gasoline Dispensing Facility Tester Certification:** The purpose of this rule is to specify the requirements for persons electing to obtain certification as a Gasoline Dispensing Facility (GDF) Tester. The GDF Tester Certification Program has been established to provide GDF operators with a qualified pool of testers to properly conduct the gasoline vapor recovery performance tests required by District rules and/or Air Resources Board (ARB) executive orders.
- **Rule 2010—Permits Required:** This rule applies to anyone who plans to or does operate, construct, alter, or replace any source operation that may emit air contaminants or may reduce the emission of air contaminants. The proposed project would be subject to SJVAPCD permitting requirements for stationary sources such as boilers or back-up generators.
- **Rule 2201—New and Modified Stationary Source Review Rule:** This rule applies to all new stationary sources and all modifications of existing stationary sources. Stationary sources are subject to SJVAPCD permit requirements if, after construction, they emit or may emit one or more affected pollutant. The project would include the operation of a back-up diesel generator to support the proposed wastewater treatment plant in scenarios where electrical power is unavailable.
- **Rule 3180—Administration Fees for Indirect Source Review:** This rule serves to recover SJVAPCD's costs for administering the requirements of Rule 9510, Indirect Source Review (summarized below).
- **Rule 3135—Dust Control Plan Fee:** This rule requires applicants to submit a fee in addition to a dust control plan. The purpose of this fee is to recover SJVAPCD's cost for reviewing such plans and conducting compliance inspections.
- **Rule 4002—National Emissions Standards for Hazardous Air Pollutants**: This rule applies to all stationary sources of HAPs and requires them to comply with the standards, criteria, and requirements set forth therein.
- **Rule 4101—Visible Emissions:** This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

- **Rule 4102—Nuisance:** This rule applies to any source operation that emits or may emit air contaminants or other materials. If such emissions create a public nuisance, the owner/operator could be in violation and be subject to enforcement action by SJVAPCD.
- **Rule 4601—Architectural Coatings:** This rule limits ROG from architectural coatings by specifying storage, cleanup, and labeling requirements for architectural coatings. This rule also establishes ROG limits for various architectural coating types.
- **Rule 4622—Gasoline Transfer Into Motor Vehicle Fuel Tanks:** The purpose of this rule is to limit emissions of gasoline vapors from the transfer of gasoline into motor vehicle fuel tanks. This rule applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks.
- **Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations:** This rule applies to the manufacture and use of certain asphalt types for paving and maintenance operations.
- **Rule 9510—Indirect Source Review:** Also known as the Indirect Source Rule (ISR), this rule is intended to reduce or mitigate emissions of NO_X and PM_{10} from the construction- and operation-related emissions of new land use development in the SJVAPCD. This rule requires specific percentage reductions in estimated onsite construction and operation emissions, and/or payment of a prescribed off-site mitigation fee for required reductions that cannot be met on the project site. Construction emissions of NO_X and PM_{10} exhaust must be reduced by 20 percent and 45 percent, respectively. Operational emissions of NO_X and PM_{10} must be reduced by 33.3 percent and 50 percent, respectively. The rule applies to residential developments of 50 units or more, and commercial development projects of 2,000 square feet and larger, so the proposed development would be subject to the ISR. The provisions of Rule 9510 are described in more detail in the analysis of environmental impacts and mitigation measures.

SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) is an advisory document that provides lead agencies, consultants, and project applicants with analysis guidance and uniform procedures for addressing air quality in environmental documents. The GAMAQI describes the criteria that the SJVAPCD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for determining whether projects would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. If modeled construction- or operation-related emissions for a project exceed SJVAPCD's mass emission thresholds for criteria air pollutants and precursors, then SJVAPCD recommends implementing mitigation to reduce these emissions (SJVAPCD 2015). SJVAPCD's mass emission thresholds are presented in Section 3.3.2 below.

These SJVAPCD thresholds of significance for criteria pollutant emissions are based on SJVAPCD New Source Review (NSR) offset requirements for stationary sources. Emission reductions achieved through implementation of SJVAPCD offset requirements are a major component of SJVAPCD's air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants are considered to not conflict or obstruct implementation of SJVAPCD's air quality plan.

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than significant. The Plan Area is located within the SJVAPCD jurisdiction, in the SJVAB. The SJVAB is in nonattainment for 1-hour ozone, PM_{10}, and $PM_{2.5}$ with respect to the CAAQS and 8-hour ozone and $PM_{2.5}$ with respect to the NAAQS. As such, air quality impacts from CAP implementation are controlled through policies and provisions of the SJVAPCD and the General Plan. The SJVAPCD has adopted several air quality attainment plans and is required

to submit a "Rate of Progress" document to the CARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants.

SJVAPCD has established thresholds of significance for criteria pollutant emissions, which are based on NSR offset requirements for stationary sources. Stationary sources in the SJVAPCD are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of SJVAPCD offset requirements are a major component of the SJVAPCD's air quality plans. Thus, for purposes of CEQA analysis, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the SJVAPCD's air quality plan (SJVAPCD 2015:65).

Regional emission inventories in the air quality attainment plans are developed based on anticipated growth in population, housing, vehicle miles traveled (VMT), and other parameters. The analysis below focuses on whether implementation of the CAP would increase population, employment, or VMT, above planned levels, as well as potentially result in exceedances of applicable thresholds for construction and operational emissions (see above).

Construction

Measures included as part of the CAP that would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1), which could require a temporary increase in the number of construction workers. These types of projects are small construction projects, which would not require a large construction crew. Furthermore, construction workers would likely be from the greater Bakersfield region and permanent, substantial relocation of workers would not be required. Therefore, implementation of these measures would not result in substantial population growth, employment growth, or increase in VMT.

Implementation of the above measures, as well as other measures which would require construction activities for their implementation, would generate emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with off-road equipment use (i.e. excavators, front loaders, pavers, dump trucks, cranes, and backhoes), material and equipment delivery trips, worker commute trips, and other miscellaneous activities. Fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be associated primarily with site preparation and would vary as a function of soil silt content, soil moisture, wind speed, and acreage of disturbance. PM_{10} and $PM_{2.5}$ are also contained in exhaust from off-road equipment and on-road vehicles. Emissions of ozone precursors, ROG and NO_X, would be associated primarily with construction equipment, such as those listed above, and on-road mobile exhaust from worker commutes and hauling and delivery trips. The application of architectural coatings would result in off-gas emissions of ROG. Construction activities would likely be relatively small in scale, occur intermittently and last for only short periods of time, as the CAP does not propose the construction of large-scale land use development projects. Therefore, emissions from construction activities would not be concentrated in one area for an extended period of time, but rather occur intermittently across a large area. Additionally, Measure IN-3.1 would promote the use of electric and alternative fuel in construction equipment, further reducing construction related emissions. Due to the non-intensive, sporadic, and widespread nature of these construction activities, emissions of criteria air pollutants would likely not occur in concentrations which would exceed SJVAPCD thresholds and would therefore be consistent with the goals of the air quality attainment plans.

Operations

Implementation of the CAP would not induce population growth directly or indirectly, because the CAP does not propose new housing, nor do they propose changes to policies or regulations related to land use or residential zoning. Rather, the CAP is intended to reduce GHG emissions generated within the city by implementing numerous transportation-, water-, waste-, and energy-related measures. For example, the implementation of the CAP would encourage the use of alternatively fueled vehicles through measures such as IN-2.1, which would increase EV charging infrastructure and IN-3.1 which would promote the use of electric and alternative fuel in construction equipment. This would reduce overall gasoline and fuel consumption, therefore reducing emissions related to fossil fuel combustion. Other transportation-related measures such LU-1.1 and LU-4.1 would reduce VMT in the City by improving pedestrian and biking infrastructure and increasing residential density near transit. Reducing VMT would reduce the emission of air pollutants by decreasing the consumption of fossil fuel in vehicles. Energy-related measures such as BE-2.2 would reduce GHG emissions by reducing plug loads in existing residential and nonresidential buildings. While these reduction

measures were formulated to reduce GHGs, they would also improve overall air quality by reducing the emission of criteria air pollutants. Building energy-related measures such as BE-1.1, BE-1.2, and BE-2.1 would decarbonize new and existing residential and nonresidential buildings and improve energy efficiency in existing residential and nonresidential buildings which would reduce GHG emissions and local criteria air pollution.

The effects associated with the reduction of air pollutant emissions in the Plan Area and SJVAB would be largely beneficial and would, by nature, reduce the concentration of air pollutants. Therefore, operational activities under implementation of the CAP would not result in the exceedance of SMAQMD thresholds and would be considered consistent with the goals of the air quality attainment plans.

Impact Summary

Air pollutant emissions resulting from construction activities associated with the implementation of the CAP would likely be relatively small in scale, occur intermittently and last for only short periods of time and would therefore not exceed SJVAPCD thresholds. Similarly, operational air pollutant emissions from CAP implementation would likely result in a net decrease in criteria air pollutants and would therefore not result in emissions of criteria air pollutants which would exceed SJVAPCD thresholds. Overall, the operational air quality benefits resulting from implementation of the CAP, including reductions in gasoline fuel consumption due to increased use of zero emission vehicles and measures to reduce the rate of VMT and reduce consumption of natural gas within residential and commercial buildings would likely outweigh the contribution of pollutants from construction activities. For these reasons, construction and operation of the CAP would not result in exceedances of the applicable local emissions thresholds and would therefore be consistent with SJVAPCD's air quality plan. This impact would be less than significant. No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant. Provided below are analysis CO emissions, criteria air pollutant emissions, and toxic air contaminant emissions.

Carbon Monoxide

The single largest source of CO within the City is motor vehicle engines. CO concentrations near roadways are a direct function of vehicle idling time and, thus, traffic flow conditions. The CAP does not include new or modified land use designations that would increase traffic or have the potential to result in CO hotspots. The CAP does not induce or otherwise result in any residential development that would result in regional population increases. The goal of the CAP is to reduce GHG emissions in the Plan Area, including from passenger vehicles by measures that would increase the use of zero emission vehicles and decrease the rate of VMT, that would also have the co-benefit of reducing air pollutant emissions. Although there would be a temporary increase in vehicle trips related to construction worker commute and equipment delivery, implementation of the CAP would not result in substantial long- or short-term vehicle trip generation at levels that would exceed the CAAQS for CO. Rather, the CAP would include the implementation of measures (Land Use and Mobility) which would collectively reduce CO emissions resulting from vehicle trips by encouraging the use of alternatively fueled vehicles, increasing access to public transportation, and encouraging the use of alternative transportation such as biking. Measure LU-4.2 which calls to increase implementation of transportation demand management strategies would reduce pollutant concentrations associated with vehicle by subsidizing transit passes for employees, encouraging ridesharing, and promoting vanpools by creating community vanpool programs that target workers at major job centers. Therefore, the CAP would not create or contribute to a CO hotspot.

Criteria Air Pollutants

For the purposes of this analysis, the CAP would result in a significant localized and/or regional air quality impact such that human health would be adversely affected if it would cause construction-generated or operational criteria air pollutant or precursor emissions to exceed SJVAPCD thresholds (see above under Criterion [a]).

The CAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, construction and operation of GHG reduction measures identified in the CAP have the potential to directly or indirectly emit air pollutants. Emissions of PM_{10}, $PM_{2.5}$, NO_x, SO_x, CO, and VOCs would

result from the use of construction equipment, construction worker vehicle trips, and truck hauling trips. Emissions of fugitive dust (PM_{10} and $PM_{2.5}$) are largely associated with ground-disturbing activities, such as site preparation.

GHG reduction measures that would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1), would not involve substantial numbers of workers, ground disturbance, or extensive use of construction equipment. Occasional maintenance activities for these facilities and operational vehicle trips would be minimal; thus, associated operational criteria air pollutant emissions would also be minimal.

Measure NU-1.1, mentioned above, would involve planting additional trees throughout the city. Tree planting is known to act as a filter for air pollution. While this would not prevent emissions from occurring, it would aid in removing them from the air.

Measure MW-2.1 which would increase organic waste diversion citywide could lead to increased haul truck trips to and from composting and recycling facilities; however, it is anticipated that these trips would displace the haul truck trips that would be diverted from the landfill. A substantial net increase in the number of haul truck trips and associated criteria air pollutant emissions within the Plan Area would not be anticipated.

Implementation of the other GHG reduction measures in the CAP would not involve short- or long-term physical changes that could result in criteria air pollutant emissions. Additionally, the CAP includes several GHG reduction measures that would also reduce the emission of air pollutants by reducing VMT by improving pedestrian and biking infrastructure (LU-1.1), improving reliability and convenience of existing transit services through increased frequency, expanded service areas, extended service hours, and better facilities (LU-2.1), and by increasing residential density near transit (LU-4.1). Therefore, implementation of the CAP would not be expected to result in construction-phase or operational air pollutant emissions in exceedance of SJVAPCD thresholds and would minimize the potential for exposing receptors to unhealthy concentrations of criteria air pollutants.

Toxic Air Contaminants

The CAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, construction and operation of GHG reduction measures that would be implemented with CAP adoption have the potential to directly or indirectly emit toxic air contaminants. The CAP does not propose any stationary sources of toxic air contaminant pollution and therefore diesel PM is the primary toxic air contaminant of concern. CAP measures would result in short-term diesel exhaust emissions from construction equipment and heavy-duty trips during construction. Diesel PM dissipates rapidly from the source, and exposure concentrations would decline with distance from construction activities (Zhu et al. 2002). The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic air contaminant emissions, should be based on a 70- or 30-year exposure period. However, such assessments should be limited to the period/duration of activities that generate toxic air contaminant emissions (OEHHA 2015).

CAP GHG reduction measures that would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1) could result in diesel PM emissions from the use of construction equipment and from the use of haul trucks to deliver materials. These types of construction activities would occur in residential and commercial areas, which include sensitive receptors such as residences, schools, playgrounds and hospitals. However, these activities would involve minimal use of heavy-duty diesel equipment and thus, diesel PM emissions would be minimal and temporary as well. Furthermore, the planting of trees (NU-1.1) is known to filter pollutants in the air and would thus aid in removing emissions from construction activities as well as operational activities. It is unlikely that construction of such projects involving use of heavy-duty diesel equipment or vehicles

would last for longer than one year, which is a short exposure period relative to the 30- or 70-year exposure timeframe recommended for health risk assessments.

Impact Summary

The CAP would not create or change land use designations that would increase the number of vehicle trips or have the potential to result in CO hotspots. Additionally, the CAP includes several GHG reduction measures (LU-1.1, LU-2.1, LU-4.1) that would reduce VMT such as improving pedestrian and biking infrastructure, improving transit services through increased frequency, expanded service areas, extended service hours, and better facilities, and by increasing residential density near transit. Although there would be a temporary increase in vehicle trips related to construction worker commute and equipment delivery, the CAP would not result in substantial long- or short-term vehicle trip generation at levels that could cause unhealthy concentrations of CO on nearby roadways. This impact regarding CO emissions would be less than significant.

GHG reduction measures that would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1), which would result in minor criteria air pollutant and toxic air contaminant emissions during construction and beneficial long-term air quality impacts. It is unlikely that these types of activities would be of the size, intensity, or duration to exceed SJVAPCD thresholds of significance or to emit substantial toxic air contaminant concentrations. SJVAPCD recommends these thresholds in consideration of achieving attainment for the NAAQS and CAAQS, which represent concentration limits of criteria air pollutants needed to adequately protect human health. Therefore, these measures would not contribute to the exceedance of the NAAQS or CAAQS in the SJVAB nor result in greater acute or chronic health impacts compared to existing conditions.

MW-2.1, described above, could result in new haul truck routes or additional haul truck traffic in some areas, which may subject sensitive receptors to new or increased diesel PM emissions. However, these trips would likely be infrequent and would not involve the trucks idling for extended periods of time near sensitive receptors. Thus, increases in mobile-related toxic air contaminant emissions would not result in substantial toxic air contaminant exposure to any single receptor. Therefore, the CAP would not expose receptors to substantial pollutant concentrations. This impact would be **less than significant**. No mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant. The CAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. However, implementation of some GHG reduction measures would result in temporary emissions of odors from construction activities such as asphalt paving and use of diesel-powered construction vehicles and equipment.

GHG reduction measures that would result in the construction of new EV charging infrastructure and (IN-2.1), improvements related to pedestrian and bike infrastructure and safety (LU-1.1, LU-1.2), tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1) would result in odorous emissions from construction equipment. For example, Measure LU-1.1 and Measure LU-1.2, which involve improvements to pedestrian and biking infrastructure and safety, would result in asphalt paving associated with sidewalk and crosswalk improvements. Measure LU-1.1 would result in the implementation of the recommended bike network projects identified in the Bakersfield Low Stress Bike Network Plan in coordination with Kern Council of Governments (KernCOG) and Kern County, which could involve asphalt paving. Although locations for some of these improvements have not been identified, these types of activities would generally occur in populated residential and commercial areas. However, these activities would occur sporadically and independent of one another across a large area and would involve minimal use of heavy-duty diesel equipment and thus, diesel PM emissions would be minimal, temporary, and each individual occurrence of construction activity would be highly localized. Furthermore, these emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction. Because odors would be temporary and would disperse rapidly with distance from source, construction-generated odors would not adversely affect a substantial number of people.

Measure MW-2.1 which increases the recovery of edible food waste and eliminate the disposal of organic waste in landfills, respectively, would generate odors through the anaerobic decomposition of composted waste that the City would divert from landfills and through increased haul truck trips to composting facilities. Compostable materials handling operations and facilities that would receive increased volumes of compostable waste from the Plan Area under implementation of MW-2.1 are regulated by CalRecycle (e.g. landfill, composting, etc.) and required by State regulation (Title 14, California Code of Regulations, Section 17863.4) to have OIMPs in place to prevent odors from occurring and to identify the measures that should be taken if odors do occur. The hauling of increased volumes of compostable waste to facilities via truck would result in some odors associated with diesel exhaust but would not adversely affect substantial numbers of people.

Construction activities associated with implementation of the CAP would result in temporary generation of odorous emissions. The specific locations and emissions of possible future projects implemented under the CAP are not known at this time. Therefore, the precise odor impacts cannot be identified at this time. Factors necessary to identify specific impacts include location, operational characteristics, frequency and duration, and the location of sensitive receptors. However, given the temporary and intermittent nature of the impacts, and dissipation of odor, construction odor impacts would be less than significant. Measure MW-2.1, described above, would result in increased odors from the anaerobic decomposition of composted waste and haul truck trips to composting facilities. These impacts would be avoided through implementation of an OIMP, as required by State regulation. Therefore, the CAP would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant, and no mitigation is required.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

Land cover within the Plan Area is comprised of developed land, agricultural land, vegetation communities, and riparian and wetland communities. Developed land makes up the majority of the Plan Area and is comprised of nonnative and ornamental vegetation. Vegetation communities occur in the eastern and southern portions of the Plan Area and primarily consist of pasture grassland and mixed riparian woodland. Riparian and wetland vegetation communities occur along water bodies, especially the Kern River, within the Plan Area. Wetlands include areas where emergent vegetation is present within the drainage, as well as active springs and seeps where surface water is sufficient to support hydrophytic vegetation.

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) (City of Bakersfield 1994) was developed to obtain permits that meet both federal and state environmental regulations regarding incidental "take" of listed species set

for in the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA). In turn, urban development outlined in the Metropolitan Bakersfield 2010 General Plan can proceed while the goal of the MBHCP is to acquire, preserve, and enhance native habitats that support endangered and sensitive species. Since development on open lands in Metropolitan Bakersfield could potentially result in the incidental "take" of habitat and/or sensitive species, permits acquired under the MBHCP (Incidental Take Permit [ITP] No. 2081-2013-058-04) include Section 10(a)(1)(B) of the ESA and Section 2081 of the CESA. The MBHCP is funded through the collection of mitigation fees associated with all urban development occurring within the HCP permit area. The fee is paid to the City or County at the time of grading permit approval, grading plan approval, or issuance of building permit, whichever occurs first. Upon payment and provided that all applicable measures required in the HCP have been implemented, the applicant will become a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws. However, in June 2023, the MBHCP and the Metropolitan Bakersfield Urban Development Incidental Take Permit (MBITP), in its current form, expired and no longer provides incidental "take" coverage for applicants. As a result of MBHCP and MBITP expiration, projects requiring and seeking incidental take coverage will be required to comply with CESA and FESA as individual projects unless subsequent regional authorizations are issued.

3.4.2 Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less than significant. The implementation of CAP would involve ground disturbing activities, including grading and excavation. For example, minor grading, excavation, and other ground disturbance would occur during the construction of new roundabouts and bicycle infrastructure (LU-1.1, LU-1.2, LU-1.3) and/or installation of EV charging infrastructure (BE-1.1, BE-1.2, IN-2.1). However, given the nature of the measures included in the CAP, construction activities associated with its implementation would occur in already disturbed developed areas such as roadways and parking lots that lack natural habitat and where candidate, sensitive, or special-status species or their habitats are not present. EV charging stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within City parks, public rights-of-way and new development projects. Further, future projects would be required to comply with General Plan Policies CON/BR-G-1, CON/BR-G-2, CON/BR-P-1, and CON/BR-P-5 which direct the City to support the protection of rare, threatened, and endangered species and their habitats.

All future projects with the potential to result in environmental impacts would generally require discretionary review and would be required to evaluate project-specific impacts under CEQA at the time of application. Project-specific mitigation would be required to minimize or avoid impacts to special-status species and their habitat to the extent feasible in compliance with CEQA Guidelines section 15126.4. In general, facilities associated with CAP implementation would occur in more urbanized areas that could involve the removal of largely landscape trees and other vegetation and would not generally require the removal of native vegetation. Impacts would be minimized through implementation of the City's General Plan policies. In addition, federal and State requirements would be adhered to, and project-specific measures that take into consideration site specific habitat conditions would be implemented to conserve, protect, and preserve special-status species and their habitat. For all of the foregoing reasons implementation of the CAP measures would not cause a substantial adverse direct and indirect effects to special-status species or sensitive habitats. This impact would be less than significant. No mitigation is required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than significant. As noted above, the implementation of CAP measures would involve ground disturbing activities, including grading and excavation. However, given the nature of the measures included in the CAP, construction activities associated with its implementation would occur in already disturbed developed areas such as roadways and parking lots where protected wetlands are not present. EV charging stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within City parks, public rights-of-way and new development projects. Further, future projects would be required to comply with General Plan Policies CON/BR-G-1, CON/BR-G-2, CON/BR-P-1, and CON/BR-P-5 which direct the City to support the protection of rare, threatened, and endangered species and their habitats. Further, Bakersfield Municipal Code Section 15.05.170(J101.7) states that a grading permit shall not be issued for areas where proposed activity will adversely affect the water quality of watercourses and existing drainage unless the City's Planning Commission has found such grading is necessary.

All future projects with the potential to result in environmental impacts would generally require discretionary review and would be required to evaluate project-specific impacts under CEQA at the time of application. Project-specific mitigation would be required to minimize or avoid impacts to protected wetlands to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Impacts would be minimized through implementation of the City's General Plan policies and Bakersfield Municipal Code described above. In addition, federal and State requirements would be adhered to, and project-specific measures implemented to conserve, protect, and preserve wetlands. For all of the foregoing reasons, implementation of the CAP measures would not cause a substantial adverse direct and indirect effects to wetlands. This impact would be less than significant. No mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant. As noted above, the implementation of CAP measures would involve ground disturbing activities, including grading and excavation. However, given the nature of the measures included in the CAP, construction activities associated with its implementation would occur in already disturbed developed areas such as roadways and parking lots where wildlife corridors are not present. EV charging stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within City parks, public rights-of-way and new development projects. Further, future projects would be required to comply with General Plan Policies CON/BR-G-1, CON/BR-G-2, CON/BR-P-1, and CON/BR-P-5 which direct the City to support the protection of rare, threatened, and endangered species and their habitats.

All future projects with the potential to result in environmental impacts would generally require discretionary review and would be required to evaluate project-specific impacts under CEQA at the time of application. Project-specific mitigation would be required to minimize or avoid impacts to wildlife corridors to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Impacts would be minimized through implementation of the City's General Plan policies. In addition, federal and State requirements would be adhered to, and project-specific measures implemented to conserve, protect, and preserve wildlife corridors. For all of the foregoing reasons, implementation of the CAP measures would not cause a substantial adverse direct and indirect effects to wildlife corridors. This impact would be less than significant. No mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant. The implementation of CAP measures would involve ground disturbing activities, including grading and excavation. For example, minor grading, excavation, and other ground disturbance would occur during the construction of new roundabouts and bicycle infrastructure (LU-1.1, LU-1.2, LU-1.3) and/or installation of EV charging infrastructure (BE-1.1, BE-1.2, IN-2.1). Given the nature of the measures included in the CAP, construction activities associated with its implementation would occur in already disturbed developed areas such as roadways and parking lots where protected biological resources are not present. EV charging stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within City parks, public rights-of-way and new development projects. Further, future projects would be required to comply with General Plan Policies CON/BR-G-1, CON/BR-G-2, CON/BR-P-1, and CON/BR-P-5 which direct the City to support the protection of rare, threatened, and endangered species and their habitats. Pursuant to Bakersfield Municipal Code 17.61.050, any person desiring to remove a tree is required to replace the removed tree within 120 days of removal.

All future projects with the potential to result in environmental impacts would generally require discretionary review and would be required to evaluate project-specific impacts under CEQA at the time of application. Project-specific mitigation would be required to minimize or avoid impacts to protected biological resources to the extent feasible in compliance with CEQA Guidelines section 15126.4. In general, facilities associated with CAP implementation would occur in more urbanized areas that could involve the removal of largely landscape trees and other vegetation and would not generally require the removal of native vegetation. Impacts would be minimized through implementation of the City's General Plan policies and Bakersfield Municipal Code, as described above. In addition, federal and State requirements would be adhered to, and project-specific measures implemented to conserve, protect, and preserve riparian habitat and sensitive natural communities. For all of the foregoing reasons, implementation of the CAP measures would not conflict with local policies or ordinances protecting biological resources. This impact would be less than significant. No mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. As of June 1, 2023, the MBHCP has expired/sunset, and there are no adopted habitat conservation plans (HCPs) that address the Plan Area. As such, development associated with CAP implementation would not conflict with the provisions of an adopted HCP. No impact would occur. No mitigation is required.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c) Substantially disturb human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Environmental Setting

CEQA defines historic resources as those that are listed on, or determined to be eligible for listing on, the California Register of Historical Resources (CRHR) or a local register, or are otherwise determined to be historical pursuant to CEQA (PRC Section 21084.1) or CEQA Guidelines (CCR Title 14, Section 15064.5). The CRHR also includes properties formally determined eligible or listed in the National Register of Historic Places (PRC Section 5024.1). A historic resource may be an object, building, structure, site, area, place, record, or manuscript that is historically significant or significant in terms of California's architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records (PRC Section 5020.1(j)). Typically, historic resources are more than 50 years old. There are 24 historic architectural resources within the Plan Area, including those that are state-listed, locally-designated, and federally-listed. These sites are generally related to the history of the area/region, and include historic sites such as the Bakersfield Californian building, Garces Circle, and Union Cemetery (City of Bakersfield n.d.(a)).

Archaeological resources may be considered historic resources or, if not, they may be determined to be "unique" as defined by CEQA (PRC Section 21083.2(g)). 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: (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person. There are numerous prehistoric and historic sites within the Plan Area, located primarily near the Kern River and local creeks.

3.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less than significant. Implementation of the CAP would involve improvements to or near properties that contain listed or eligible historical resources. For example, minor grading, excavation, and other ground disturbance would occur during the construction of new roundabouts and bicycle infrastructure (LU-1.1, LU-1.2, LU-1.3) and/or installation of EV charging infrastructure (BE-1.1, BE-1.2, IN-2.1). The implementation of these and other measures that may involve ground disturbance, including grading and excavation, would likely not involve the demolition,

destruction, alteration, or structural relocation of a historical resource. Energy efficiency improvements and building retrofits would involve minor changes to the exterior (e.g., rooftop solar panels) or interior (e.g., water heating and space heating and cooling systems) of existing buildings, and would not otherwise involve features with substantial height, bulk, or massing that could substantially cause an adverse change to a historic resource.

Further, the implementation of any measures that involves listed or eligible historical resources would be required to comply with existing federal, State, and local regulations that protect historical resources and undergo the City's discretionary review process, where applicable, including completion of subsequent project-level planning and environmental review under CEQA that would ensure that identified resources are appropriately protected. For example, following the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings would ensure that implementation of any measures involving historical resources, such as promoting building retrofits to include climate resilience (BE-1.1, BE-1.2, BE-2.1, BE-2.2, BE-3.1, BE-3.2) would not adversely change the historical resource. Compliance with the California State Historical Building Code would protect from substantial adverse change to historic structures included on the national or State registers of historic places. Implementation of the other measures included in the CAP would not involve short- or long-term physical changes that could cause a substantial adverse change in the significance of a historical resource. For all of the foregoing reasons, implementation of the CAP would not cause a substantial adverse change in the significance of a historical resource. This impact would be less than significant. No mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant. Implementation of the CAP would involve ground disturbing activities, including grading and excavation, in which archaeological resources could be encountered. As noted above, ground disturbance associated with CAP implementation would likely be limited to shallow depths, in areas comprised of artificial fill or previously disturbed soils, and as such, archaeological resources are unlikely to be encountered. For example, construction activities associated with CAP implementation would generally occur in already disturbed developed areas such as roadways and parking lots for the installation of EV equipment and solar. EV charging stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within city parks, public rights-of-way and new development projects.

Implementation of the other measures included in the CAP would not involve short- or long-term physical changes that could cause a substantial adverse change in the significance of an archaeological resource. In general, facilities associated with CAP implementation would occur in more urbanized areas that would involve development within previously disturbed areas. However, depending on the depth of excavation with certain facilities, disturbance of native soils may be necessary.

The exact locations of physical activities implementing the CAP are unknown at this time; however, all future projects with the potential to result in environmental impacts would generally require discretionary review and would be required to evaluate project-specific impacts under CEQA at the time of application. As part of this, potential impacts to archaeological resources would be analyzed and mitigated in compliance with CEQA requirements. For all the foregoing reasons, the implementation of CAP measures would not result in substantial adverse change in the significance of an archaeological resource. Therefore, the impact would be less than significant. No mitigation is required.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

Less than significant. Implementation of the CAP would involve ground disturbing activities, including grading and excavation, could, depending on their location, encounter human remains interred outside formal cemeteries. Because ground disturbance would generally be limited to previously disturbed soils and would occur at shallow depths, human remains are unlikely to be encountered. Implementation of the other measures included in the CAP would not involve short- or long-term physical changes that could disturb human remains. The locations of grave sites and Native American remains can occur outside identified cemeteries or burial sites. Therefore, there is a

possibility that unmarked, previously unknown Native American or other graves could be present within future project sites and could be encountered during construction activities.

California recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Codes Sections 7050.5 and 7052 and Public Resource Code (PRC) Section 5097.

These statutes require that, if human remains are discovered during construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the County coroner and Native American Heritage Commission (NAHC) shall be notified immediately, in accordance with PRC Section 5097.98 and California Health and Safety Code Section 7050.5. If the remains are determined by NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94. Compliance with California Health and Safety Code Sections 7050.5 and 7052, and PRC Section 5097 would avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, implementation of the CAP would not disturb humans remains, including those interred outside of formal cemeteries. This impact would be less than significant. No mitigation is required.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Environmental Setting

In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49 percent of California's in-state electricity generation, natural gas fueled another 42 percent, and nuclear power supplied almost all the rest (US EIA 2023). Electric services and natural gas are provided to the Plan Area by Pacific Gas and Electric Company (PG&E). PG&E is a service provider with a service area that spans an area of 70,000 square miles in northern and central California, from Eureka in the north to Bakersfield in the south and from the Pacific Ocean in the west to the Sierra Nevada in the east (PG&E 2023). Sources of electricity sold in 2019, the latest year for which data are available, were 44 percent nuclear, 29 percent renewable, consisting mostly of solar and wind, and 27 percent large hydro (PG&E 2019).

FEDERAL REGULATIONS

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Under this act, the National Highway Traffic and Safety Administration is responsible for revising existing fuel economy standards and establishing new vehicle economy standards. The Corporate Average Fuel Economy program was established to determine vehicle manufacturers compliance with the government's fuel economy standards. Three Energy Policy Acts have been passed, in 1992, 2005, and 2007, to reduce dependence on foreign petroleum, provide tax incentives for alternative fuels, and support energy conservation.

STATE REGULATIONS

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The Act established State policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

State of California Energy Action Plan

The CEC, CPUC, and now defunct Consumer Power and Conservation Financing Authority prepared the first State of California Energy Action Plan (EAP) in 2003 to establish shared goals and specific actions to ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.

The plan was updated in 2005 and 2008 to address policy the emerging importance of climate change, transportation-related energy issues, and research and development activities.

Title 24 California Building Code

California Energy Code

Title 24 CCR, Part 6, is California's Energy Efficiency Standards for Residential and Non-Residential Buildings (California Energy Code). The California Energy Code consists of energy and water efficiency requirements for the construction of new buildings as well additions and alterations to existing buildings (CEC 2022). The CEC adopted the most recent California Energy Code (2022) on August 11, 2021.

California Green Building Standards

Part 11 of Title 24 is the California Green Building Standards Code (CALGreen) which consists of mandatory regulations pertaining to both residential and non-residential building efficiency standards for energy efficiency, water efficiency, material conservation and resource efficiency, and environmental quality (DGS 2022). The most recent version of the CALGreen code (2022) became effective January 1, 2023.

Transportation-Related Regulations

Various regulatory and planning efforts are aimed at reducing dependency on fossil fuels, increasing the use of alternative fuels, and improving California's vehicle fleet. Senate Bill (SB) 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. CARB, in consultation with the metropolitan planning organizations, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035. The current plan for KernCOG is the 2022 Regional Transportation Plan/Sustainable Communities Strategy (2022 RTP/SCS). Through the implementation of this plan, KernCOG aims to reduce per capita GHG emissions from passenger vehicles by 15 percent by 2035 as compared to 2005 (KernCOG 2022).

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the CARB prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003).

AB 1007 (Chapter 371, Statues of 2005) required CEC to prepare the State Alternative Fuels Plan to increase the use of alternative fuels in California.

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles (ZEVs), into a single package of regulatory standards for vehicle model years 2017– 2025. The new regulations strengthened the GHG standards for 2017 models and beyond. In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles (EVs) to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the ACC II program, which sets sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales in the State by 2035.

GHG Reduction Regulations

Several regulatory measures such as AB 32, EO B-30-15, SB 32, AB 197, and most recently, AB 1279, were enacted to reduce GHGs and have the co-benefit of reducing California's dependency on fossil fuels and making land use development and transportation systems more energy efficient. CARB adopted the Final *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) in December 2022, which provides the framework for meeting the state's ambitious GHG reduction targets of reducing GHG emissions 85 percent below 1990 levels and achieving carbon neutrality by 2045 (CARB 2022b).

Renewable Energy Regulations

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

SB 100, signed in September 2018, requires that all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, supply 44 percent of retail sales from renewable resources by December 31, 2024, 50 percent of all electricity sold by December 31, 2026, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. The law also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant. Provided below are analyses of energy consumption related to construction and operational activities.

Construction

Implementation of the CAP would result in the consumption of energy resources during construction. GHG reduction measures that would result in construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1) would consume energy resources such as electricity, fuels, and non-renewable resources during construction. These types of projects would not involve large amounts of labor or extensive use of construction equipment. Some worker trips may be required during installation of these facilities and features, resulting in the short-term consumption of diesel fuel and gasoline. However, workers would likely be located within the Bakersfield region and would not require extended commutes to reach construction sites. Construction equipment may also be used during installation of these facilities and features, construction equipment (e.g., backhoes, front loaders, bulldozers and skid steers), but it is likely that this equipment would be used intermittently and for relatively short periods of time. Additionally, Measure IN-3.1 would promote the use of electric and alternative fuel in construction equipment. Demand for energy resources during construction would vary throughout the construction period and would generally cease upon completion of construction.

Measure NU-1.1 would increase the urban tree canopy by promoting tree planting. This would likely not require heavy equipment but could result in a small amount of fuel consumption when delivering trees.

Operations

Occasional operational maintenance activities for facilities and features above may be required with implementation of the CAP. However, these trips would be infrequent and therefore operational vehicle trips would be minimal; thus, associated operational fuel consumption would also be minimal.

Implementation of the CAP would improve operational energy efficiency and reduce the use of fossil fuels through measures which reduce VMT and encourage EV use, as well as measures which facilitate the increased generation and utilization of renewable energy. For example, measures such as IN-2.1 which would increase EV charging infrastructure by installing EV charging stations and preferred parking for EVs at public facilities, parks, and other high-use parking areas throughout the city (IN-2.1.4). Other transportation-related measures such as LU-1.1 and LU-4.1 would reduce VMT in the City by improving pedestrian and biking infrastructure and increasing residential density near transit. Measures pertaining to EV charging, such as IN-2.1 described above, would increase the use of electricity. However,

these measures would reduce the consumption of fossil fuels. Building energy-related measures such as BE-1.1, BE-1.2, and BE-2.1 would decarbonize new and existing residential and nonresidential buildings and improve energy efficiency in existing residential and nonresidential buildings which would reduce GHG emissions and decrease operational energy consumption.

Measure MW-2.1 which would increase organic waste diversion citywide could lead to increased haul truck trips to and from composting and recycling facilities; however, it is anticipated that these trips would displace the haul truck trips that would be diverted from the landfill. Therefore, no net change in energy consumption is anticipated.

Measure NU-1.1 would increase the urban tree canopy by promoting tree planting, specifically by amending the zoning code to create tree planting standards for new and renovated development; require the planting of two trees in single-family development in the front, side, or rear yard as feasible; and create lineal landscaping standards for commercial development that identify a minimum number of tree plantings based on lineal frontage length (NU-1.1.2). This could indirectly involve minor electricity consumption associated with conveyance and treatment of water used for irrigation.

Collectively, these measures are intended to reduce the urban heat island effect, reduce consumption of gasoline and diesel fuels, and reduce the amount of energy consumed for cooling in the summer. Therefore, these projects would be considered necessary and beneficial uses of energy resources. Implementation of the other GHG reduction measures and adaptation strategies in the CAP would not involve short- or long-term physical changes that could result in wasteful, inefficient, or unnecessary energy consumption.

Impact Summary

The goal of the CAP is to reduce GHG emissions generated within the Plan Area by using alternatively fueled vehicles, reducing VMT, generating and utilizing renewable energy, reducing waste generation, and increasing carbon sequestration. The CAP also sets forth actions to adapt to climate change hazards including extreme heat, drought, flooding, and wildfires. Although implementation of the CAP would result in temporary construction activities that would consume energy resources, standard best management practices would discourage unnecessary idling and the operation of poorly maintained equipment during construction. Moreover, while GHG reduction measures were formulated to reduce GHGs, many would improve energy efficiency and decrease reliance on fossil fuels. Thus, implementation of the CAP would not result in wasteful, inefficient, or unnecessary consumption of energy during project construction or operation. This impact would be less than significant. No mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less than significant. There is no adopted plan by the City of Bakersfield for renewable energy or energy efficiency. The goals and measures included in the CAP are being developed in consideration of the long-term GHG reduction goals of the 2022 Scoping Plan, especially those pertaining to energy utilization and generation. Additionally, the CAP includes the Priority GHG Reduction Strategies outlined in the 2022 Scoping Plan. These measures, which focus on transportation electrification and VMT reduction, are intended to provide local jurisdictions with impactful GHG reduction strategies that can be implemented by local governments (CARB 2022b). Measures included in the CAP such as BE-1.1, BE-1.2, and BE-2.1 would decarbonize new and existing residential and nonresidential buildings and improve energy efficiency in existing residential and nonresidential buildings. Additionally, the CAP would encourage the use of alternatively fueled vehicles through the implementation of measures such as IN-2.1 which would increase EV charging infrastructure by installing EV charging stations and preferred parking for EVs at public facilities, parks, and other high-use parking areas throughout the city (IN-2.1.4). Other transportation-related measures such as LU-1.1 and LU-4.1 would reduce VMT in the City by improving pedestrian and biking infrastructure and increasing residential density near transit. While the construction required to implement these measures may require some energy consumption, ultimately the measures would improve energy efficiency and reduce fossil fuel consumption. Measures IN-3.1, IN-3.2, and IN-3.3 would promote the use of electric and alternative fuel in construction equipment, landscaping equipment, and agricultural equipment. Therefore, construction associated with implementation of the CAP would not obstruct achievement of the energy efficiency and GHG reduction goals outlined in the 2022 Scoping Plan.

The EAP, which focuses on energy efficiency; demand response; renewable energy; the supply and reliability of electricity, natural gas, and transportation fuels; and achieving GHG reduction targets would also be relevant to the implementation of the CAP (CEC and CPUC 2003). As discussed above in Criterion (a) although implementation of the CAP would consume energy resources during construction and operation, GHG reduction measures such as BE-1.1, BE-1.2, BE-2.1, IN-2.1, LU-4.1, IN-3.1, IN-3.2, and IN-3.3 (described above) would increase energy efficiency and use of renewable energy while also acting to conserve energy and reduce reliance on fossil fuels. Measures to increase energy efficiency, support the conversion from gasoline or diesel to electricity or alternative fuels, and increase the supply of renewable energy would directly support EAP goals and strategies. Lastly, all GHG-related measures within the CAP would support the EAP's goal of achieving GHG reduction targets because the CAP is intended to reduce GHG emissions generated within the Plan Area. Therefore, the CAP would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This impact would be less than significant. No mitigation is required.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Environmental Setting

The city is located in the Great Valley of the California Geomorphic Provinces, which is characterized as an alluvial plain approximately 50 miles wide and 400 miles long. The largest alluvial fan is the Kern River fan, which is north of downtown Bakersfield, covering about 300 square miles of the valley made up of sand, silt and clay deposits. The city is located in the southern end of the San Joaquin Valley. The San Joaquin Valley is bounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Range to the west (City of Bakersfield 2002b).

According to the Kern County Multijurisdictional Hazard Plan (MJHMP), the city is in close proximity to historically active faults and geologic vulnerabilities to seismic activity (Kern County 2020). The San Andreas Fault is the most prominent geologic fractures in the earth's crust within the San Joaquin Valley. The San Andreas Fault line is located 38 miles southwest of the city but has the potential to cause strong ground shaking in the city. Because the San Andreas Fault is an active fault, it is capable of causing damage to the Plan Area. Furthermore, areas along this fault have been designated by the state as an Alquist-Priolo Special Studies Zone. Other active faults are located in the eastern portion of the City, and include the Garlock Fault, White Wolf Fault, Breckenridge-Kern Canyon Fault, and the fault systems of Sierra Nevada, Edison, Kern Front, and Pond-Paso Fault. Due to the many active faults in the region, the probability of a major earthquake impacting the city is increased (City of Bakersfield 2002a).

The Plan Area is not located within an Alquist-Priolo Fault Zone, liquefaction zone, or landslide zone (DOC 2023).

REGULATORY SETTING

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (PRC Section 2621-2630) intends to reduce the risk to life and property from surface fault rupture during earthquakes by regulating construction in active fault corridors and prohibiting the location of most types of structures intended for human occupancy across the traces of active faults. The act defines criteria for identifying active faults, giving legal support to terms such as active and inactive and establishes a process for reviewing building proposals in Earthquake Fault Zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across these zones is strictly regulated if they are "sufficiently active" and "well-defined." Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. The Act addresses only the hazard of surface fault rupture.

Seismic Hazards Mapping Act

The intention of the SHMA of 1990 (PRC Section 2690–2699.6) is to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the SHMA addresses other earthquake-related hazards, including ground shaking, liquefaction, and seismically induced landslides. The Act's provisions are similar in concept to those of the Alquist-Priolo Act, the State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the SHMA, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for projects in Seismic Hazard Zones until appropriate site-specific geologic or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into development plans.

California Building Code

The California Building Code (CBC) (California Code of Regulations, Title 24) is based on the International Building Code (IBC). Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, while Chapter 18A regulates construction on unstable soils, such as expansive soils and areas subject to liquefaction. Appendix J of the CBC regulates grading activities, including drainage and erosion control.

The CBC contains a provision that provides for a preliminary soil report to be prepared to identify "…the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects." (CBC Chapter 18 §1803.1.1.1)

Metropolitan Bakersfield General Plan

Chapter VIII, Safety/Public Safety, of the Metropolitan Bakersfield General Plan (City of Bakersfield 2002b) contains the following goals, policies, and implementation measures for seismic safety:

GOAL 6: Provide a continuously improving data base and reference source for evaluation of seismic and geologic hazards.

- Policy 7: Continue to address seismically hazardous building pursuant to Chapter 12.2 (SS 8875 et seq.), Division 1 of Title 2 of the Government Code (I-5 through I-8).
- Policy 8: Require seismic review of other potentially hazardous buildings upon any change in their use or occupancy status.
- Policy 9: Adopt and maintain high standards for seismic performance of buildings, through prompt adoption and careful enforcement of the most currents seismic standards of the Uniform Building Code.
- Policy 10: Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.
- Policy 11: Require site-specific studies to locate and characterize specific fault traces within an Alquist-Priolo Earthquake Fault Zone for all construction designed for human occupancy.
- Policy 12: Design significant lifeline installations such as highways, utilities and petrochemical pipelines which cross an active fault, to accommodate potential fault movement without prolonged disruption of an essential service or creating threat to health and safety.
- Policy 13: Determine the liquefaction potential at sites in areas of high groundwater prior to development and determine specific mitigation to be incorporated into the foundation design, as necessary to prevent or reduce damage from liquefaction in an earthquake.
- Policy 15: Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.
    - Implementation Measure 3: Require structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as a part of the Uniform Building Code.
    - Implementation Measure 17: Require liquefaction investigations in all areas of high groundwater potential and appropriate foundation designs to mitigate potential damage to building on sites with liquefaction potential.
    - Implementation Measure 18: Develop specific guidelines for the collection of data for determination of liquefaction potential at a site.

3.7.2 Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. The San Andreas Fault line is located 38 miles southwest of the city. Because the San Andreas Fault is an active fault, it is capable of causing damage to the Plan Area. Furthermore, areas along this fault have been designated by the state as an Alquist-Priolo Special Studies Zone. However, there are no delineated Alquist-Priolo Earthquake Fault Zones within the Plan Area (DOC 2023). Therefore, measures that would be implemented as part of the CAP would not cause substantial adverse effects related to the rupture of a known earthquake fault. No impact would occur. No mitigation is required.

ii) Strong seismic ground shaking?

No impact. There are no delineated Alquist-Priolo Earthquake Fault Zones or other potentially active faults that have been mapped within the Plan Area (DOC 2023). Furthermore, CAP implementation would not include the construction of habitable structures and development of CAP-related structures would occur within already developed areas where the necessary ground compaction and other seismic considerations have already been taken into account. Thus, implementation of the CAP would not exacerbate hazards to people or property from strong seismic ground shaking. No impact would occur. No mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

No impact. There are no liquefaction zones identified within the Plan Area (DOC 2023). Furthermore, liquefaction and other seismic-related ground failure events primarily affect structures. Because CAP implementation would not result in construction of habitable structures and development of CAP-related structures would occur within already developed areas where the necessary ground compaction and other seismic considerations, including liquefaction, have already been taken into account. Thus, implementation of the CAP would not exacerbate hazards to people or property from seismic-related ground failure, including liquefaction, no impact would occur. No mitigation is required.

iv) Landslides?

No impact. There are no landside zones identified within the Plan Area (DOC 2023). In addition, CAP implementation would not occur on steep slopes or require substantial ground disturbing activities that could cause a landslide. No impact would occur. No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant. Implementation of the CAP would involve minor ground disturbing activities, including grading and excavation, and could, depending on their location, cause soil erosion and loss of topsoil. For example, minor grading, excavation, and other ground disturbance would occur during the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). However, given the nature of the CAP, construction activities associated with the implementation would occur in already disturbed, developed areas such as roadways and parking lots. EV charging stations would be installed in new and existing developments, and roadway improvements such as crosswalks, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting and landscaping would occur within city parks, public rights-of-way and new development projects. Additionally, CAP measures involving disturbance of one or more acres would be required to comply with a project-specific storm water pollution prevention plan (SWPPP) that complies with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Order 2009-0009-DWQ). The SWPPP would identify erosion and sediment controls to substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters during construction. Through compliance with applicable requirements, measures that would be implemented as part of the CAP would not result in substantial soil erosion or the loss of topsoil. For all the foregoing reasons, implementation of the CAP would not result in substantial soil erosion or the loss of topsoil. This impact would be less than significant. No mitigation is required.

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?

No impact. There are no delineated Alquist-Priolo Earthquake Fault Zones, landslide zones, or liquefaction zones identified within the Plan Area (DOC 2023). Furthermore, CAP implementation does not include construction of habitable structures and development of CAP-related structures would occur within already developed areas where the necessary ground compaction and other seismic considerations, including geologic unit or soil type, have already been taken into account. Thus, implementation of the CAP would exacerbate the risk of lateral spreading, subsidence, liquefaction, or collapse. No impact would occur. No mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

No impact. Expansive soils are known to occur within the Plan Area; however, CAP implementation does not include construction of habitable structures that could be affected by soil expansion and development of CAP-related structures would occur within already developed areas where the necessary ground compaction and other seismic considerations have already been taken into account. Therefore, CAP implementation would not create substantial risks to life or property from expansive soils. No impact would occur. No mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No impact. CAP implementation does not include installation of any septic tanks or alternative wastewater disposal systems. As a result, no impact would occur. No mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant. The Plan Area is located within the Great Valley of the California Geomorphic Provinces, which is characterized as an alluvial plain approximately 50 miles wide and 400 miles long. The largest alluvial fan is the Kern River fan, which is north of downtown Bakersfield, covering about 300 square miles of the valley made up of sand, silt and clay deposits. Thus, measures that involve ground disturbing activities could be implemented in areas underlain by potentially unique paleontological resources. Measures that would be implemented as part of the CAP would involve minor grading, excavation, and other ground disturbance during construction. For example, minor grading, excavation, and other ground disturbance would occur during the construction of new EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). However, given the nature of the CAP, construction activities associated with the implementation would occur in already disturbed, developed areas such as roadways and parking lots. EV charging stations would be installed in new and existing developments, and roadway improvements such as crosswalks, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. Ground disturbance would generally be limited to shallow depths, comprised of artificial fill or previously disturbed soils, within developed roadways and urbanized areas; paleontological resources are unlikely to be encountered during the types of ground-disturbing activities that would occur during CAP implementation. Therefore, the CAP would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. This impact would be less than significant. No mitigation is required.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. GHGs are responsible for "trapping" solar radiation in the earth's atmosphere, a phenomenon known as the greenhouse effect. Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. Emissions of GHGs contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial on-site fuel usage, and agriculture and forestry. Emissions of CO_2 are, largely, byproducts of fossil fuel combustion.

The quantity of GHGs in the atmosphere that ultimately result in climate change is not precisely known but is enormous; no single project alone would measurably contribute to an incremental change in the global average temperature, or to global, local, or microclimates. From the standpoint of the CEQA, GHG impacts relative to global climate change are inherently cumulative.

Although there is strong scientific consensus that global climate change is occurring and is influenced by human activity, there is less certainty as to the timing, severity, and potential consequences of the climate phenomena. Scientists have identified several ways in which global climate change is anticipated to alter the physical environment in California (CNRA 2012, DWR 2006, IPCC 2007). These include:

- increased average temperatures;
- modifications to the timing, amount, and form (rain vs. snow) of precipitation;
- changes in the timing and amount of runoff;
- reduced water supply;
- deterioration of water quality; and
- elevated sea level.

FEDERAL REGULATORY SETTING

The EPA is the federal agency responsible for implementing the federal CAA and its amendments. EPA has taken steps to regulate GHG emissions and lent support for State and local agencies' efforts to reduce GHG emissions. In October

2012, EPA and the National Highway Traffic Safety Administration issued rules to reduce GHG emissions and improve corporate average fuel economy standards for light-duty vehicles for model years 2017 and beyond (77 FR 62624).

STATE REGULATORY SETTING

Statewide GHG Emission Targets and Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the State government for approximately two decades. GHG emission targets established by the State legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016). AB 1279 requires California to achieve "net zero greenhouse gas emissions" as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. It also requires that statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels by 2045. These targets are in line with the scientifically established levels needed in the U.S. to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015).

CARB adopted the 2022 Scoping Plan on December 16, 2022 (CARB 2022b). It identifies the reductions needed by each GHG emission sector (e.g., transportation [including off-road mobile source emissions], industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). The 2022 Scoping Plan traces the pathway for the state to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045 using a combined top-down, bottom-up approach under various scenarios.

CARB and other state agencies also released the *January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan* consistent with the carbon neutrality goal of Executive Order B-55-18 (California Environmental Protection Agency et al. 2019).

The state has also passed more detailed legislation addressing GHG emissions associated with transportation, electricity generation, and energy consumption, as summarized below.

Transportation-Related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established more stringent GHG emission standards and fuel efficiency standards for fossil fuel–powered on-road vehicles than EPA. In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles (EVs) to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the ACC II program, which sets sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales in the state by 2035.

Executive Order B-48-18, signed into law in January 2018, requires all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as 200 hydrogen-fueling stations and 250,000 EV-charging stations installed by 2025. It specifies that 10,000 of these charging stations must be direct-current fast chargers.

CARB adopted the Low Carbon Fuel Standard (LCFS) in 2007 to reduce the carbon intensity (CI) of California's transportation fuels. Low-CI fuels emit less CO_2 than other fossil fuel–based fuels such as gasoline and fossil diesel. The LCFS applies to fuels used by on-road motor vehicles and off-road vehicles, including construction equipment (Wade, pers. comm., 2017).

In addition to regulations that address tailpipe emissions and transportation fuels, the state legislature has passed regulations to address the amount of driving by on-road vehicles. Since passage of SB 375 in 2008, CARB requires metropolitan planning organizations (MPOs) to develop and adopt sustainable communities strategies (SCSs) as a component of the federally-prepared regional transportation plans (RTPs) to show reductions in GHG emissions from passenger cars and light-duty trucks in their respective regions for 2020 and 2035 (CARB 2018a). These plans link land use and housing allocation to transportation planning and related mobile-source emissions. KernCOG serves as the MPO for the region. The current plan is the 2022 RTP/SCS. Through implementation of this plan, KernCOG aims to reduce GHG emissions per capita from passenger vehicles by 15% by 2035 compared to 2005 (KernCOG 2022).

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. As required by the Renewable Portfolio Standard (RPS), California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); and 100 percent by 2045 (also SB 100 of 2018).

Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Energy Code. The code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy-efficiency standards for residential and nonresidential buildings. CEC updates the California Energy Code every 3 years, typically including more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2022 California Energy Code went into effect on January 1, 2023. The 2022 California Energy Code advances the onsite energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photo voltaic (PV) system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers $1.5 billion and reduce GHGs by 10 million $MTCO_2e$ over the next 30 years (CEC 2021).

California Green Building Standards (Title 24, Part 11)

The California Green Building Standards, also known as CALGreen, is a reach code (i.e., optional standards that exceed the requirements of mandator codes) developed by CEC that provides green building standards for statewide residential and nonresidential construction. The current version is the 2022 CALGreen Code, which took effect on January 1, 2023 (CEC 2022). As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to EV and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes.

LOCAL

San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the primary agency responsible for addressing air quality concerns in Kern County. Its role is discussed further in Section 3.1, "Air Quality." SJVAPCD recommends methods for analyzing project-generated GHGs in CEQA analyses and offers multiple potential GHG reduction measures for land use development projects. SJVAPCD published its Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA in 2009, which it incorporated into its 2015 Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). SJVAPCD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA and AB 32. SJVAPCD's goals in developing GHG thresholds include ease of implementation, use of standard analysis tools, and emissions mitigation consistent with AB 32. However, since the passage of SB 32, which mandates a statewide emissions target of 40 percent below 1990 levels by 2030, SJVAPCD has not developed new thresholds in compliance with this target.

Metropolitan Bakersfield General Plan

The Conservation Element of the Metropolitan Bakersfield General Plan (City of Bakersfield 2002b) contains the following air quality goals and policies relevant to GHG:

GOAL 3: Reduce the amount of vehicular emissions in the planning area.

- **Policy 29**: Expand the use of alternative fuel and low or zero emission vehicles.

3.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant. The CAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, construction and operation of GHG reduction measures and adaptation actions that would be implemented with CAP adoption have the potential to directly or indirectly emit GHG emissions.

Construction

Implementation of the CAP would result in construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1) which would generate GHG-emissions from the operation of construction equipment, construction worker vehicle trips, and truck hauling trips. These types of projects would not involve substantial numbers of workers or extensive use of construction equipment. Additionally, Measure IN-3.1 would promote the use of electric and alternative fuel in construction equipment. This would reduce GHG emissions from construction activities in the Plan Area. Although SJVAPCD has not adopted a GHG emission threshold for construction-related emissions, it is highly unlikely that small-scale, sporadic infrastructure-improvement construction projects, such as those required for implementation of the CAP, would exceed construction-related GHG threshold (1,100 $MTCO_2e$/year) recommended by many air districts in California for land use projects, including the Bay Area Air Quality Management District (BAAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD). Additionally, any temporary GHG emissions would be offset by the overall net benefit of GHG emissions reduction after implementation of the CAP.

Operations

Occasional maintenance activities for these facilities and operational vehicle trips described above would be minimal; thus, associated operational GHG emissions resulting from implementation of the CAP would also be minimal. Measure MW-2.1 is intended to reduce fugitive methane emissions from anaerobic decomposition of organic waste in landfills by increasing organic waste diversion citywide could lead to increased haul truck trips to and from composting and recycling facilities. However, it is anticipated that these trips would displace the haul truck trips that would be diverted from the landfill. A net increase in the number of haul truck trips and associated GHG emissions within the Plan Area would not be anticipated.

Implementation of the CAP would also reduce GHG emissions by encouraging the use of alternatively fueled vehicles through the measure such as IN-2.1 which would increase EV charging infrastructure by installing EV charging stations and preferred parking for EVs at public facilities, parks, and other high-use parking areas throughout the city (IN-2.1.4). Other transportation-related measures such as LU-1.1 and LU-4.1 would reduce VMT in the city by improving pedestrian and biking infrastructure and increasing residential density near transit. Measures pertaining to EV charging, such as IN-2.1 described above would reduce the consumption of fossil fuels and are considered to be beneficial in reducing GHG emissions.

Building energy-related measures such as BE-1.1, BE-1.2, and BE-2.1 would decarbonize new and existing residential and nonresidential buildings and improve energy efficiency in existing residential and nonresidential buildings which would reduce GHG emissions and decrease operational energy consumption.

Measure NU-1.1 would increase the urban tree canopy by planting new trees while also preserving existing trees. While this measure would not reduce GHG emissions, it would aid in the removal of GHG emissions from the atmosphere. Additionally, this measure could reduce electricity demand associated with the use of air conditioning by providing shade.

Impact Summary

In summary, implementation of the GHG reduction measures in the CAP would not involve short- or long-term physical changes that could result in GHG emissions. The CAP would reduce GHG emissions generated within the Plan Area by encouraging the use of alternative fuels in vehicles, reducing VMT, improving energy efficiency, reducing waste generation, and increasing carbon sequestration. In addition, measures that support energy efficiency and renewable energy generation would reduce GHG emissions at power plants generating electricity that serve the Plan Area. Thus, any temporary GHG emissions would be offset by the overall net benefit of GHG emissions reduction after implementation of the CAP. Therefore, implementation of the CAP would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be less than significant. No mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant. See Criterion (b) of Section 3.6 "Energy," which explains that implementation of the CAP would not conflict with the 2022 Scoping Plan, which is the adopted Statewide plan for the purpose of reducing GHG emissions. This impact would be less than significant. No mitigation is required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

3.9.1 Environmental Setting

This section describes the environmental setting and impacts related to hazards and hazardous materials. For the purposes of this analysis, the term "hazards" refers to risk associated with such issues as fires, explosions, exposure to hazardous materials, and interference with emergency response plans. The term "hazardous material" is defined in different ways for different regulatory programs. For this analysis, "hazardous material" is defined by the California Health and Safety Code, Section 25501: "because of their quantity, concentration, or physical or chemical characteristics, (they) pose a significant present or potential hazard to human health and safety or to the environment if release into the workplace or the environment."

"Hazardous waste" is a subset of hazardous materials. For this analysis, "hazardous waste" is defined by the California Health and Safety Code, Section 25517, and in the California Code of Regulations, Title 22, Section 66261.2: "because of their quantity, concentration, or physical or chemical characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites.

The Bakersfield Municipal Airport is a one-runway airport located at 2000 S Union Avenue, Bakersfield. There is also the International Meadows Field Airport within the Bakersfield metro area.

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped Fire Hazard Severity Zones (FHSZs) for the entire State. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as: Moderate, High, and Very High. According to CAL FIRE's Fire Resource Assessment Program FHSZ Geographic Information System data, the city is not located within a Very High FHSZ, however is located adjacent to an areas designated as moderate and high fire hazard risk immediately east of the Plan Area (CAL FIRE 2023).

3.9.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant. The implementation of CAP would involve the use of hazardous materials during construction and routine maintenance. However, all future projects would be required to comply with relevant federal, State, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Regulations that would be required of those transporting, using or disposing of hazardous materials include the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Transportation Act; Title 22; CCR Title 27, and California Fire Code. For all the foregoing reasons, implementation of the CAP would not create a significant hazard through the routine transport, use, or disposal of hazardous materials. This impact would be less than significant. No mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant. As discussed in Criterion (a) above, all future projects would be required to comply with relevant federal, State, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Enforcement of these regulatory standards would ensure that GHG reduction measures facilitated by CAP implementation would not create a significant hazard through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment. This impact would be less than significant. No mitigation is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant. Implementation of GHG reduction measures would be required to comply with relevant federal, State, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Because such laws are established to be protective of

human health and the environment, compliance with applicable regulations is sufficient to ensure that any hazardous materials used during CAP implementation would not result in hazardous emissions within one-quarter mile of an existing or proposed school. This impact would be less than significant. No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than significant. Sites with the potential to contain soil and/or groundwater contamination are located throughout the Plan Area. Implementation of the CAP would involve ground disturbing activities, including grading and excavation, which could result in the release of contaminants into the environment, if they are present in the underlying soils and/or groundwater. California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and updated specified lists of hazardous material release sites According to the State Water Resources Control Board's (SWRCB) GeoTracker database, there are approximately 40 open sites within and around the City (SWRCB 2023). Sites with the potential to contain soil and/or groundwater contamination are located throughout the Plan Area. Implementation of the CAP would involve ground disturbing activities, including minor grading and excavation, which could, depending on their location, be located on a hazardous materials site. Many of these are active cleanup sites with efforts focusing on remediation of polluted ground water supply from contaminated soils. Implementation of the CAP would not result in any ground-disturbing activities on these sites before their cleanup and remediation activities are completed. In addition, in the event CAP implementation results in ground disturbance on these sites after completion of their cleanup activities, any residual contamination that is encountered would be remediated to allowable regulatory levels in accordance with applicable county and State regulations before any ground-disturbing activities are permitted to occur. Therefore, implementation of the CAP would not result in a significant hazard to the public or the environment due to being located on a hazardous materials site. This impact would be less than significant. No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. The implementation of GHG reductions measures would not result in new or relocated residential land uses, other types of noise-sensitive receptors, or new places of permanent employment where residents or workers could be exposed to a safety hazard or excessive noise. The closest airports to the Plan Area are Bakersfield Municipal Airport, located near the eastern border of the Plan Area, and the International Meadow Field Airport, located near the northern border of the Plan Area. Therefore, implementation of the CAP would not expose residents or workers to a safety hazard or excessive noise levels. No impact would occur. No mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant. Implementation of the CAP would involve construction within/near existing roadways that could serve as evacuation routes, including new pedestrian and biking infrastructure improvements (LU-1.1). However, these improvements would not adversely affect the capacity of roadways during an emergency or evacuation. In fact, the CAP includes Action HR-3.1.4, which calls to maintain up-to-date emergency preparedness and evacuation plans and procedures in coordination with appropriate state, regional, county, and local agencies and departments. Overall, the physical improvements resulting from CAP implementation would not impair or interfere with adopted emergency response or evacuation plans. Additionally, the CAP would promote emergency response and evacuation by pursuing funding to establish resilience hubs in disadvantaged communities (Action HR-1.1.1). This impact would be less than significant. No mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less than significant. The Plan Area is not located within a Very High FHSZ (CAL FIRE 2023). The implementation of the CAP would involve ground disturbing activities, including grading and excavation, that require the temporary and periodic use of construction vehicles and equipment. For example, minor grading, excavation, and other ground disturbance would occur during the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). Given the nature of the CAP, and the absence of Very High FHSZs in the Plan Area, construction activities associated with implementation would occur in already disturbed, developed areas such as roadways and parking lots where wildfire risk is low. The CAP also includes actions that would reduce the potential for people to be indirectly exposed to significant risks due to wildfire by implement a fuels reduction program around City-owned critical facilities to reduce wildfire risk (Action BE-3.1.4) and by developing a public outreach program for residents in wilderness-urban interface areas of the city to improve preparedness and reduce risk to wildfires including improved website content and targeted outreach (Action HR-2.1.1). Implementation of the CAP would not directly or indirectly expose people or structures to a significant risk of loss injury, or death involving wildland fires. Therefore, the impact would be less than significant**.** No mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 on- or offsite erosion or siltation;	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Environmental Setting

The Kern River is the main source of water supply for the City of Bakersfield. The Kern River originates in the southern Sierra Nevada mountains and flows generally south-southwest, passing through Sequoia National Park and Sequoia National Forest before being impounded at the Lake Isabella Dam, then ultimately passing through the city. The Kern River has two principal tributaries that meet at Lake Isabella. Less significant tributaries are Erksine, Bodfish, Clear, and Cottonwood Creeks which join the Kern River downstream from Lake Isabella. Besides the small valley where Lake Isabella is located, the Kern River and its principal tributaries flow in steep, and narrow canyons from their headwaters to the mouth of Kern Canyon (City of Bakersfield 2002a).

Flooding hazards in Bakersfield originate from the Kern River watershed. Areas located in a 100-year floodplain have a 1 percent chance each year of flooding, while areas in a 500-year floodplain have a 0.2 percent chance of flooding annually. The risk of flooding in Bakersfield is primarily along the Kern River running southwest through the north of Downtown Bakersfield. Additionally, flooding hazards associated with the Kern River and historical flood plains are present at the intersection of Edison Highway and State Route 184 and a small portion of the southeastern portion of the City. Localized flooding may occur in other parts of the city but does not pose a significant threat to developed areas. (City of Bakersfield 2022).

Seismic and flood hazards have the potential to cause a dam failure at Lake Isabella, which would inundate portions of the city located along the Kern River, in Downtown Bakersfield, and extending further east along the Stockdale Highway at the intersection of Buena Vista Road. No dams have failed in Kern County to date (City of Bakersfield 2022).

Groundwater is part of a system of water-bearing aquifers under the city that are part of the San Joaquin Valley Groundwater Basin. The City owns and operates 63 groundwater wells throughout their domestic service boundaries. A large majority of Kern River surface water is converted to groundwater for later use and is recharged throughout the city through the Kern River channel and various unlined canals (City of Bakersfield 2022).

Recharge of the groundwater comes from various water supplies such as the Kern River channel, precipitation runoff collected in drainage basins and recharge areas, canal seepage, groundwater banking ponds, and reclaimed water for wastewater treatment (City of Bakersfield 2022). The Sustainable Groundwater Management Act (SGMA) was enacted in 2014 and requires all groundwater basins designated as high- or medium-priority that are subject to critical overdraft conditions to be managed under a groundwater sustainability plan (GSP) or coordinated GSPs. The City of Bakersfield is located within the Kern County Subbasin, which is a high-priority basin and identified as having critical overdraft conditions. As a water purveyor, the City of Bakersfield was required to participate in the SGMA by joining a Groundwater Sustainability Agency (GSA) in order to develop a GSP (City of Bakersfield 2022).

Water quality in Bakersfield is monitored through a contract agreement with California Water Service (Cal Water). Water operators from Cal Water perform daily, monthly, and annual testing of the city's drinking water to verify that residents are receiving a safe supply of municipal water, in addition to reporting and submitting annual Drinking Water Source Assessment and Protection Program reports to California's Division of Drinking Water. The most recent Water Quality Report (2021) indicates that the water the City produces and distributes meets and exceeds state and federal standards for drinking water quality (City of Bakersfield 2022).

3.10.2 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant. The Plan Area is located within the San Joaquin Valley Groundwater Basin. *The Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (Basin Plan) (Central Valley RWQCB 2019) adopted by the Central Valley Regional Water Quality Control Board (RWQCB), establishes water quality objectives for ground and surface waters in the Central Valley region. The purpose of the Basin Plan is to preserve and enhance water quality and protect the beneficial uses of regional waters. The RWQCB also issues waste discharge requirements to ensure that wastewater is not discharged in a manner that would cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan.

Implementation of the CAP would include improvements to the City's existing pedestrian, bicycle, and transit network. These types of projects would not create substantial new sources of pollutants and would not involve the discharge of wastewater. The CAP measures involving construction activity would require minor grading, excavation, and other ground disturbance. Ground-disturbing activities, could, depending on their location, potentially cause soil erosion which in turn can contaminate nearby surface water. However, implementation of the CAP would be required to comply with the Bakersfield Municipal Code Section 15.05.170 which contains rules and regulations to control excavation and grading including fills or embankments, and the control of grading site runoff, including erosion

sediments and construction-related pollutants that could impact water quality. For CAP measures that involve one or more acres of ground disturbance, applicants would be required to submit a Notice of Intent to the State Water Resources Control Board (SWRCB) to obtain approval to carry out construction activities under the NPDES Construction General Permit (Order 2009-0009-DWQ). Compliance with the Construction General Permit requires the applicant to develop a project-specific SWPPP, which would identify source control, site design, and treatment-control BMPs to reduce stormwater runoff volumes and pollutants leaving the site. Erosion and sediment controls identified in the SWPPP would substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters, and pollutants in site runoff during construction. The City owns and maintains a municipal separate storm sewer system (MS4). The MS4 Permit mandates the implementation of a storm water management framework to ensure that water quality is maintained within the city from operational storm water discharges throughout the city. By complying with the MS4 Permit, future projects would not violate any water quality standards or waste discharge requirements.

Through compliance with all applicable regulations and permits, implementation of CAP measures under the program would not violate any water quality standards or waste discharge requirements established by the Central Valley RWQCB or otherwise substantially degrade surface or groundwater quality. This impact is less than significant. No mitigation is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant. The implementation of the CAP would involve ground disturbing activities, including minor grading and excavation, which could require the use of water for dust abatement as needed via a water truck. These activities would be temporary and intermittent and would not involve the substantial use of groundwater or otherwise affect recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. CAP measures NU-1.1 and NU-1.2 would increase the number of trees and hazard-resistant vegetation in the Plan Area which would require water consumption for irrigation. However, landscaping would be limited to water-efficient varieties, such as species that are native to the region or that are adapted to a hot dry summer and cool winter climate, as required by the Bakersfield Municipal Code Chapter 14.02, "Water Use Regulations."

Implementation of the CAP measures would primarily occur in areas developed with impervious surfaces that do not provide for substantial groundwater recharge. Additionally, CAP measures are not anticipated to increase the amount of impervious surface area in the Plan Area and rather, could decrease the amount of impervious surface area. For example, measure IN-4.2 which would reduce water consumption for irrigation and landscaping by requiring drought-tolerant, water-conserving, and/or native landscaping in new development and redevelopment projects (IN-4.2.1), continuing to promote landscape water conservation incentives in partnership with California Water Services (IN-4.2.2), reducing consumption of water, electricity, and fossil fuels in the construction, operations and maintenance of parks and recreation facilities where possible through use of artificial turf, drought-tolerant landscaping, water conservation technology, and use of recycled water (IN-4.2.3), and installing drought-tolerant landscaping in the public right of way and City-owned buildings and facilities (IN-4.2.4). Measure IN-4.3 would increase the capture and use of recycled water. Implementation of CAP Measures IN-4.2 and IN-4.3 would therefore mitigate flooding hazards associated with climate change, and also result in increased groundwater recharge.

Furthermore, implementation of the CAP would not involve development of residential communities or other similar types of development or induce population growth in an area that would increase water demand. Water Conservation Measures IN-4.1, IN-4.2, and IN-4.3 would reduce water consumption in buildings, irrigation, and landscaping, and increase the capture and use of recycled water. Therefore, implementation of the CAP would not decrease groundwater supplies or interfere with groundwater recharge. The impact would be less than significant. No mitigation is required.

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 on- or offsite erosion or siltation;

Less than significant. The implementation of CAP measures that would involve ground disturbing activities, including minor grading and excavation, could, depending on their location, cause soil erosion. For example, minor grading, excavation, and other ground disturbance would occur during the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). However, given the nature of future projects it is likely that construction activities would occur in already disturbed areas developed with impervious surfaces. EV charging stations would be installed in new and existing developments, and roadway improvements to pedestrian and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within City parks, public rights-of-way and new development projects. Further, future projects would be required to comply with the Bakersfield Municipal Code Section 15.05.170 which contains rules and regulations to control excavation and grading including fills or embankments, and the control of grading site runoff, including erosion sediments and construction-related pollutants. Therefore, implementation of CAP measures would not result in substantial soil erosion. The impact would be less than significant. No mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than significant. The implementation of CAP measures that would involve construction activities, could, depending on their location, increase the amount of impervious surface that could result in an increase of surface runoff. Given the nature of future projects it is likely that construction activities would occur in already disturbed areas developed with impervious surfaces. EV charging stations would be installed in new and existing developments, and roadway improvements to pedestrian and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. Implementation of CAP measures would not substantially increase the amount of impervious surfaces in the Plan Area. Further, future projects would be required to comply with BMPs consistent with the Central Valley RWQCB. Construction and post-construction activities would be required to adhere to various federal, State, and regional water quality standards, such as the Municipal Permit and Construction General Permit. As such, runoff volumes and pollutants leaving sites during construction and post-construction operations would be substantially reduced through source control, site design, and/or treatment-control BMPs mandated by these permits. Erosion and sediment controls identified in project specific SWPPPs would substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters, and pollutants in site runoff during construction. In addition, implementation of the CAP would reduce the potential for flooding in the Plan Area by, for example, building bioswales and other vegetative stormwater treatment features for stormwater filtration and flood prevention (Action NU-1.3.1) and working with FEMA to update the City's flood zone map and use that information to decide where to add more parks or open space (Action NU-1.3.2).For all of the foregoing reasons, implementation of CAP measures would not increase the rate or amount of surface runoff. The impact would be less than significant. No mitigation is required.

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

Less than significant. The implementation of CAP measures that would result in ground disturbing activities, including minor grading and excavation, could, depending on their location, require the use of water for dust abatement as needed via a water truck. These activities would be temporary and intermittent and would not generate permanent water drainage flows. In addition, implementation of the CAP would not substantially increase impervious surface area in the Plan Area such that the quantity of runoff water would increase, or additional sources of polluted runoff would be created. Therefore, implementation of CAP measures could not 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. This impact would be less than significant. No mitigation is required.

iv) Impede or redirect flood flows?

No impact. Flooding hazards within the Plan Area are located along the Kern River. The implementation of CAP measures would not place any structures in or adjacent to the Kern River. Further, future projects would be required to comply with the Bakersfield Municipal Code Section 15.05.170 which directs the City to deny grading permits where the proposed activity would adversely affect existing drainage and watercourses. Therefore, implementation of CAP measures could not impede or redirect flood flows. No impact would occur. No mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. Flooding hazards within the Plan Area are located along the Kern River. The implementation of CAP measures would not place any structures in or adjacent to the Kern River. Additionally, flooding hazards associated with the Kern River and historical flood plains are present at the intersection of Edison Highway and State Route 184 and a small portion of the southeastern portion of the city. Localized flooding may occur in other parts of the city but does not pose a significant threat to developed areas. (City of Bakersfield 2022). Although seismic and flood hazards have the potential to cause a dam failure at Lake Isabella, which would inundate portions of the city located along the Kern River, in Downtown Bakersfield, and extending further east along the Stockdale Highway at the intersection of Buena Vista Road, no dams have failed in Kern County to date (City of Bakersfield 2022). In addition, there is an approved Lake Isabella Dam Failure Evacuation Plan (Kern County 2009) that establishes a process and procedures for the mass evacuation and short-term support of populations at risk below the Lake Isabella Dam. The City would utilize the Evacuation Plan to support its Emergency Operations Plans. Furthermore, the city is located approximately 95 miles east of the Pacific Ocean and is not located near other large bodies of water that could result in tsunamis, flooding, or seiches. Therefore, implementation of CAP measures would not result in construction of buildings or other facilities or store materials on site where they could be inundated by tsunami, floodwater, or seiche.

Further, future projects would be required to comply with the Bakersfield Municipal Code Section 15.05.170 which directs the City to deny grading permits where the proposed activity would adversely affect existing drainage and watercourses. In addition, as described in Section 3.10.2(a), CAP projects involving disturbance of one or more acres would be subject to the requirements of the NPDES Construction General Permit. Applicants would be required to develop a project-specific SWPPP, which would identify BMPs to reduce the potential for pollutants in surface runoff from leaving the project site. Therefore, implementation of the CAP would not risk the release of pollutants due to inundation of the Plan Area during a flood. No impact would occur. No mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant. As discussed in Criterion (a) above, future projects would be required to comply with the Bakersfield Municipal Code Section 15.05.170, which contains rules and regulations to control excavation and grading including fills or embankments, and the control of grading site runoff, including erosion sediments and construction-related pollutants that could impact water quality. In addition, construction projects that disturb one or more acres would be required to prepare a SWPPP that demonstrates conformance with applicable best management practices that would be implemented to reduce the amount of surface runoff. Further, implementation of CAP measures would not involve development of residential communities or other similar types of development or induce population growth in an area that would increase water demand. Therefore, implementation of CAP measures would not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The impact would be less than significant. No mitigation is required.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

3.11.1 Environmental Setting

The city is the largest urban community in Kern County and includes the core urban area of Kern County. The city is the primary center of economic activity outside of the agricultural industry. The central downtown area of Bakersfield, which is bordered by State Highway 99 on the west, includes dense commercial and residential land uses, and various municipal services. The downtown is the cultural, entertainment, and convention center of the city. The remainder of Bakersfield is a mix of residential and commercial uses. The western area or Bakersfield includes water banking operations, petroleum production operations, agriculture, residential, commercial development, and open space. Eastern Bakersfield includes the Baker Street commercial corridor, several pockets of light industry, and mostly single-family neighborhoods with some scattered multi-family residences (City of Bakersfield 2002b).

3.11.2 Discussion

a) Physically divide an established community?

Less than significant. Typically, the physical division of an established community could result from the construction of a physical feature, such as a wall, interstate highway, airport, roadway, or railroad tracks. Additionally, division of an established community could result from the removal of a means of access, such as a local road or bridge, that could impair mobility or constrain travel within an existing community or between a community and outlying areas. Implementation of the CAP would not result in development that could physically divide a community. For example, construction related to improving pedestrian and biking infrastructure and safety (LU-1.1, LU-1.2) would reduce vehicle congestion and encourage bicycle trips, which would increase community connectivity and access. Additionally, improvements within roadway rights-of-way would be required to comply with the City's current *Subdivision & Engineering Design Manual*, which establishes the minimum acceptable standards of design, materials, and methods to be used in the construction of streets in the City right-of-way (City of Bakersfield 2019). As such, these projects are intended to improve, rather than impair, community connectivity and access throughout the city. Therefore, implementation of the CAP would not result in construction of physical barriers that would change the connectivity between developed areas or physically divide an established community. The impact would be less than significant. No mitigation is required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. CAP measures that would be implemented as part of the program would include improvements to the City's existing pedestrian, bicycle, and transit network within developed areas. Implementation of the CAP would not

change existing land uses and would comply with all applicable zoning regulations. Furthermore, as discussed in Section 3.3, "Air Quality," Section 3.8, "Greenhouse Gas Emissions," and Section 3.17, "Transportation," CAP measures would be consistent with General Plan policies intended to reduce vehicle trips and associated air pollutant and greenhouse gas emissions, which would have beneficial environmental effects. Therefore, implementation of CAP measures under the program 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. No impact would occur. No mitigation is required.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.12.1 Environmental Setting

Mineral resources in the region generally consist of aggregate resources such as construction-grade sand and gravel and petroleum resources in the form of oil and natural gas. Areas used for sand and gravel extraction are concentrated primarily along the floodplain and alluvial fan of the Kern River, which is an important resource for construction, development, and other improvements (City of Bakersfield 2022).

Mineral Resource Zones (MRZ) are established based upon a geologic appraisal of the mineral resource potential of the land. The city contains lands that have been classified within the MRZ-2a and MRZ-2b categories. The land designated as MRZ-2a includes areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Land in this category is of prime importance since it contains known economic mineral deposits. The land designated as MRZ-2b includes areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic (City of Bakersfield 2002a).

3.12.2 Discussion

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?

Less than significant. The Plan Area contains lands that have been classified within the MRZ-2a and MRZ-2b. The implementation of the CAP would involve ground disturbing activities, including minor grading and excavation, which could, depending on their location, impact mineral resources. For example, minor grading, excavation, and other ground disturbance would occur during construction required for pedestrian and biking infrastructure improvements (LU-1.1), adding EV charging infrastructure (IN-2.1), and tree planting associated with increasing the urban tree canopy (NU-1.1). However, given the nature of the CAP, construction activities associated with its implementation would occur in already disturbed and developed areas such as roadways and parking lots where known mineral resources are not present. Areas designated as MRZ-2 have a high likelihood of containing valuable mineral deposits and are protected by the City from premature or incompatible development with mining per the California Surface Mining and Reclamation Act (SMARA). Future projects would be required to comply with the goals and policies provided by the General Plan Update that serve to mitigate the potential impacts to mineral resources as a result of buildout of the city. The General Plan Update will provide programs that serve to implement the goals and policies affecting mineral resources. Future projects would comply with State's requirements for mineral resources contained in the SMARA. Implementation of the other measures included in the CAP would not involve short- or long-term physical changes that could cause a loss of availability of known mineral resources.

For all these foregoing reasons, implementation of the CAP would not result in the loss of availability of a known mineral resource and a less-than-significant impact would occur. No mitigation is required.

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?

Less than significant. As discussed in criterion (a) above, construction activities associated with implementation of the CAP would occur in already disturbed, developed areas such as roadways and parking lots where known mineral resources are not present. Future projects would also comply with the State's requirements for mineral resources contained in the SMARA. Therefore, implementation of the CAP would not result in the loss of availability of a locally important mineral resource recovery site and a less-than-significant impact would occur. No mitigation is required.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

3.13.1 Environmental Setting

Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise. Noise is typically expressed in decibels (dB), which is a common measurement of sound energy. Definitions of acoustical terms used in this section are provided in Table 3.13-1.

Table 3.13-1 Acoustic Term Definitions

Term	Definition
Noise	Noise is generally defined as sound that is loud, disagreeable, unexpected, or unwanted.
Decibel (dB)	Sound levels are measured using the decibel scale, developed to relate to the range of human hearing. A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly summed. For example, a 65-dB source of sound, such as a truck, when joined by another 65-dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). A sound level increase of 10 dB corresponds to 10 times the acoustical energy, and an increase of 20 dB equates to a 100-fold increase in acoustical energy.
Equivalent Noise Level (L_{eq})	The average noise level during a specified time period; that is, the equivalent steady-State noise level in a stated period of time that would contain the same acoustic energy as the time-varying noise level during the same period (i.e., average noise level).
Maximum Noise Level (L_{max})	The highest instantaneous noise level during a specified time period.
Day-Night Noise Level (L_{dn})	The 24-hour L_{eq} with a 10-dB penalty applied during the noise-sensitive hours from 10 p.m. to 7 a.m., which are typically reserved for sleeping.
Community Noise Equivalent Level (CNEL)	Similar to the L_{dn} described above with an additional 5-dB penalty applied during the noise-sensitive hours from 7 p.m. to 10 p.m., which are typically reserved for evening relaxation activities.

Source: Caltrans 2013

Noise can be generated by many sources, including mobile sources such as automobiles, trucks, and airplanes and stationary sources such as activity at construction sites, machinery, and commercial and industrial operations. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on ground absorption characteristics, atmospheric conditions, and the presence of physical barriers.

In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

Major sources of noise in Bakersfield are from state highways and major road was (i.e., SR 43,58,99,119,178, 184, and 204, Columbus Street, Truxtun Avenue, California Avenue, Brundage Lane, Ming Avenue, Planz Road, White Lane, Coffee Road, Stine Road, Wible Road, Chester Avenue, River Boulevard, Mt. Vernon Avenue, 24th Street, Golden State Avenue, Niles Street, Stockdale Avenue, Panama Lane, Airport Drive, Oswell Street, Fairfax Avenue, Gosford Road, Wilson Road, Pacheco Road, H Street, Renfro Road, Olive Drive, Allen Road, Calloway Drive/ Old River Road, New Stine Road and 23rd Street) (City of Bakersfield 2002b). Other significant noise from stationary sources includes construction activity, street sweepers, and gas-powered leaf blowers. Further, the Bakersfield Speedway and the Lake Ming boat races are also sources of noise within the city.

GROUND VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient in nature, such as explosions.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2006; Caltrans 2013). PPV and RMS vibration velocity are normally described in inches per second (in/sec). Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2006).

The typical background vibration-velocity level in residential areas such as the project area is approximately 50 VdB. Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2006).

SENSITIVE RECEPTORS

Noise- and vibration-sensitive land uses are generally considered to include those uses for which noise exposure could result in health-related risks to individuals, as well as uses for which quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, health care facilities, places of worship, hotels, libraries, and other places where low interior noise levels are essential are also considered noise- and vibration-sensitive land uses.

AIRPORTS AND PRIVATE AIRSTRIPS

The Bakersfield Municipal Airport, which is a one-runway airport located at 2000 South Union Avenue, is the main airport within the Plan Area. It is located near the on the southeast side of the city. Portions of the Plan Area are located within the Kern County Airport Land Use Compatibility Plan area (Kern County 2012).

CITY OF BAKERSFIELD GENERAL PLAN

The Bakersfield General Plan Noise Element provides a series of goals and policies pertaining to the regulation of noise in the metropolitan Bakersfield area. To Implement these polices, the City maintains noise compatibility standards to avoid potential land use conflicts. Similarly, Bakersfield's Municipal Code regulates where and when amplified sound may be produced and limits construction activities to times between the hours of 6 a.m. and 9 p.m. on weekdays and between 8 a.m. and 9 p.m. on weekends (City of Bakersfield 2022).

General Plan Table VII-2 establishes exterior noise level standards for stationary noise sources based on time of day, duration, and type of noise (City of Bakersfield 2002b). For residential properties, the exterior noise level shall not exceed 55 dBA Leq during the daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA Leq during the nighttime hours (10:00 p.m. to 7:00 a.m.) (City of Bakersfield 2002b).

The City's General Plan Noise Element is intended to protect local citizens from the harmful effect of excessive noise exposure. The Noise Element identifies the following two goals:

GOALS:

1. Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.
2. Protect the citizens of the planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports, and other sources.

POLICIES:

1. Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-2. The noise exposure contour maps on file at the City of Bakersfield and Kern County indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified (I-1)
2. Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to reduce noise to acceptable levels (I-1, I-3, I-6, I-7).
3. Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive noise land uses (I-3, I-6, I-7).
4. Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (See Figure VII-1 (I-4)).
5. Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise (I-7).
6. Encourage interjurisdictional coordination and cooperation with regard to noise impact issues (I-8).
7. Establish threshold standards for the determination of the existence of project and cumulative noise impacts for mobile noise generating land uses that are significant and will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element (I-9, I-10).

CITY OF BAKERSFIELD NOISE ORDINANCE

The City's Noise Ordinance (Chapter 9.22 of the Bakersfield Municipal Code) states that it is unlawful for construction to occur outside the hours of 6:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends. Construction performed 1,000 feet or more from residential receptors is exempt from these hours (City of Bakersfield 2023). The hours of operation and location for use, including within the central traffic district, may be modified by a special permit issued by the city manager as otherwise permitted by the provisions of this municipal code. Exterior noise levels are limited to 7 days a week to 55 dBA L_{max} from 7:00 a.m. to 10:00 p.m. and 50 dBA L_{max} from 10:00 p.m. to 7:00 a.m. Interior noise levels are limited to 45 dBA L_{max} (City of Bakersfield 2002a).

3.13.2 Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?

Less than significant. The CAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. However, CAP measures would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). During operation, these types of projects would not permanently introduce any new stationary sources of noise (e.g., machinery, pumps, fans, compressors, or other equipment) and would not generate new vehicle trips that would result in transportation-related noise. Therefore, the operation of these projects would not result in any increases in permanent noise sources.

The City of Bakersfield Noise Ordinance states that it is unlawful for construction to occur outside the hours of 6:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends, however, construction performed 1,000 feet or more from residential receptors is exempt from these hours (City of Bakersfield 2023). Outside these hours, construction activities would be subject to the noise standards specified in Municipal Code Chapter 9.22. The Federal Transit Administration (FTA) has also established construction noise criteria which specify noise levels that may result in an adverse community reaction. The FTA criteria are as follows:

- Residential: 90 dBA L_{eq} (day) and 80 dBA Leq (night)
- Commercial/Industrial: 100 dBA L_{eq} (day and night)

Implementation of the CAP, including but not limited to measures IN-2.1, LU-1.1, LU-2.1, NU-1.1, NU-1.2, and NU-2.1 would result in temporary increases in ambient noise levels from vehicle trips that generate noise. Construction-related vehicle trips would travel along multiple roads throughout the city, and therefore not expose any individual sensitive receptor to substantial noise levels for a sustained period of time. Additionally, the minor and temporary increase in construction-related vehicle trips would not result in a substantial increase in ambient noise levels along roadways in the city because a doubling of traffic volume on a roadway would have to occur before an increase in noise levels would be detectable to a person.

The use of heavy equipment would also result in temporary increases in ambient noise levels during construction of the infrastructure associated with CAP activities. Construction equipment that could be used includes concrete saws for hardscape removal, backhoes or mini excavators, skip loaders, smooth drum rollers, dump trucks, and striping and paving machines, depending on the type of project. Based on the anticipated construction equipment that would be used and applying reference maximum noise levels for each, average hourly construction noise could range from 76 dBA L_{eq} to 83 dBA L_{eq} at 50 feet from the receptor (FTA 2018).

During the normal daytime hours specified above, the construction activities for each project would be exempt from the City's construction noise requirements. If construction activities were to occur outside these hours, they would be

subject to the noise standards outlined in the Bakersfield Municipal Code Chapter 9.22. Depending on the specific construction activities involved and the proximity of construction activities to existing sensitive receptors, construction noise levels from construction activities taking place outside normal daytime hours may exceed the sound level limit of 55 dBA L_{eq}, as specified above. However, in these cases, applicants would be required to obtain a variance from the City, and these cases are unlikely since construction activities are not expected to take place outside normal daytime hours. Regardless, construction noise levels are not anticipated to exceed FTA's construction noise criteria of 90 dBA L_{eq} in residential areas and 100 dBA L_{eq} in commercial and industrial areas. Therefore, construction activities would not result in an adverse community reaction.

With regard to human response, changes in noise of 1 to 2 dB are generally not perceptible to people in typical noisy environments. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013). However, a substantial increase in noise itself does not necessarily constitute a significant noise impact, so long as overall noise exposure is below an acceptable level and does not result in excessive exposure for extended periods of time (FTA 2018)

For construction activity along the loudest roadways in the city, construction noise would be masked by existing ambient noise levels. However, at other locations, such as in quieter, residential neighborhoods away from major roadways, existing ambient noise levels could be below 60 dBA CNEL. In these areas, construction-related noise increases could exceed 10 dB, which would be perceived by people adjacent to the equipment as more than a doubling of existing noise levels. Actual increases in noise levels would vary depending on the distance from the construction equipment to the receptor and the presence of intervening topography, vegetation, or structures, which may provide shielding and reduce noise levels.

FTA provides general and detailed guidance for assessing construction noise impacts and this analysis is developed largely based on general guidance. In addition, FTA recognizes the greater potential for noise impacts to occur when construction activities result in noise exposure for extended periods of time, which FTA has identified as 30 days, and in these circumstances, recommends the use of lower noise standards that account for the sensitive time of the day. Because the proposed project's construction would likely occur during daytime hours and each individual phase would be relatively short (i.e., one to two days at any one location), it is appropriate to only consider the hourly noise levels at each construction location, assessing construction noise as a temporary and intermittent source rather than a source that occurs for an extended period of time.

On average, construction activities for projects under the CAP would be short-term, generally small, localized, and would require little use of heavy-duty construction equipment. Due to the scale and nature of the short-term construction activities, construction activities associated with CAP implementation would not involve particularly noisy equipment or activities, such as blasting or pile driving. Different pieces of construction equipment would be used intermittently to complete the work and would move linearly along a roadway or corridor and through a given area. Because the sources of construction noise would be mobile and shifting as the work is performed, the exposure of individual residents, households, and other sensitive receptors to substantial noise level increases would be limited to a fraction of a workday. Furthermore, construction-related noise-generating activities would be most likely be limited to daytime hours when ambient noise levels are higher and people are less likely to be disturbed or awakened. Such brief, intermittent periods of exposure to substantial noise level increases would not result in the kinds of adverse health effects to humans that are associated with prolonged exposure to sustained substantial noise levels over long periods of time (e.g., weeks or months) or to substantial noise level increases that disrupt sleep. Thus, for all the foregoing reasons, construction activities would not result in substantial temporary increases in noise levels that would adversely affect human health or well-being in the city.

Based on the above discussion, implementation of the CAP would not generate substantial temporary or permanent increases in ambient noise levels in the vicinity of a given project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans. This impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant. The CAP is a policy-level document that does not include any site-specific designs, or locations for future improvements. However, implementation of the CAP would result in the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). Operation of these projects would not introduce stationary or transportation-related sources of groundborne vibration or noise. Therefore, operation of these projects would not generate excessive groundborne vibration or noise levels.

Based on FTA guidance, transient vibrations (such as construction activity) with a 0.2 inches per second (in/sec) PPV may be characterized as causing structural damage to non-engineered timber and masonry buildings, 0.3 PPV in/sec for engineered concrete masonry, and 0.5 PPV in/sec for reinforced concrete, steel, or timber structures. In addition, the FTA recommends a level of 80 VdB for the purpose of evaluating disturbance to sensitive land uses where people sleep.

Implementation of the CAP, including Measures IN-2.1, LU-1.1, LU-2.1, NU-1.1, NU-1.2, and NU-2.1, would result in temporary increases in groundborne noise and vibration from the use of heavy equipment. Construction equipment that could be used includes concrete saws for hardscape removal, backhoes or mini excavators, skip loaders, smooth drum rollers, dump trucks, and striping and paving machines, depending on the type of project. Construction activities would not require the use of pile drivers or other types of equipment that produce substantial groundborne vibration or noise. Of the types of equipment that would be used, vibratory rollers would generate the highest levels of vibration. Based on FTA guidance, reference vibration levels for this type of equipment are 0.21 PPV in/sec and 94 VdB at 25 feet. FTA recommended criteria of 0.2 PPV in/sec for structural damage and 80 VdB for human disturbance could be exceeded for projects at distances within 75 feet and 25 feet, respectively, of construction equipment use. Actual exposure levels would depend on equipment types, haul truck routes, and proximity to and characteristics of sensitive receptors.

Construction activities for each project would be short-term. Different pieces of construction equipment would be used intermittently to complete the work and would move linearly along a roadway or corridor and through a given area. Because the sources of groundborne vibration and noise would be mobile and shifting as the work is performed, the exposure of individual residents, households, and other sensitive receptors to excessive groundborne vibration and noise would be limited to a fraction of a workday. Furthermore, construction activities that generate groundborne vibration and noise would most likely be limited to daytime hours when people are less likely to be disturbed or awakened. Such brief, intermittent periods of exposure to increases in groundborne vibration and noise would not result in the kinds of adverse health effects to humans that are associated with prolonged exposure to sustained substantial groundborne vibration and noise levels over long periods of time (e.g., weeks or months) or to substantial noise level increases that disrupt sleep. Furthermore, most construction activities would most likely be located at distances greater than 25 feet from the nearest structures and vibration levels would dissipate rapidly at increasing distance from the vibration source. Finally, it is extremely rare for structural damage to occur from equipment other than pile driving. At these distances, thus, the potential for structural damage from the proposed construction activities would not be a concern. For all the foregoing reasons, implementation of the CAP would not generate excessive groundborne vibration or groundborne noise levels. This impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than significant. The Bakersfield Municipal Airport is the primary airport within city limits and overlaps with the currently adopted 60-dBA, 65-dBA, and 70-dBA CNEL noise contours outlined in the Kern County Airport Land Use Compatibility Plan (Kern County 2012). However, the CAP does not propose any new sensitive receptors (e.g., residences, schools) that could be adversely impacted from noise associated with aircraft flyovers. Temporary construction workers would not be adversely affected by aircraft flyover as noise generated from construction equipment would be the dominant noise exposure to them, which is generally dealt with by wearing ear plugs to prevent hearing damage. Furthermore, long-term maintenance workers would not sleep onsite; thus, they would not be exposed to potential sleep disturbance from aircraft flyovers. Thus, implementation of the CAP would not expose people residing or working near an airport to excessive airport/aircraft noise. This impact would be less than significant.

3.14 POPULATION AND HOUSING

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

3.14.1 Environmental Setting

The City of Bakersfield has a total population of 410,647 people (US Census Bureau 2022). Between 2010 and 2022, the population increased from 347,483 people to 410,647 people, or by approximately 15 percent (US Census Bureau 2022). The 2022 Census reported 123,334 households with an average household size of approximately 3.2 people. Approximately 60 percent of the population owns their property and approximately 40 percent of the population rents (City of Bakersfield 2022).

3.14.2 Discussion

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than significant. CAP measures that would be implemented as part of the program would include improvements to the City's existing pedestrian, bicycle, and transit network. These projects would not induce population growth directly or indirectly because the projects do not propose new housing or changes to policies or regulations related to land use or residential zoning. Measures included in the CAP that would result in the construction related to improving pedestrian and biking infrastructure and safety (LU-1.1, LU-1.2), adding EV charging infrastructure (IN-2.1), and increasing the urban tree canopy by planting trees (NU-1.1), could require a temporary increase in the number of construction workers. These types of projects are small construction projects, which would not require a large construction crew. Furthermore, construction workers would likely be from the Bakersfield region and permanent, substantial relocation of workers would not be required. Therefore, implementation of these measures would not result in substantial population growth or employment growth in the Plan Area. The impact would be less than significant. No mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. Implementation of the CAP would not displace people or because they would not require the removal of existing housing and would not propose changes to policies or regulations related to land use or residential zoning. Therefore, implementation of the CAP would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. No impact would occur. No mitigation is required.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.15.1 Environmental Setting

The Plan Area is located within the following public service districts, and described further below:

- Fire Protection- Bakersfield Fire Department (BFD)
- Police Protection- the City of Bakersfield Police Department
- School District- Bakersfield City School District (BCSD) and Kern High School District (KHSD)
- Electrical Service- Pacific Gas and Electric (PG&E)
- Natural Gas Service- SoCal Gas

The Bakersfield Fire Department (BFD) is the agency responsible for providing emergency services in the event of a fire emergency. The Bakersfield Fire Department is a multi-dimensional public safety organization and includes an "all-risk" approach in its emergency delivery system and operates 14 active fire stations (City of Bakersfield n.d. b). The BFD provides emergency medical services, fire suppression, hazardous materials mitigation, vehicle and technical rescue, water rescue, and other life safety services to the citizens within the city. There are 240 sworn, support, and reserve personnel operating within the 14 fire stations in the city, as shown in Table 3.15-1.

Table 3.15-1 Existing Bakersfield Fire Department Facilities and Locations

Name of Facility	Address
Station 1	210 H St
Station 2	2716 E 21st St
Station 3	3400 Palm St
Station 4	130 Bernard St
Station 5	106 E White Lane

Name of Facility	Address
Station 6	127 W Brundage Ln
Station 7	4030 Soranno Ave
Station 8	2213 University Ave
Station 9	7912 Westhold Dr.
Station 10	12100 Alfred Harrell Expy
Station 11	7000 Stockdale Hwy
Station 13	4900 Poppyseed
Station 14	5815 Mountain Vista Dr
Station 15	1301 Buena Vista

The City of Bakersfield Police Department (BPD) provides for the safety and welfare of the citizens of Bakersfield by utilizing community relations, crime analysis, crime prevention, criminal investigation follow-up, gang suppression, patrol and traffic enforcement, and vice and narcotics enforcement (City of Bakersfield n.d. c).

There are 17 public school districts and 26 private schools that service residents in Bakersfield (City of Bakersfield 2022). Bakersfield City School District is the largest elementary school district in California, serving approximately 30,000 students across 44 schools. There are 33 elementary schools, six middle schools, four Jr. High, one children's center, one community school, and four wellness centers (BCSD, n.d.). Kern High School District (KHSD) is located in Kern County, California and is the largest grades 9-12 high school district in California serving 42,000 students. KHSD includes the high schools available in the City of Bakersfield (KHSD, n.d.).

3.15.2 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

No impact. CAP measures that would be implemented would include improvements to the city's existing pedestrian, bicycle, and transit network. These projects do not include development of new residences or the creation of permanent jobs requiring increased fire or police services. As discussed in Section 3.14, "Population and Housing," CAP measures would not induce population growth in the community that would require school services, new or expanded park facilities, other public facilities. Therefore, implementation of the CAP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities. No impact would occur. No mitigation is required.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) 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?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

3.16.1 Environmental Setting

Parks make up more than 600 acres of land in Bakersfield (City of Bakersfield 2022). The City of Bakersfield Department of Recreation and Parks has the primary responsibility for providing and maintaining recreational facilities throughout the city. The city contains a variety of recreational facilities, including 61 public parks, along with the Kern River Parkway and Centennial Plaza, located throughout Bakersfield (City of Bakersfield n.d. d).

3.16.2 Discussion

a) 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?

Less than significant. The implementation of the CAP would not increase the use of recreational facilities to the extent that substantial deterioration would occur. Typically, this impact occurs when a project induces population growth, such as new development or a business that would necessitate a large number of new employees. Implementation of the CAP would not include construction of new housing or commercial development. Furthermore, the number of construction workers needed to install future projects would be minimal and would not substantially increase the use of existing recreational facilities. Therefore, implementation of the CAP would not increase the use of recreational facilities to the extent that substantial deterioration would occur. A less-than-significant would occur. No mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less than significant. CAP measure NU-2.1 would enhance recreational opportunities for the region by improving public access and comfort. As discussed in criterion a), the implementation of the CAP would not increase the use of recreational facilities to the extent that substantial deterioration would occur and would not induce population growth that would require the construction or expansion of recreational facilities. A less-than-significant would occur. No mitigation is required.

3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

The transportation system in the city consists of highways, streets, pedestrian pathways, transit routes, and bikeways. The circulation system is connected to the larger regional network which includes State Route (SR) 99 and SR 58 east of SR 99 (City of Bakersfield 2022). Principal arterials are roadways that may directly serve adjoining business or residential areas but continue to be major thoroughfares serving high volumes of traffic flow. Examples within Bakersfield include SR 58 west of SR 99, SR 184, Westside Parkway, Chester Avenue, and Union Avenue (City of Bakersfield 2022).

Travel demand on a region's roadways is an indicator of existing transportation trends and can predict future roadway needs within a region. SB 743 2013 has established vehicle miles traveled (VMT) as the primary metric for measuring travel demand and other transportation impacts in California. VMT represents the amount of travel (distance travelled) for all vehicles in a region over a given period of time. Regional roadway VMT, is calculated by multiplying the number of daily trips on a roadway by the length of the roadway segment and summing this measure for each roadway within a geographic region. VMT trends within Bakersfield over the last decade have stayed stable, as annual VMT estimates for local roadways have consistently been approximately 6,000,000 VMT/year between 2010 to 2019. Similarly, annual VMT estimates for state highways in the city have consistently been approximately 2,000,000 VMT/year (City of Bakersfield 2022).

A relatively small percentage of commuters in Bakersfield use public transit to get to work (peaking at 1.2 percent from 2011 to 2013). Golden Empire Transit District, operated by the City of Bakersfield, and Kern Regional Transit, operated by Kern County, are the two primary public transit agencies that provide bus service in Bakersfield. Several private intercity bus service operators also serve the City, including Greyhound, International Bus Lines, Flixbus, and a number of Mexican bus companies including ACN Autobuses, Tufesa Internacional, and Estrella Blanca, Costa de Oro Transportando, and ETS. The city is also currently served by Amtrak passenger rail and will host a major station in the planned California High-Speed Rail system (City of Bakersfield 2022).

There is a large network of Class I, II, III, IV bike lanes that stretch throughout Bakersfield, comprising roughly 176 miles of bike paths within the city limits (City of Bakersfield 2022).

3.17.2 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant. The implementation of CAP would not result in long-term operational increases in vehicular traffic along roadways in the Plan Area. The GHG reduction measures and adaptation actions would improve the operation of the circulation system in several ways, including fewer vehicle trips on roadways and highways and higher numbers of transit riders, bicyclists, and pedestrians. For example, implementation of the CAP would improve pedestrian and biking infrastructure (LU-1.1) by implementing the recommended bike network projects identified in the Bakersfield Low Stress Bike Network Plan in coordination with KernCOG and Kern County (Action LU-1.1.2), and by working with the California High-Speed Rail Authority to implement the three projects identified in the Downtown Bakersfield High-Speed Rail Station Area Plan that would create a "green loop" that forms a continuous active transportation network around downtown Bakersfield (Action LU-1.1.3). CAP implementation would also improve reliability and convenience of transit services through increased frequency, expanded service areas, extended service hours, and better facilities, and would prioritize improvements in disadvantaged communities (LU-2.1). Implementation of the CAP would also develop programs and incentives that promote shared mobility in disadvantaged communities and increase access to health services, food, education, and employment (LU-3.1) by expanding bike and scooter share services throughout the city (LU-3.1.3).

Consistent with the General Plan, new bikeways would be located along identified travel routes. The construction of new pedestrian and bicycle infrastructure would be consistent with City of Bakersfield Bicycle Transportation Plan which guides the future development of bicycle facilities and programs in the City and provides a blueprint for making bicycling an integral part of daily life in Bakersfield and supports the goals of the General Plan Circulation Element and other plans and policies adopted by the City (City of Bakersfield 2013). Implementation of the CAP would not conflict with any measures included in the General Plan.

Improvements to pedestrian and biking infrastructure (LU-1.1) could result in construction-related vehicle trips, and trips associated with the workers commuting to and from construction sites. The number of haul trips and workers trips to and from construction sites would vary based on the type of future project and project location. However, the types of projects facilitated by CAP implementation are small construction projects, which would not require a large construction crew. This would result in a small number of worker related trips to and from future project sites. Construction activities would result in temporary road closures which could temporarily disrupt traffic operations; however, any lane closures would be accompanied by traffic control signage and flaggers.

Therefore, implementation of GHG reduction measures would not adversely affect the performance of the circulation system and would not conflict with any applicable transportation plans, ordinances, or policies. This impact would be less than significant. No mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

Less than significant. Senate Bill 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. The Office of Administrative Law approved (on December 28, 2018) comprehensive updates to the CEQA Guidelines (including at Section 15064.3(b)) that included removing Level-of-Service as a measure of transportation impacts under CEQA and replacing it with VMT. A "vehicle mile traveled" is defined as one vehicle traveling on a roadway for 1 mile. Pursuant to State CEQA Guidelines Section 15064.3(c), this change in analysis has been required since July 1, 2020. According to OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, projects that generate or attract fewer than 110 vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). This section of the Initial Study relies on the City's VMT thresholds.

As described in Section 3.14, implementation of GHG reduction measures would not induce substantial population or employment growth in the Plan Area, therefore it would not generate additional VMT over the long-term. The types

of projects facilitated by implementation GHG reduction measures are small construction projects, which would not require a large construction crew. This would result in a small number of construction worker related trips to and from future project sites. In addition, worker related trips would be sporadic and occur at designated times throughout implementation of GHG reduction measures. Therefore, implementation of GHG reduction measures would not generate 110 construction trips per day. Moreover, the CAP includes the following GHG reduction measures that would meaningfully reduce the rate of VMT in the Plan Area over the long-term:

- Measure LU-1.1: Improve pedestrian and biking infrastructure, prioritizing investments in disadvantaged communities.
- Measure LU-1.2: Improve safety for pedestrians and cyclists.
- Measure LU-1.3: Improve access to bicycling through support services.
- Measure LU-2.1: Partner with Golden Empire Transit District to improve reliability and convenience of existing transit services through increased frequency, expanded service areas, extended service hours, and better facilities. Prioritize improvements in disadvantaged communities.
- Measure LU-2.2: Identify alternate routes for transit in case of hazard-related closures.
- Measure LU-3.1: Develop programs and incentives that promote shared mobility in disadvantaged communities and increase access to health services, food, education, and employment.
- Measure LU-4.1: Increase residential density near transit, prioritizing affordable housing development.
- Measure LU-4.2: Increase implementation of transportation demand management strategies.
- Measure LU-5.1: Increase smart mobility throughout the city.

Any temporary VMT increases associated with construction activities would be offset by the overall net benefit of reducing the long-term rate of VMT due to the implementation of the CAP. Therefore, CAP implementation would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b), and the impact would be less than significant. No mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant. The implementation of the CAP would result in ground disturbing activities, including minor grading and excavation, could, depending on their location, result in alterations of public roadways. Construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1) could result in construction-related vehicle trips, and trips associated with the workers commuting to and from construction sites. The number of haul trips and workers trips to and from construction sites would vary based on the type of future project and project location. However, the types of projects facilitated by CAP implementation are small construction projects, which would not require a large construction crew. This would result in a small number of worker related trips to and from future project sites. Construction activities would result in temporary road closures which could temporarily disrupt traffic operations; however, any lane closures would be accompanied by traffic control signage and flaggers.

All future roadway improvements within roadway rights-of-way would be required to comply with the City's current *Subdivision & Engineering Design Manual*, which establishes the minimum acceptable standards of design, materials, and methods to be used in the construction of streets in the City right-of-way (City of Bakersfield 2019). Construction-related activities would be subject to the standards contained in a Traffic Control Plan, which includes provisions for public convenience and safety, construction area traffic control, and hours of work, and would be subject to Public Works approval.

Because future construction of the GHG reduction measures would comply with the relevant traffic- and street-related regulations overseen by the City, implementation of GHG reduction measures would not substantially increase hazards due to a geometric design feature and the impact would be less than significant. No mitigation is required.

d) Result in inadequate emergency access?

Less than significant. The GHG reduction measures would not result in new development or land uses that would require installation of emergency access routes. However, construction pertaining to improving pedestrian and bicycle infrastructure and safety (LU-1.1, LU-1.2) could permanently alter existing roadways that serve as emergency access routes. However, all future roadway improvements would be required to comply with the California Fire Code, adopted by reference in the City's Municipal Code Chapter 15.65. The California Fire Code requires the width of an unobstructed roadway to measure no less than 24 feet in order to provide adequate access for fire and emergency responders. Additionally, improvements within roadway rights-of-way would be required to comply with the City's current *Subdivision & Engineering Design Manual*, which establishes the minimum acceptable standards of design, materials, and methods to be used in the construction of streets in the City right-of-way (City of Bakersfield 2019). Therefore, CAP implementation would not result in inadequate emergency access and the impact would be less than significant. No mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	☐ Yes		☒ No	
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☒	☐

3.18.1 Environmental Setting

AB 52, signed into law in September of 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, where one or more California Native American Tribes has requested formal written notification of proposed projects from a lead agency, the lead agency shall begin consultation with those tribes by providing them with formal written notification of proposed projects prior to the release of an environmental impact report, negative declaration, or mitigated negative declaration.

Lands within the Plan Area were historically inhabited by the Tejon Indian Tribe. To help determine whether a project may have such an effect, PRC requires a lead agency to invite consultation with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. In compliance with PRC section 21080.3.1, the City provided formal written notification of the CAP to Native American tribes including Santa Rosa Rancheria, Kitanemuk and Yowlumne Tejon Indians, Kawaiisu Tribe, Tubatulabals of Kern Valley, Tule River Indian Tribe, Chumash Council of Bakersfield, Tejon Indian Tribe, Kern Valley Indian Council, and the Tehachapi Indian Tribe on February 14, 2023. Within the mandates established by AB 52 and CEQA, no responses requesting consultation were received from any of the tribal entities, and no further consultation under CEQA are required.

3.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than significant. Implementation of the CAP would involve ground disturbing activities, including grading and excavation, during which, depending on their location, a tribal cultural resource could be encountered. PRC Section 21074 defines a tribal cultural resource as a site, feature, place, or cultural landscape that is geographically defined in terms of size and scope, sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register or a local register of historical resources. Given that Native American tribes inhabited the Plan Area, there is a potential that unidentified resources may be discovered during construction activities. The potential for disturbance may be reduced through surveying a site to determine the likelihood that tribal cultural resources are present, review of records to determine if tribal cultural resources are known to occur in the area, and then designing future projects to avoid areas where resources may be present. However, CAP projects would be located in developed areas within roadway rights-of-way, such as on existing roads and sidewalks, or in disturbed areas along roadway shoulders. Because ground disturbance would be limited to shallow depths, generally comprised of artificial fill or previously disturbed soils, tribal cultural resources are unlikely to be encountered.

Nonetheless, future projects would be required to evaluate and mitigate potential impacts to tribal cultural resources in compliance with CEQA requirements. As defined by PRC Section 21084.3 (b), mitigation measures that may avoid or minimize significant adverse impacts to tribal cultural resources include:

(1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

(2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

(A) Protecting the cultural character and integrity of the resource

(B) Protecting the traditional use of the resource

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

For all the foregoing reasons, implementation of the CAP would not result in substantial adverse change in the significance of a tribal cultural resource. Therefore, the impact would be less than significant. No mitigation is required.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

3.19.1 Environmental Setting

Several water districts and private water supply companies provide the supply of water to the city; however, the majority of the city is served by the California Water Service Company, a privately held public utility, which obtains its water supply principally from wells (City of Bakersfield 2002a). The city is served by five major wastewater treatment facilities: the City of Bakersfield's Treatment Plant No. 2, the City's Treatment Plant No. 3, the North of River Sanitary District (NORSD) plant, Mount Vernon/Panorama District plant, and the Lamont Public Utility District plant (City of Bakersfield 2002a). Solid waste collection services (residential and commercial) are provided within the City of Bakersfield by the City Sanitation Division and is transported to one of three existing landfills that are utilized to dispose of waste generated within City: Bena, Shafter-Wasco and Arvin. The three landfills are located outside of City limits within Kern County (City of Bakersfield 2002a). Pacific Gas and Electric Company (PG&E), a regulated public utility, supplies natural gas to the city.

3.19.2 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant. Implementation of the CAP would not induce increased development or population growth directly or indirectly, because measures included do not propose new housing nor do they propose changes to policies or regulations related to land use or residential zoning. As a result, demand for new or expanded infrastructure, including water, wastewater treatment, stormwater drainage, natural gas or telecommunication facilities would not increase to serve new population or development.

The implementation of the CAP would incrementally increase electricity consumption, for example through measures to increase the installation of EV charging stations, improve energy efficiency in existing residential and nonresidential buildings, and replace building natural gas end uses with systems and appliances (e.g., electric-powered heat pumps and water heaters for space and water heating). The physical effects of construction activities to implement these measures are analyzed throughout Chapter 3 of this document and would not result in any significant environmental effects. Moreover, the incremental increases in electricity consumption would not indirectly result in new or expanded electric power infrastructure improvements for the following reasons. Increased electric consumption due to EV charging would occur incrementally as new stations are installed and the number of EVs in the Plan Area increases. In addition, CAP implementation would increase the number of publicly available charging stations, which increases off-peak hour charging when ample grid capacity is available. In addition, replacing natural gas-powered building systems for space and water heating would primarily increase electricity consumption in the winter when ample grid capacity is available (relative to peak summer periods when demand is significantly higher). CAP measures resulting in more efficient electricity consumption than required by the State energy code and supporting on-site installation of solar energy systems lessen rather than increase demand on existing electric power infrastructure. The CAP's support for fuel switching from natural gas to electric and more efficient natural gas consumption would lessen and not increase demand for natural gas infrastructure.

The implementation of the CAP would involve ground disturbing activities, including minor grading and excavation, which could require the use of water for dust abatement as needed via a water truck. These activities would be temporary and intermittent and would not involve the substantial use of water supplies. CAP measures NU-1.1 and NU-1.2 would increase the number of trees and hazard-resistant vegetation in the Plan Area which would require water consumption for irrigation. However, landscaping would be limited to water-efficient varieties, such as species that are native to the region or that are adapted to a hot dry summer and cool winter climate, as required by the Bakersfield Municipal Code Chapter 14.02, "Water Use Regulations."

Implementation of the CAP measures would primarily occur in areas developed with impervious surfaces and existing stormwater infrastructure. Additionally, CAP measures are not anticipated to increase the amount of impervious surface area in the Plan Area, and could decrease the amount of impervious surface area, which would lessen the demand for stormwater infrastructure. For example, measure IN-4.2 which would reduce water consumption for irrigation and landscaping by requiring drought-tolerant, water-conserving, and/or native landscaping in new development and redevelopment projects (IN-4.2.1), continuing to promote landscape water conservation incentives in partnership with California Water Services (IN-4.2.2), reducing consumption of water, electricity, and fossil fuels in the construction, operations and maintenance of parks and recreation facilities where possible through use of artificial turf, drought-tolerant landscaping, water conservation technology, and use of recycled water (IN-4.2.3), and installing drought-tolerant landscaping in the public right of way and City-owned buildings and facilities (IN-4.2.4). Measure IN-4.3 would increase the capture and use of recycled water. Implementation of CAP Measures IN-4.2 and IN-4.3 would therefore mitigate flooding hazards associated with climate change, and also result in increased

groundwater recharge. Therefore, implementation of the CAP would not result in the relocation or construction or new or expanded infrastructure systems that could cause significant environmental effects and would not result in insufficient water supplies being available to serve the Plan Area during normal, single-dry, or multiple dry years. The impact would be less than significant. No mitigation is required.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

Less than significant. The implementation of the CAP would not involve development of residential communities or other non-residential development or induce population growth in an area that would increase demand for wastewater treatment. Further, it would not involve the construction of restroom facilities. Depending on the duration and location of future projects, the project proponent may supply portable restrooms for use by work crews. Portable restrooms are self-contained and would be cleaned periodically, and the waste would be hauled off-site to a wastewater treatment facility for disposal. This service is typically provided by an independent contractor permitted to handle, haul, and dispose of sanitary sewage. Pursuant to 40 CFR Part 403.5, hauled waste must be disposed of at a designated publicly owned treatment facility. Typically, publicly owned treatment facilities are responsible for implementing permit programs for hauled waste and ensure that adequate treatment capacity exists. Therefore, implementation of the CAP would not exceed the capacity of any wastewater treatment provider. The impact would be less than significant. No mitigation is required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No impact. Implementation of the CAP would not induce increased residential or non-residential development, or population growth directly or indirectly, and there would be no increase in solid waste production as a result of the CAP. Measure MW-2.1 would increase organic waste diversion citywide, which is consistent with and would further State solid waste statutes and goals. Therefore, implementation of the CAP would have no impact. No mitigation is required.

3.20 WILDFIRE

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

3.20.1 Environmental Setting

CAL FIRE has mapped fire hazard severity zones (FHSZs) for the entire State. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as: Moderate, High, and Very High. According to CAL FIRE's Fire Resource Assessment Program FHSZ Geographic Information System data, the City is not located within a Very High FHSZ, however is located adjacent to an areas designated as moderate and high fire hazard risk immediately east of the Plan Area (CAL FIRE 2023).

The City of Bakersfield and Kern County provide fire protection services in the city limits under a Joint Powers Agreement (JPA) (City of Bakersfield 2022). The City of Bakersfield Fire Department (BFD) has 14 fire stations, with four planned fire stations for future buildout and provides emergency services including emergency medical services, fire suppression, hazardous materials mitigation, vehicle and technical rescue, water rescue, and other life safety services (City of Bakersfield 2022). The Kern County Fire Department (KCFD) provides additional services for the unincorporated areas of the City, as well as serving as the Office of Emergency Management for all of Kern County (City of Bakersfield 2022).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant. The Plan Area is not located in or near state responsibility areas or lands classified as Very High FHSZ. Implementation of the CAP would result in improving pedestrian and biking infrastructure and safety (LU-1.1, LU-1.2), adding EV charging infrastructure (IN-2.1), and increasing the urban tree canopy by planting trees (NU-1.1), which could alter existing roadways that serve as emergency access routes. However, all future roadway improvements would be required to comply with the California Fire Code, adopted by reference in the City's Municipal Code Chapter 15.65. The California Fire Code requires the width of an unobstructed roadway to measure no less than 24 feet in order to provide adequate access for fire and emergency responders. Additionally, improvements within roadway rights-of-way would be required to comply with the City's current *Subdivision & Engineering Design Manual*, which establishes the minimum acceptable standards of design, materials, and methods to be used in the construction of streets in the City right-of-way (City of Bakersfield 2019). Compliance with applicable codes and design standards would ensure that adequate access is provided for fire and emergency responders during operations of CAP measure projects.

Construction activities for CAP projects would occur within roadway rights-of-way and may require temporary lane closures or result in other traffic disruptions. Encroachment permits from the City would be required for all work within public rights-of-way. Compliance with the encroachment permit and the City's current *Subdivision & Engineering Design Manual* would ensure that adequate access is provided for fire and emergency responders for the duration of construction activities. Therefore, implementation of measures under the CAP would not impair an adopted emergency response plan or emergency evacuation plan. This impact is less than significant. No mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than significant. The Plan Area is not located in or near State responsibility areas or lands classified as Very High FHSZ. Although implementing CAP measure LU-4.1 would increase residential density near transit prioritizing affordable housing development, given the flat topography of the Plan Area, it is not anticipated implementation of the CAP would expose occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors. This impact is less than significant. No mitigation is required.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than significant. The Plan Area does not include a Very High FHSZ. Implementation of the CAP would result in alterations of public roadways. Specifically, by improving pedestrian and biking infrastructure (LU-1.1), adding EV charging infrastructure (IN-2.1), and by increasing the urban tree canopy which would require planting trees (NU-1.1). CAP measures would not require the use of construction vehicles and equipment within very high FHSZ. The temporary and periodic use of construction vehicles and equipment has the potential to increase the risk of an accidental fire ignition. However, construction activities associated with their implementation would occur within an urbanized area, in developed roadway rights-of-way where wildfire risk is low. In addition, enforcement of the California Fire Code would require the implementation of fire safety measures during construction. Safety measures would include prohibiting smoking except in approved areas and ensuring proper use of motorized equipment so that exhausts do not discharge against combustible material and refueling would not occur while equipment was in operation. Therefore, implementation of CAP measures would not exacerbate fire risk or result in temporary or ongoing impacts to the environment from installation of associated infrastructure. This impact is less than significant. No mitigation is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than significant. The Plan Area does not include a Very High FHSZ and there are no landslide zones identified within the Plan Area. Implementation of the CAP would involve ground disturbing activities, including minor grading and excavation, which could, depending on their location, result in runoff or drainage changes. For example, minor grading, excavation, and other ground disturbance would occur during the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). However, given the nature of future projects, it is likely that construction activities would occur in already disturbed areas within the Plan Area. EV charging infrastructure would likely be installed in new and existing developments and underserved areas, and roadway improvements would occur along already paved roadways. In addition, increasing the urban tree canopy by tree planting would occur within urbanized areas, including City parks and public rights-of-way and within new development projects. Further, future projects would be required to comply with the City of Bakersfield Municipal Code Chapter 16.44 which contains requirements pertaining to preliminary soil reports and grading plans and building permits. Enforcement of this City regulatory standard would ensure that implementation of the CAP would not result in flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The impact would be less than significant. No mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

3.21.1 Environmental Setting

Environmental settings provided throughout Sections 3.1 to 3.20 were used in preparing the impact discussion for this section.

3.21.2 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than significant. Implementation of the CAP would involve ground disturbing activities, including minor grading and excavation. For example, minor grading, excavation, and other ground disturbance would occur during the construction of EV charging infrastructure and (IN-2.1), pedestrian and bike infrastructure and safety improvements (LU-1.1, LU-2.1), new tree planting and landscaping (NU-1.1, NU-1.2), and park access improvements (NU-2.1). Because ground disturbance would be limited to shallow depths in largely developed areas and, as a result, would largely be comprised of artificial fill or previously disturbed soils, resources that are important examples of major periods of California history or prehistory are unlikely to be encountered. In addition, construction activities associated with CAP implementation would occur in already disturbed developed areas such as roadways and parking lots. EV charging

stations would be installed in new and existing developments, and roadway improvements such as roundabouts, walkways, and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would occur within city parks, public rights-of-way and new development projects. As a result, CAP implementation would not substantially reduce habitat for fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal species, or substantially reduce or restrict the range of an endangered, rare, or threatened species. Refer to Sections 3.4. Biological Resources, 3.5 Cultural Resources, and 3.18, Tribal Cultural Resources, for additional discussion of the reasons why CAP implementation would not result in significant adverse effects to any biological, cultural, or tribal cultural resources. This impact is less than significant. No mitigation is required.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than significant. Cumulative environmental effects are multiple individual effects that, when considered together, would be considerable or compound or increase other environmental impacts. Individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time.

As described in Sections 3.1 through 3.20 of this checklist, construction activities implementing the CAP would result in short-term and temporary effects on the environment, including the following: changes to the visual setting; increases in air pollutants and noise levels; erosion and degradation of water quality; potential releases of hazardous materials into the environment; and increases in demand for utilities and services. Construction-related effects would be localized within the immediate vicinity of each project site and would cease following the construction period. As a result, they are not considered cumulatively considerable. Additionally, compliance with applicable permits, programs, regulations referenced throughout this IS/proposed ND would minimize impacts such that construction-related impacts would not contribute to a cumulative effect when combined with the effects of other cumulative projects.

As described in Sections 3.1 through 3.20 of this checklist, operation of CAP implementation would not result in substantially adverse environmental effects. Rather, CAP implementation would reduce vehicle trips, with the co-benefits of reducing air pollutant and greenhouse gas emissions, reducing the rate of VMT, and reducing reliance on fossil fuels. CAP implementation also would reduce natural gas consumption within building energy systems in the Plan Area, which also improves air quality, reduces GHG emissions, and reducing use of non-renewable fossil fuels. As a result, they are not considered cumulatively considerable. Therefore, operations-related impacts would not contribute to a cumulative effect when combined with the effects of other cumulative projects.

Reasonably foreseeable future development in the Plan Area would be subject to the same land use and environmental regulations as described throughout this checklist. Development projects within the city are guided by policies identified in the City's General Plan and by the regulations established in the Bakersfield Municipal Code. Compliance with these local regulations would minimize the combined effects of the related projects, thereby minimizing the potential for those effects to combine with CAP implementation to produce a cumulatively considerable impact. In addition, stand-alone projects associated with CAP implementation would likely occur within developed areas and not associated with or near other development. As a result, they are not considered cumulatively considerable. Based on the above discussion, implementation of the CAP would not result in a cumulatively considerable contribution to environmental impacts. This impact is less than significant. No mitigation is required.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant. As discussed in Section 3.3, "Air Quality"; Section 3.8, "Greenhouse Gas Emissions"; Section 3.9, "Hazards and Hazardous Materials"; Section 3.10, "Hydrology and Water Quality"; Section 3.13, "Noise"; and Section 3.17, "Transportation"; project construction would result in the short-term and temporary increases in air pollutants, greenhouse gas emissions, and noise levels; degradation of water quality; potential releases of hazardous materials into

the environment; and disruptions to the transportation network. However, through compliance with applicable permits, programs, and regulations during construction, these environmental effects would not cause substantial adverse effects on human beings. Furthermore, these construction-related effects would be offset by the overall net benefits of CAP implementation, which include improved air quality, reduced GHG emissions, lower consumption of non-renewable fossil fuels like natural gas and gasoline, and lower rates of VMT. Therefore, implementation of the CAP would not result in substantial adverse effects on human beings. This impact is less than significant. No mitigation is required.

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