2024 Community Climate Action Plan Update

DRAFT Initial Study – Negative Declaration

Prepared by

County of Alameda
Community Development Agency
224 W. Winton Ave, Suite 111
Hayward, CA 94544
Contact: Elizabeth McElligott, Assistant Planning Director

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ALAMEDA COUNTY
Community Development Agency

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A. INITIAL STUDY

1. Project Title:

Alameda County Community Climate Action Plan Update 2024

2. Lead agency Name and Address:

Alameda County Community Development Agency
Planning Department
224 W. Winton Ave, Suite 111
Hayward, CA 94544

3. Contact Person and Phone Number

Elizabeth McElligott
510-670-5400, elizabeth.mcelligott@acgov.org

4. Project Location and Setting

The Alameda County Climate Action Plan applies to all areas and plans/projects within unincorporated County limits. The plan location includes all unincorporated Alameda County lands.

5. Plan Sponsor's Name and Address

Alameda County Community Development Agency
Planning Department
224 W. Winton Ave, Suite 111
Hayward, CA 94544

6. General Plan Designation

n/a (unincorporated countywide)

7. Zoning

n/a (unincorporated countywide)

8. Description of Project:

Alameda County (the County) proposes to amend the Alameda County General Plan to adopt an updated Community Climate Action Plan (CCAP). The CCAP identifies measures and actions to reduce greenhouse gas (GHG) emissions and build resilience to climate impacts in unincorporated Alameda County. The project represents an update to the County's first CCAP, which was adopted by the Board of Supervisors on February 4, 2014. The objectives of the updated CCAP are to:

- Center equity and the needs of frontline communities in plan development and implementation,
- Establish a baseline inventory of GHG emissions in the unincorporated county,
- Project future GHG emissions,
- Set GHG emissions reduction targets,
- Identify strategies to reduce GHG emissions,
- Evaluate the unincorporated county's exposure to climate hazards,

- Analyze sensitivity to these hazards and identifying vulnerabilities and potential impacts,
- Determine the County's adaptive capacity to prepare for and adapt to the impacts, and
- Develop adaptation strategies to improve community resilience.

The CCAP outlines "climate action strategies" designed to meet state-mandated requirements for GHG reductions and/or to build unincorporated-area community resilience to climate impacts. Climate action strategies and associated measures and actions in the CCAP are organized into the following focus areas:

- **Land Use and Mobility** strategies propose incremental, long-term improvements to reduce vehicle miles traveled in unincorporated Alameda County by increasing the safety and availability of alternative mobility options and encouraging climate-smart land use patterns. This focus area is divided into five overarching climate action strategies: LU-1) Safe, Accessible, and Reliable Active Transportation, LU-2) Safe, Accessible, and Reliable Public Transportation, LU-3) Equitable Shared Mobility, LU-4) Sustainable Land Use Planning, and LU-5) Parking.
- **Buildings** strategies outline practical approaches to increase efficiency and resilience of new, upgraded, and existing residential and commercial buildings in unincorporated Alameda County. This focus area is divided into four overarching building strategies: BE-1) Building Decarbonization; BE-2) Clean and Renewable Energy, BE-3) Energy Efficiency and Reliability, and BE-4) Resilient and Sustainable Buildings.
- **Infrastructure** strategies address the infrastructure needed to support a resilient and climate-smart unincorporated Alameda County community. This focus area consists of six overarching infrastructure strategies: IN-1) Clean and Reliable Energy; IN-2) Low- and Zero-Emission Vehicles; IN-3) Low- and Zero-Emission Equipment; IN-4) Water Conservation; IN-5) Wastewater; and IN-6) Resilient Infrastructure.
- **Waste** strategies address GHG reduction and community resilience opportunities related to the management and reduction of solid waste in unincorporated Alameda County. The two overarching climate action strategies within this focus area are: MW-1) Inorganic Waste Management and Reduction, and MW-2) Organic Waste Management and Reduction.
- **Agriculture and Vegetation** strategies aim to reduce GHG emissions, capture carbon, and increase community resilience through actions related to open spaces and natural and working lands in unincorporated Alameda County. The two overarching climate action strategies in this focus area are: NU-1) Climate-Resilient Agriculture and NU-2) Nature-Based Solutions.
- **Health and Resiliency** strategies seek to promote better public health outcomes, promote community resilience, and build adaptive capacity in unincorporated Alameda County. This focus area is divided into four overarching climate action strategies: HR-1) Resilient Communities, Equity, and Environmental Justice, HR-2) Emergency Preparedness and Disaster Response, HR-3) Hazard-Specific Resilience, and HR 4) High-Road, Green Workforce and Business Development.
- **Community Engagement and Monitoring** strategies outline the County's commitment to engage the unincorporated-area community in CCAP implementation and to ensure transparent monitoring and reporting of the CCAP's progress over time. The two overarching climate action strategies within this focus area are: CE-1) Ongoing Equitable Community Engagement and CE-2) Climate Action Monitoring.

GHG Emissions Inventory

The County's 2019 "production-based" GHG emissions inventory provides an important foundation for the CCAP. As shown in **Table 1** and **Figure 1**, the production-based inventory estimates GHG emissions generated within unincorporated Alameda County in 2019. It identifies the activities, sources, and sectors that are generating these emissions and the relative contributions of each, while also providing a baseline used to forecast emissions trends into the future. This information was used to set the County's reduction targets consistent with State objectives, and provides the basis for the CCAP's solutions for reducing local GHG emissions.

The County's GHG emissions inventory also includes an "carbon stock inventory" for agricultural and working lands, shown in **Table 2**, that aids the County in understanding the magnitude and nature of existing carbon storage to help inform the potential future carbon sequestration opportunities.

Finally, a "consumption-based" emissions inventory (CBEI) explores the full impact of the unincorporated county's contribution to global climate change by accounting for lifecycle emissions generated outside of the unincorporated county. As shown in **Table 3**, the unincorporated county's 2019 CBEI emissions are 154 percent higher than its 2019 production-based emissions because the CBEI captures emissions not included in the production-based inventory, such as embedded lifecycle emissions from the worldwide production of fuel, food, goods, services, and construction. These indirect emissions represent over two-thirds of the unincorporated county's CBEI. **Table 4** compares the unincorporated county's 2019 consumption-based emissions and 2019 production-based emissions.

Figure 1: *2019 Unincorporated Alameda County Production-Based GHG Emissions Inventory*

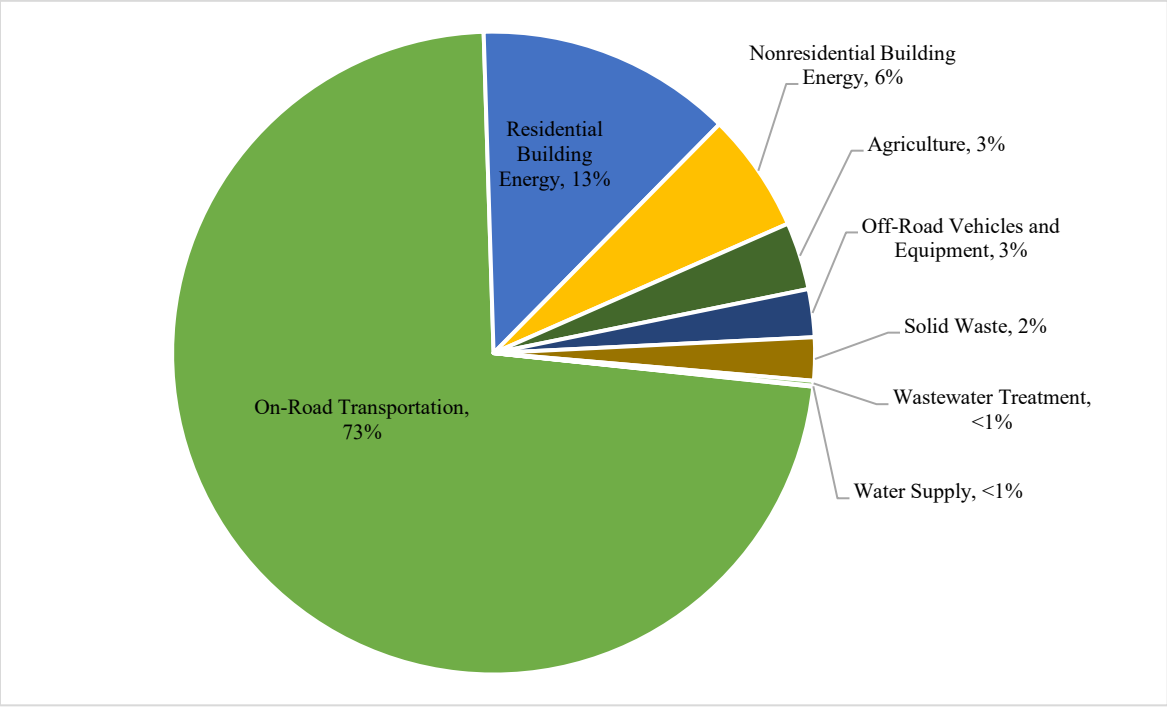


Table 1: *2019 Unincorporated Alameda County Production-Based GHG Emissions Inventory*

Sector	GHG Emissions ($MTCO_2e$)	Percent of Total
On-Road Transportation	692,138	73%
Building Energy	179,606	19%
Agriculture	32,288	3%
Off-Road Vehicles and Equipment	22,886	2%
Solid Waste	20,562	2%
Wastewater Treatment	2,404	<1%
Water Supply	350	<1%
Total	**950,235**	**100%**

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

Table 2: *Unincorporated Alameda County 2019 Carbon Stock Inventory*

Source	Carbon Stock ($MTCO_2e$)	Percent of Total
Aboveground Live Carbon Storage	4,884,713	27%
Soil Carbon Storage	12,486,405	69%
Urban Forest Carbon Storage	700,046	4%
Total	**18,071,164**	**100%**

Table 3: *2019 Unincorporated Alameda County Consumption-Based Emissions Inventory*

Sector/Source	$MTCO_2e$/person	$MTCO_2e$/household	Total $MTCO_2e$	% of Total
Transportation	**5.1**	**14.8**	**789,777**	**33%**
Vehicle Fuel Direct	2.8	8.1	432,870	18%
Vehicle Fuel Indirect	0.6	1.9	99,565	4%
Vehicle	0.5	1.5	80,891	3%
Air Travel	1.1	3.2	172,042	7%
Public Transit	0.03	0.1	4,408	0.2%
Food	**3.1**	**9.1**	**486,253**	**20%**
Meat	0.9	2.7	143,268	6%
Dairy	0.5	1.5	78,424	3%
Fruits/Vegetables	0.3	0.9	46,531	2%
Cereals	0.4	1.1	57,752	2%

Other Food	1.0	3.0	160.278	7%
Goods	**2.7**	**7.9**	**423,022**	**18%**
Small	0.7	2.2	116,526	5%
Clothing	0.6	1.9	99,484	4%
Furnishings/Appliances	0.5	1.6	84,921	4%
Other Goods	0.8	2.3	122,092	5%
Services	**2.7**	**8.0**	**427,145**	**18%**
Housing	**2.0**	**5.9**	**313,521**	**13%**
Natural Gas	0.7	2.0	108,281	4%
Electricity	0.3	0.9	50,054	2%
Fuel Oil/Other Fuel	0.03	0.1	4,942	0.2%
Energy Indirect	0.2	0.5	28,044	1%
Water	0.1	0.2	10,385	0.4%
Waste	0.2	0.7	37,971	2%
Construction	0.5	1.4	73,844	3%
Composting	**-0.1**	**-0.4**	**-22,703**	**-1%**
Total	**15.5**	**45.3**	**2,417,015**	**100%**

Table 4: *Comparison - Unincorporated Alameda County 2019 Consumption-Based and Production-Based Emissions Inventories*

Total $MTCO_2e$	Percent of Total	Consumption-Based Emissions Inventory	Percent Difference
Total	950,235	2,417,015	+154%

GHG Emissions Reduction Targets

The CCAP establishes GHG emissions reduction targets for the years 2030, 2040, and 2045, consistent with statewide GHG targets. The County is seeking consistency with state targets because they have been determined as technologically and financially feasible through analysis by the California Air Resources Board. The County does not intend to place undue burden on community members by seeking to adopt overall targets that are more stringent than those set by the State of California. As directed in SB 32 and AB 1279, the State aims to reduce annual GHG emissions to 40 percent reduction below 1990 levels by 2030; 85 percent reduction in anthropogenic emissions below 1990 levels by 2045; and net zero GHG emissions by 2045.

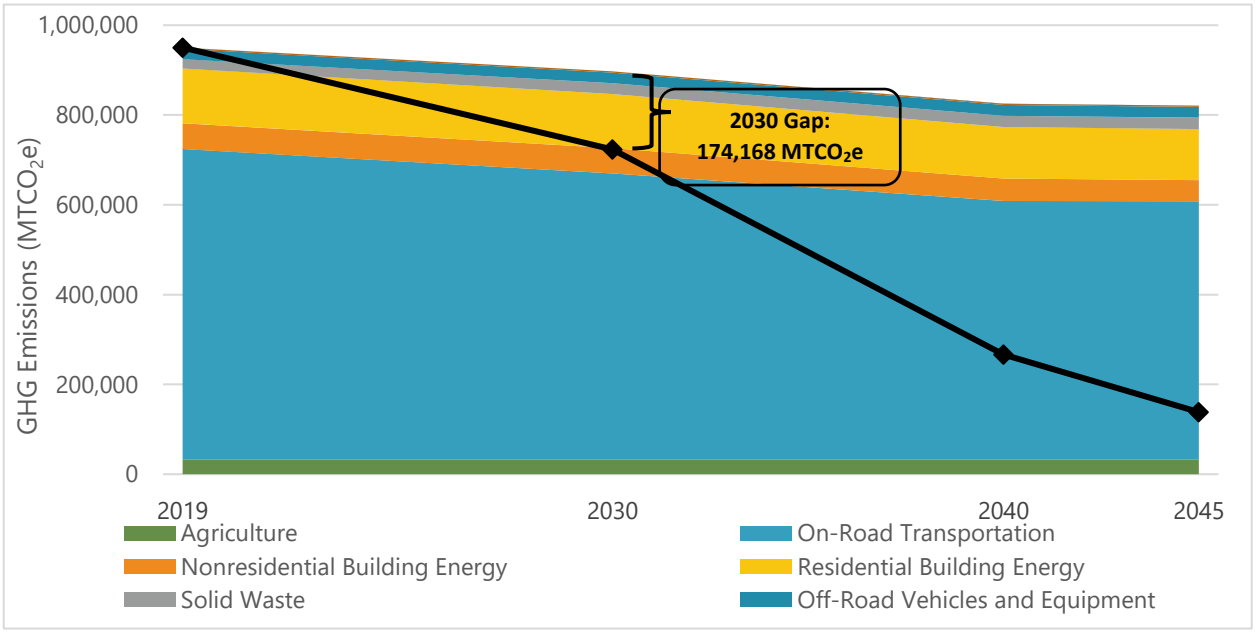
The County aims to reduce GHG emissions in proportion to the State's targets and goals. Community emissions levels from 1990 are not available, which is the case for most local jurisdictions in California.

Thus, community GHG reduction targets for the CCAP were developed relative to the County's emissions in 2019 and established in proportion with statewide reduction for all emissions sectors relevant to the County's jurisdiction, consistent with CARB guidance. Estimating equivalent reductions needed from the 2019 baseline, the County aims to reduce emissions to:

- 2030 target: 24 percent below 2019 levels (723,139 MTCO2e);
- 2040 target: 72 percent below 2019 levels (266,819 MTCO2e); and
- 2045 target: 85 percent below 2019 levels (138,283 MTCO2e).

The County's 2030 target requires GHG emission to be reduced by 228,056 MTCO2e in 2030. The 2040 target, which the County has set based on the trajectory necessary to meet the 2045 goal, requires that community emissions be reduced to 80,949 MTCO2e. Achievement of the 2040 and 2045 targets 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. display the unincorporated county's forecasted emissions, targets, and the local emissions gap. **Figure 2** illustrates the unincorporated county's forecasted emissions, targets, and the 2030 "local emissions gap." The local emissions gap represents local reductions that the County will need to pursue, in addition to anticipated state or federal action, to achieve the County's 2030 targets.

Figure 2 : Unincorporated Alameda County Forecasted Emissions, Targets, and Local Emissions Gap



Climate Adaptation and Resilience

The CCAP includes an overview of the County's Vulnerability Assessment (VA), which was developed in preparation of the CCAP and is included as CCAP Appendix B. The VA provides a comprehensive analysis of community vulnerabilities to climate change across the unincorporated county. It identifies and characterizes climate hazards that are anticipated to impact the community, and the results of the VA informed the development of CCAP adaptation strategies intended to improve the unincorporated county's climate resilience. The VA aims to answer these questions:

- **Exposure:** what climate hazards does the unincorporated county currently face? How are these climate hazards projected to change in the future?
- **Sensitivity and Potential Impacts:** what aspects of the community (i.e., populations, built environment, community functions) in the unincorporated county will be affected by climate hazards, and to what degree?
- **Adaptive Capacity:** what is currently being done to address climate hazards and their associated impacts in the unincorporated county? What ability does the County have to address impacts in the future?
- **Vulnerability:** how vulnerable is the unincorporated county to climate hazards?

The CCAP summarizes the findings of the VA, underscoring the primary climate hazards that the unincorporated county faces (i.e., wildfire, increased temperatures and extreme heat, extreme precipitation and flooding, drought). It includes an overview of the findings from the exposure, sensitivity and potential impacts, and adaptive capacity analyses conducted for each hazard.

As shown in **Table 5** and summarized in the CCAP, the VA assigns a potential impact score to each major hazard. The score reflects the County's adaptive capacity and the degree of sensitivity of unincorporated-area populations and built and natural assets to various climate hazards. On a scale of 1 – 5, with 5 indicating highest vulnerability, increased heat ranked as the greatest vulnerability risk for the unincorporated county with a score of 4. Wildfire and extreme precipitation and flooding tied for next-highest at 3, and drought ranked lowest with a vulnerability rating of 2 to 3.

Table 5: Vulnerability Scoring Summary for Unincorporated Alameda County

Climate Change Effect	Vulnerability Score		
	Adaptive Capacity	Potential Impacts	Vulnerability
Increased Wildfire Risk	High	High	3
Increased Temperatures and Extreme Heat	Medium	High	4
Extreme Precipitation and Flooding	Medium	Medium	3
Drought	Medium	Low/Medium	2-3

Climate Action Strategies and Measures

The CCAP includes 25 strategies and 56 measures (with accompanying actions) designed to reduce GHG emissions and support adaptation and resilience to climate impacts in the community. These climate action strategies, measures, and associated actions, shown in **Table 6**, are organized under seven focus areas: Land Use and Mobility, Buildings, Infrastructure, Waste, Agriculture and Vegetation, Health and Resiliency, and Community Engagement and Monitoring.

Except where noted in Table 6 and the analysis below, many CCAP actions can be effectively ruled out as potential sources of adverse impacts to the environment. Most of the actions described in the CCAP are programs to (1) ease the reduction of fossil fuel use and reduce GHG emissions, (2) build community resilience and increase community capacity to adapt to climate change impacts, or (3) facilitate residents' abilities to participate in climate mitigation and resilience actions. These actions would have no substantial or significant adverse physical/environmental effects of their own and would purely result in GHG reduction, increased resilience, and associated co-benefits. In the interest of clarity and brevity, these innocuous actions can be excluded from specific mention in this analysis.

No significant land use changes would occur, nor would land use policies or zoning ordinance changes be required to administer these measures. No changes in density of use or significant generation of traffic would occur as a result of these measures. No adverse alterations to air quality or water quality/runoff volumes would result, and changes to the visual environment would be minor and, in most cases, invisible. No adverse changes to infrastructure or public services and utilities would occur as a result of these measures. By and large, each of these measures individually, and considered collectively with the other CCAP measures, represents an improvement in safety, air quality, visual quality and most importantly, GHG reduction and climate resilience.

This exercise leaves measures that could potentially result in environmental impacts, although even these, taken together with aforementioned innocuous measures, represent improvements to air quality and GHG emissions. These measures, indicated by a "YES" in the final column of Table 6, are discussed in the analysis section of this document.

9. Surrounding Land Uses and Setting

The Community Climate Action Plan Update would apply to all unincorporated lands under jurisdiction of Alameda County, including urban, suburban and rural, on lands under all General Plan Designations.

10. Other Public Agencies Whose Approval is Required:

Alameda County has sole approval authority over the CCAP and the General Plan. There are no other public agencies whose approval is required.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?

No California Native tribes have requested consultation.

Table 6: Climate Action Strategies, Measures, and Actions

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
LAND USE AND MOBILITY: **1) Safe, Accessible, and Reliable Active Transportation**	**MEASURE LU-1.1: Develop and maintain a safe, connected, and continuous bicycle and pedestrian network.** GHG reduction: 20,029 (2030) 18,439 (2040) 18,607 (2045)	**Action LU-1.1.1:** Implement specific recommendations for improving bicycle and pedestrian infrastructure (e.g., bike paths, sidewalks) included in the 2019 Alameda County Bicycle & Pedestrian Master Plan for Unincorporated Areas and its future updates.	**YES**
		Action LU-1.1.2: Continue to eliminate gaps in the existing network and improve bicycle and pedestrian connections to transit, schools, parks/trails, retail and employment centers, community/senior centers, and libraries as identified in the 2019 Alameda County Bicycle & Pedestrian Master Plan for Unincorporated Areas.	
		Action LU-1.1.3: Work with Alameda County Transportation Commission, local cities, school districts, and community-based organizations to launch a Vision Zero program for the unincorporated county.	
		Action LU-1.1.4: Consider establishing temporary and permanent car-free areas.	
		Action LU-1.1.5: Partner with neighboring counties, special districts, and other relevant partners to close gaps in long-distance trail networks.	
	MEASURE LU-1.2: Increase and improve access to walking and bicycling throughout the unincorporated county. GHG reduction: Supportive	**Action LU-1.2.1:** Promote the Bay Area Air Quality Management District's (BAAQMD's) rebate program for e-bikes.	**N/A**
		Action LU-1.2.2: Work with school districts and park districts that serve unincorporated areas of the county to install secure bicycle parking at all elementary, middle, and high schools; and parks.	
		Action LU-1.2.3: Promote partnerships with transit providers (e.g., AC Transit, BART, Wheels, ACE, Amtrak) to increase bicycle access on board transit vehicles to bicycle users, especially during peak commute hours.	
		Action LU-1.2.4: Work with the Alameda County Transportation Commission to build community awareness, through multilingual outreach efforts, of walking and biking as an alternative to driving, road safety responsibilities, and existing programs such as Safe Routes to Schools.	
LAND USE AND MOBILITY: **2) Safe, Accessible, and Reliable Public Transportation**	**MEASURE LU-2.1: Continue to partner with transit agencies to improve reliability, affordability, and convenience of existing transit services through increased frequency, expanded service areas, extended service hours, and better facilities. Prioritize**	**Action LU-2.1.1:** Request that AC Transit evaluate the potential for increasing service frequency on key routes.	**YES**
		Action LU-2.1.2: Prepare formal request for AC Transit to extend bus rapid transit service to the unincorporated county and determine the conditions necessary for bus rapid transit route expansion.	
		Action LU-2.1.3: Ensure that bus stops provide shade, weather protection, seating, lighting, route information, and are frequently cleaned and maintained.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	improvements in disadvantaged communities. GHG reduction: 37,817 (2030) 36,902 (2040) 38,295 (2045)	**Action LU-2.1.4:** Explore and support innovative public transit options, such as deploying low-emissions buses in neighborhoods with disproportionately poor air quality, or developing a "first and last mile" plan to connect riders to public transit	
		Action LU-2.1.5: Work with regional transit providers (e.g., BART, AC Transit) to make public transit safer for all riders.	
		Action LU-2.1.6: Promote discounted transit passes such as the Clipper START program and the Student Transit Pass Program.	
LAND USE AND MOBILITY: **3) Equitable Shared Mobility**	**MEASURE LU-3.1: Develop programs and incentives that promote shared mobility (e.g., car sharing, bike sharing, and scooter sharing) in frontline communities and that increase access to health services, food, education, and employment.** GHG reduction: Supportive	**Action LU-3.1.1:** Explore programs and funding to provide an electric vehicle (EV) car share program for areas of the unincorporated county that are not well served by transit.	**N/A**
		Action LU-3.1.2: Promote the establishment of affordable bikeshare programs in the urban unincorporated areas of Alameda County (e.g., expanding the geography of Bay Wheels' Bike Share for All program, which offers affordable membership options for low-income residents).	
		Action LU-3.1.3: Develop community awareness and education programs around shared mobility (e.g., car sharing, bike sharing, and scooter sharing), prioritizing multilingual outreach to frontline communities.	
LAND USE AND MOBILITY: **4) Sustainable Land Use Planning**	**MEASURE LU-4.1: Increase residential and commercial density in urban areas located near transit.** GHG reduction: 3,637 (2030) 5,423 (2040) 6,398 (2045)	**Action LU-4.1.1:** Facilitate construction of missing middle housing, including Accessory Dwelling Units (ADUs) and duplexes by connecting unincorporated area residents to the Alameda County ADU Resource Center. Develop an ADU incentive program that will offer grants and loans for the construction of ADUs and adopt an ordinance to allow up to four housing units in single-family zones.	**YES**
		Action LU-4.1.2: Streamline the permitting process and reduce parking requirement for affordable housing as an incentive.	
		Action LU-4.1.3: Encourage transit-oriented development and promote co-location of childcare centers and family childcare homes with affordable housing, employment centers, and health and social services.	
		Action LU-4.1.4: Focus commercial and residential development in the County's Specific Plan areas to encourage efficient land use and minimize daily trips.	
		Action LU-4.1.5: Promote jobs-housing balance in the urban unincorporated area through zoning and general plan policy.	
	MEASURE LU-4.2: Promote and ensure land uses that support walking and bicycling.	**Action LU-4.2.1**: Develop incentive zoning for the inclusion of shared mobility and other transportation demand management measures. Incentive zoning could include parking reduction or substitution, greater floor-to-area ratios, increased dwelling units, and greater height allowances.	**YES**

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	GHG reduction: Supportive	**Action LU-4.2.2**: Partner with regional agencies to promote vanpools by creating community vanpool programs, including farmworker vanpools, employer-sponsored shuttles and rural vanpool programs.	
		Action LU-4.2.3: Collaborate with regional transportation agencies and business networks to provide information about, and access to, incentives and services that increase the use of alternatives to single-occupant vehicle commuting, including the Bay Area Commuter Benefits Program, the Alameda County Guaranteed Ride Home Program, and the 511 SF Bay traffic information program.	
LAND USE AND MOBILITY: **5) Parking**	◊**MEASURE LU-5.1: Reduce minimum parking requirements and strategically evaluate the parking needs of the community.** GHG reduction: Supportive	**Action LU-5.1.1**: Modify the zoning code in accordance with Assembly Bill (AB) 2097 to remove parking minimums for new developments within half a mile of public transit and consider establishing parking maximums in new developments.	**YES**
		Action LU-5.1.2: Evaluate current and future parking needs and consider repurposing underutilized and vacant lots.	
		Action LU-5.1.3: Implement the recommendations of the Ashland Cherryland Business District Specific Plan Area Parking Demand and Management Strategy Study.	
BUILDINGS: **1) Building Decarbonization**	**MEASURE BE-1.1:** Encourage **decarbonization of existing residential and nonresidential buildings (e.g., replace gas infrastructure and appliances with electric alternatives).** GHG reduction: 17,237 (2030) 68,604 (2040) 100,370 (2045)	**Action BE-1.1.1:** Consider developing a comprehensive energy retrofit plan to encourage transition mixed-fuel residential and nonresidential buildings to all-electric, prioritizing the needs of frontline communities. The plan should address end-of-life recycling and disposal of gas appliances.	**YES**
		Action BE-1.1.2: Consider establishing electrification retrofit requirements for commercial buildings at the time of building retrofit/renovation or equipment replacement. Where electrification is infeasible, encourage renewable gas.	
		Action BE-1.1.3: Work with Renew Alameda County to expand the services eligible for home improvements and repair to include energy efficiency and electric appliance changeouts, and to reduce barriers to accessing the services for low-income property owners.	
		Action BE-1.1.4: Consider eliminating the provision of fossil fuel-powered backup generator permits for existing nonresidential development (except for emergency facilities such as hospitals and building types not subject to the California Building Energy Efficiency Standards that provide essential services) by 2030.	
		Action BE-1.1.5: Evaluate the feasibility of requiring electric service upgrades during major retrofits, including solar-ready panels.	
	MEASURE BE-1.2: Encourage a transition away from reliance on natural gas infrastructure in new	**Action BE-1.2.1:** Consider adopting a reach code for the 2025 California Building Energy Efficiency Standards code cycle that reduces reliance on natural gas infrastructure in new development (residential and nonresidential).	**YES**

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	buildings and significant remodels. GHG reduction: 997 (2030) 3,682 (2040) 5,487 (2045)	**Action BE-1.2.2:** Consider adopting a reach code that requires electric-ready design in new industrial construction and that requires non-core industrial operations (e.g., space heating and cooling, domestic hot water) to be all electric.	
	MEASURE BE-1.3: Encourage and support the use of electricity and alternative fuels in construction equipment. GHG reduction: 367 (2030) 846 (2040) 1,110 (2045)	**Action BE-1.3.1:** Encourage all construction projects starting in 2025 and later to use renewable diesel in diesel-powered construction equipment.	**YES**
		Action BE-1.3.2: Encourage the use of electric-powered construction equipment in all discretionary projects.	
		Action BE-1.3.3: Discourage the use of fossil fuel-powered generators at construction sites in all discretionary projects.	
BUILDINGS: **2) Clean and Renewable Energy**	**MEASURE BE-2.1: Install additional renewable energy-generating technologies (e.g., solar panels) in existing residential and nonresidential buildings.** GHG reduction: Supportive	**Action BE-2.1.1:** Identify commercial and industrial areas with optimal solar orientation, building structure, and land ownership/management conditions.	**YES**
		Action BE-2.1.2: Adopt ordinance that establishes Solar EmPowerment Districts in high potential areas.	
		Action BE-2.1.3: Minimize barriers and streamline permitting for solar photovoltaic installation in Solar EmPowerment Districts.	
		Action BE-2.1.4: Promote the availability of incentive programs to support the installation of renewable energy-generating technologies.	
	MEASURE BE-2.2: Install renewable energy-generating technologies (e.g., solar panels) beyond minimum State requirements in new residential and nonresidential development. GHG reduction: Supportive	**Action BE-2.2.1:** Adopt a reach code with the 2025 code cycle that requires all new residential and nonresidential buildings to generate on-site, renewable energy to meet anticipated energy consumption of the building, as feasible.	**YES**
		Action BE-2.2.2: Eliminate local regulatory barriers to installation of distributed renewable energy systems, such as wind and solar, through revisions to the zoning code and other relevant County policies.	
		Action BE-2.2.3: Provide guidelines, in multiple languages, for the permit application process for renewable energy generation installation (e.g., solar photovoltaics) in residential and nonresidential development.	
		Action BE-2.2.4: Collaborate with Pacific Gas & Electric Company (PG&E) to make key upgrades to transmission and distribution systems, substations, and other equipment to enable electrification and renewable energy integration into the electricity grid.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	MEASURE BE-3.1: Connect owners/occupants of existing residential and nonresidential buildings to energy audit and weatherization programs and resources. GHG reduction: Supportive	**Action BE-3.1.1:** Work with regional organizations such as BayREN to support and expand access to rental property energy efficiency and electrification outreach and incentive programs.	**N/A**
		Action BE-3.1.2: Connect to external programs that provide low-cost financing and encourage energy efficiency investments for existing residential buildings, focused on owner-occupants.	
BUILDINGS: **3) Energy Efficiency and Reliability**	**MEASURE BE-3.2: Retrofit existing residential and nonresidential buildings to improve energy efficiency.** GHG reduction: Supportive	**Action BE-3.2.1:** Work with PG&E, Ava Community Energy (Ava), and community-based organizations (e.g., Rising Sun Center for Opportunity) to provide free energy audits of existing buildings, prioritizing implementation in frontline communities.	**N/A**
		Action BE-3.2.2: Encourage developers to utilize state and federal funding programs, such as Community Development Block Grant programs, to achieve energy efficiency improvements in existing and new buildings, with a particular focus on affordable housing.	
		Action BE-3.2.3: Promote existing community education programs around energy efficiency best practices and cost savings opportunities, prioritizing outreach to frontline communities.	
		Action BE-3.2.4: Explore options to lower costs associated with residential energy efficiency improvements, such as lowering permit fees.	
	MEASURE BE-3.3: Reduce plug loads (i.e., energy used by equipment that is plugged into an outlet) in existing residential and nonresidential buildings. GHG reduction: Supportive	**Action BE-3.3.1:** Promote appliance upgrades to energy-efficient technologies and products through campaigns focused on residents and local businesses (e.g., ENERGY STAR® appliance change-out programs, and incentives).	**N/A**
		Action BE-3.3.2: Facilitate the adoption of smart grid and other peak load reduction technologies such as building energy management systems and smart appliances.	
BUILDINGS: **4) Resilient and Sustainable Buildings**	**MEASURE BE-4.1: Improve resilience of existing residential and nonresidential buildings to climate hazards.** GHG reduction: Supportive	**Action BE-4.1.1:** Increase access to and use of indoor air purification systems capable of enhancing and protecting public health from wildfire smoke and poor air quality in the existing building stock in the unincorporated county, as well as from toxic air contaminants associated with freeway traffic and vehicle travel (consistent with the County's proposed Air Pollution Exposure Zone Ordinance).	**N/A**
		Action BE-4.1.2: Through focused outreach, encourage all residential and nonresidential building owners located in wildland-urban interface (WUI) areas or "High" or "Very High" fire hazard severity zones (FHSZs) to conduct hardening retrofits, which may include installing fire-resistant roofs and building materials, covering vents or using ember- and flame-resistant vents, and	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		installing dual-paned windows with one pane of tempered glass, among other actions.	
		Action BE-4.1.3: Encourage residential and nonresidential building owners that lack air conditioning, or that are located in areas vulnerable to extreme heat, to install reflective "cool roofs" to mitigate the impacts of increased temperatures and extreme heat through public education campaigns and incentive programs.	
		Action BE-4.1.4: Encourage residential and nonresidential building owners located in the 100- or 500-year floodplain to floodproof their building to a point at, or above, the base flood elevation, and to raise mechanical equipment through public education campaigns and incentive programs.	
		Action BE-4.1.5: Decrease vulnerability of renters to extreme heat by assisting rental housing owners with implementing measures to improve interior cooling in rental units.	
	MEASURE BE-4.2: Enhance resilience of new residential and nonresidential buildings to climate hazards. GHG reduction: Supportive	**Action BE-4.2.1:** Require new buildings located within or in the vicinity of the 100- or 500-year floodplain, or in areas that are historically prone to flooding, to be designed and located to allow unrestricted flow of flood waters or be able to withstand flood forces.	
		Action BE-4.2.2: Require new development to comply with the requirements and criteria for stormwater quantity controls established in the Alameda County Hydrology and Hydraulics Criteria Summary and the Alameda County Clean Water Program to control surface runoff from new development.	**YES**
		Action BE-4.2.3: Require new buildings located within "High" or "Very High" FHSZs to use fire-resistant building materials, fire-resistant landscaping, and adequate clearance around structures	
		Action BE-4.2.4: Encourage new development to use high-albedo (i.e., reflective) materials for features such as roofs and driveways to help mitigate the impacts of increased temperatures and extreme heat through public education campaigns and incentives.	
	MEASURE BE-4.3: Increase the use of low-carbon concrete and other types of sustainable materials in new construction and renovations. GHG reduction: Supportive	**Action BE-4.3.1:** Adopt a reach code with the 2025 code cycle that requires new residential and nonresidential construction to use low-carbon concrete, steel, and other key impact materials	**YES**

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
INFRASTRUCTURE 1) Clean and Reliable Energy	MEASURE IN-1.1: **Transition the community to 100 percent clean energy.** GHG reduction: 27,795 (2030) 11,139 (2040) 0 (2045)	**Action IN-1.1.1:** Work with Ava Community Energy (Ava) on a transition plan to automatically enroll all unincorporated-area accounts in the Renewable Choice tier, with an option for residents and businesses to opt-out.	YES
		Action IN-1.1.2: Promote enrollment in Ava for current PG&E customers through a multilingual outreach campaign.	
		Action IN-1.1.3: Require all newly built parking lots and structures to have solar-ready generation capabilities.	
		Action IN-1.1.4: Require the installation of solar heaters for all new swimming pools which propose the use of heating systems.	
		Action IN-1.1.5: Work with Ava to provide incentives for replacing existing swimming pool heaters with solar versions.	
		Action IN-1.1.6: Encourage the installation of solar canopies on surface parking lots.	
		Action IN-1.1.7: Partner with advocacy organizations, such as The Utility Reform Network (TURN), to ensure consideration of energy use-reduction barriers faced by low-income utility users.	
	MEASURE IN-1.2: **Increase the use of battery storage technologies (i.e., decentralized clean energy resources).** GHG reduction: Supportive	**Action IN-1.2.1:** Encourage the installation of battery storage in conjunction with renewable energy generation projects within new and existing buildings through engagement campaigns and state incentives. Ensure that battery storage systems are responsibly handled during operation and are properly disposed of at the end of useful life.	YES
		Action IN-1.2.2: Require battery storage readiness design in new nonresidential construction.	
		Action IN-1.2.3: Seek funding opportunities for additional backup power capabilities at critical facilities.	
		Action IN-1.2.4: Evaluate opportunities to remove barriers to battery storage throughout the unincorporated county. Opportunities could include development-related incentives, streamlined permitting, or incentives for medical uses.	
	MEASURE IN-1.3: **Support development of innovative approaches to energy generation, distribution, and storage (e.g., energy recapture [in-conduit hydro, co-generation], developing clean microgrids for schools, hospitals, or neighborhoods).** GHG reduction: Supportive	**Action IN-1.3.1:** Develop renewable microgrids at County libraries, fire and police stations and other emergency facilities and community hubs.	YES
		Action IN-1.3.2: Encourage non-municipal public service facilities (e.g., hospitals and public schools) to develop renewable microgrids.	
		Action IN-1.3.3: Evaluate opportunities and incentives that remove barriers for integrating battery storage readiness in existing homes and businesses at the time of retrofit and/or in conjunction with renewable energy generation installations.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	MEASURE IN-1.4: Encourage the increase of smart grid integration throughout the unincorporated county. GHG reduction: Supportive	**Action IN-1.4.1:** Partner with PG&E and develop a community smart grid integration plan.	**YES**
		Action IN-1.4.2: Develop an outreach program that informs property owners and businesses about benefits of smart grid and smart appliances.	
		Action IN-1.4.3: Consider adopting an ordinance that requires smart grid energy management systems and compatible heating, ventilation, air conditioning and lighting in new construction.	
	MEASURE IN-1.5: Evaluate the potential for district energy systems (multi-building heating and cooling systems) in urban areas of the unincorporated county and develop an implementation plan for cost-effective systems. GHG reduction: Supportive	**Action IN-1.5.1:** Conduct an analysis of district heating potential in the Castro Valley Central Business District Specific Plan area, the Ashland and Cherryland Business District Specific Plan area, the San Lorenzo Village Center Specific Plan area, and other neighborhood commercial centers.	**N/A**
INFRASTRUCTURE **2) Low- and Zero-Emission Vehicles**	**MEASURE IN-2.1: Increase electric vehicle (EV) charging infrastructure.** GHG reduction: 50,951 (2030) 180,943 (2040) 249,892 (2045)	**Action IN-2.1.1:** Consider adopting an EV charging reach code to increase levels of EV readiness in new residential and nonresidential development.	**YES**
		Action IN-2.1.2: Ensure EV charging stations are encouraged and allowed through land use designations that currently permit gas fueling stations.	
		Action IN-2.1.3: Work with Ava, BAAQMD, and regional agencies to provide incentives for existing gas stations and retail centers to add EV charging stations.	
		Action IN-2.1.4: Work with regional agencies and EV charging companies to incentivize, install, and maintain in good working order EV charging stations and preferred parking for EVs at public facilities, parks, retail centers, multifamily residential properties, and other high-use parking areas throughout the unincorporated county.	
		Action IN-2.1.5: Collaborate with Ava to establish EV charging mobility hubs at publicly accessible sites that support tenants of multifamily properties and rideshare drivers.	
		Action IN-2.1.6: Provide guidelines in multiple languages for the permit application process for EV charging infrastructure installation in residential and nonresidential development.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action IN-2.1.7: Promote the Alameda County Incentive Project to increase EV charging infrastructure in frontline communities, at workplaces, in multifamily residential properties, and in affordable housing developments.	
		Action IN-2.1.8: Promote Ava's EV charging rates for residents, which provides a cost-effective way to charge EVs at residences by charging during off-peak hours.	
		Action IN-2.1.9: Require all nonresidential development with loading docks to supply sufficient electrical power for delivery trucks and associated equipment to reduce idling when making deliveries.	
		Action IN-2.1.10: Seek funding to support improved access to EV charging stations.	
	MEASURE IN-2.2: Encourage public EV and low-carbon vehicle adoption. GHG reduction: Supportive	**Action IN-2.2.1:** Implement the recommendations for local governments provided in the Bay Area Electric Vehicle Acceleration Plan to support outreach and education for EV adoption.	
		Action IN-2.2.2: Promote Electric For All, which provides information and an incentive database for EVs and associated charging equipment.	
		Action IN-2.2.3: Collaborate with Ava to develop and implement a Medium- and Heavy-Duty Goods Movement Electrification Blueprint.	**N/A**
		Action IN-2.2.4: Promote the California Clean Vehicle Rebate Project and the Clean Vehicle Assistance Program, which provide rebates and financial incentives that prioritize accessibility and affordability for low- to moderate-income consumers to switch to EVs.	
INFRASTRUCTURE **3) Low- and Zero-Emission Equipment**	**MEASURE IN-3.1: Transition to electric landscaping equipment.** GHG reduction: 311 (2030) 803 (2040) 1,082 (2045)	**Action IN-3.1.1:** Encourage business owners (e.g., landscaping businesses) to convert or replace their gasoline-powered gardening equipment, such as lawn mowers, leaf blowers, and hedge trimmers, with electric or other zero-emission alternative equipment.	**N/A**
		Action IN-3.1.2: Promote California's Clean Off-Road Equipment Voucher Program for professional landscape services, which provides vouchers to purchase zero-emission landscaping equipment.	
	MEASURE IN-3.2: Encourage the use of electric or alternatively fueled agricultural equipment. GHG reduction:	**Action IN-3.2.1:** Encourage the use of electric-powered agricultural equipment where feasible and promote the California Air Resources Board's Carl Moyer Program, which provides grants to replace diesel-powered agricultural equipment. Encourage the use of renewable diesel in diesel-powered agricultural equipment where electrification is infeasible.	**N/A**

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	Supportive	**Action IN-3.2.2:** Encourage the replacement of diesel- and natural gas-powered irrigation pumps with electric-powered alternatives where feasible. Encourage the use of renewable diesel or renewable natural gas where electrification is infeasible.	
INFRASTRUCTURE **4) Water Conservation**	**MEASURE IN-4.1: Reduce water consumption in buildings.** GHG reduction: 11 (2030) 5 (2040) 0 (2045)	**Action IN-4.1.1:** Continue to promote water conservation incentives such as appliance and plumbing rebates and water conservation kits in partnership with California Water Services.	**YES**
		Action IN-4.1.2: Require ultra-low-flow fixtures in new development to reduce water consumption.	
		Action IN-4.1.3: Consider requiring ultra-low-flow water fixture retrofit-upon-sale requirements for residential and commercial buildings.	
	MEASURE IN-4.2: Reduce water consumption for irrigation and landscaping. GHG reduction: Supportive	**Action IN-4.2.1:** Continue to promote landscape water conservation incentives in partnership with EBMUD and Zone 7.	**N/A**
	MEASURE IN-4.3: Increase the capture and use of recycled water. GHG reduction: Supportive	**Action IN-4.3.1:** Adopt a drought-ready ordinance to require greywater readiness in new residential construction and major remodels.	**YES**
		Action IN-4.3.2: Encourage the use of onsite rainwater harvesting and recycled water systems, consistent with all applicable environmental, health, and safety regulations and requirements.	
		Action IN-4.3.3: Encourage the use of rainwater capture and onsite recycled water for landscaping use.	
		Action IN-4.3.4: Support residents and businesses interested in installing onsite recycled water systems (i.e., greywater) consistent with all State and County health codes and standards and in compliance with regional water agency requirements through providing guidance in multiple languages, incentives, and/or streamlining permitting processes.	
INFRASTRUCTURE **5) Wastewater**	**MEASURE IN-5.1: Foster best management practices and innovative strategies for Onsite Wastewater Treatment System (OWTS) management for the protection of groundwater and surface water bodies.** GHG reduction: Supportive	**Action IN-5.1.1:** Explore the feasibility of reducing wastewater through a variety of methods, including the use of dry/composting toilets in new development and encourage these systems, repairing leaks in plumbing, using water-saving devices (e.g., low-flow fixtures), reducing water usage in daily activities, and avoiding the plumbing of greywater systems into the OWTS.	**YES**
		Action IN-5.1.2: Promote best management practices of septic system OWTSs by properly sizing and maintaining wastewater dispersal fields (avoiding plants with invasive roots and parking of vehicles/heavy equipment on dispersal fields), using supplemental treatment units, pumping and maintaining all tanks and other components of the OWTS every 3 to 5 years (or as needed by a	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		licensed professional), and avoiding chemical additive to maintain the OWTS or using harsh chemicals for cleaning.	
INFRASTRUCTURE 6) Resilient Infrastructure	**MEASURE IN-6.1: Improve energy sector resilience.** GHG reduction: Supportive	**Action IN-6.1.1:** Coordinate with PG&E and other utility providers/suppliers to identify and protect critical energy infrastructure in the unincorporated county from climate hazards.	N/A
		Action IN-6.1.2: Integrate energy assurance actions into countywide planning processes to decrease vulnerability to grid outages during hazard events.	
		Action IN-6.1.3: Ensure adequate utility redundancy and backup power is available to maintain critical facilities where not already installed, prioritizing clean backup power sources where feasible.	
		Action IN-6.1.4: Encourage the inclusion of broadband infrastructure in new development proposals to enable connectivity for building and utility controls and operating system networks.	
		Action IN-6.1.5: Encourage residents to use the California Interactive Broadband Map developed by the California Public Utilities Commission, which reports internet speeds and helps to document and identify unserved and underserved areas	
	MEASURE IN-6.2: Improve resilience of water and wastewater systems. GHG reduction: Supportive	**Action IN-6.2.1:** Collaborate with relevant local and regional agencies to identify and protect vulnerable water and wastewater facilities to ensure an adequate clean water supply during emergencies and disaster recovery.	YES
		Action IN-6.2.2: Upgrade water and wastewater systems to accommodate projected changes in water quality and availability such as intake systems that are too shallow, higher levels of water contaminants, and potential need for greater water storage capacity.	
		Action IN-6.2.3: Reduce reliance on external water supplies by shifting towards local sources of water such as grey water, rainwater, air conditioning condensate, and foundation drainage.	
		Action IN-6.2.4: Inventory all sewer pump stations in the 100- and 500-year floodplain and identify priority facilities to upgrade to become more flood-resilient.	
	MEASURE IN-6.3: Protect vulnerable transportation infrastructure, services, and systems from climate hazards. GHG reduction: Supportive	**Action IN-6.3.1:** Coordinate with AC Transit, community-based organizations, and other relevant partners to identify and protect local and regional transportation, transit, and active transportation corridors that are at risk from climate change impacts. Use the best available science and resilient design features to improve resiliency in transportation infrastructure.	YES
		Action IN-6.3.2: Update County transportation system maintenance protocols, for which the Public Works Agency is responsible, to incorporate climate vulnerabilities.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action IN-6.3.3: Pilot cool pavement initiatives and evaluate effectiveness post-implementation.	
WASTE: **1) Inorganic Waste Management and Reduction**	**MEASURE WR-1.1: Increase recycling in the unincorporated areas of the county.** GHG reduction: Supportive	**Action WR-1.1.1:** Partner with waste haulers, Sanitary Districts, and StopWaste to expand the diversion of recyclable inorganic solid waste from landfills.	**YES**
		Action WR-1.1.2: Continue to increase participation in, while simultaneously reducing contamination of, curbside and drop-off recycling programs for all residential, commercial, industrial, and institutional uses. Identify new drop-off and pick-up opportunities and additional items that can be recycled curbside.	
		Action WR-1.1.3: Provide education, audits, and other technical assistance in multiple languages to increase waste diversion rates in coordination with StopWaste. Develop waste reduction and diversion behavior campaigns in partnership with StopWaste and local organizations for residential, multifamily property managers, and commercial sectors.	
		Action WR-1.1.4: For events that require a County-issued permit, adopt an ordinance that requires recycling and composting services, the use of only recyclable and compostable materials by vendors, and adequate staff to ensure proper disposal and recycling.	
	MEASURE WR-1.2: Reduce solid waste generation. GHG reduction: Supportive	**Action WR-1.2.1:** Adopt a comprehensive construction and demolition ordinance to reach a 75 percent diversion rate, which could include deconstruction.	**YES**
		Action WR-1.2.2: Work with restaurants in the unincorporated areas of the county to reduce single-use plastics.	
		Action WR-1.2.3: Create and support "fix-it clinics" at community facilities that can build skills among local businesses and residents in innovation, repair, and reuse.	
		Action WR-1.2.4: Support Extended Producer Responsibility initiatives that drive end of product life management.	
		Action WR-1.2.5: Explore establishment of a tool lending library in unincorporated Alameda County to reduce unnecessary waste associated with purchasing home improvement tools and equipment, increase access to electric tools, hand-powered tools, and home energy assessment tools like plug load meters, and decrease cost-related barriers to home improvements.	
WASTE: **2) Organic Waste Management and Reduction**	**MEASURE WR-2.1: Educate the community and food generating businesses about reducing wasted food by preventing surplus edible food generation, storing food correctly, and donating**	**Action WR-2.1.1:** Implement and enforce the requirements of SB 1383 to divert compostable organic materials from landfills, ensuring that outreach and education materials are provided in appropriate languages and at appropriate literacy levels to meet the unique needs of residents and small businesses.	**YES**
		Action WR-2.1.2: Expand existing organic waste collection routes and drop-off sites to improve composting services for interested residents and businesses.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	surplus edible food before composting what is left. GHG reduction: 15,531 (2030) 18,226 (2040) 20,834 (2045)	**Action WR-2.1.3:** Seek partnerships with schools to develop school composting programs and education.	
		Action WR-2.1.4: Seek partnerships with nonprofits and local community-based organizations to establish new food recovery programs, but also to maintain existing ones, such as the Alameda County Food Recovery Project led by the Alameda County Deputy Sheriffs' Activities League.	
		Action WR-2.1.5: Develop and launch multilingual outreach campaigns intended to educate the community and food generating businesses on reducing food waste, properly storing food, and composting**.**	
AGRICULTURE & VEGETATION **1) Climate-Resilient Agricultural and Working Lands**	**MEASURE AG-1.1:** **Encourage best practices in agricultural and working lands that improve resilience to climate impacts.** GHG reduction: Supportive	**Action AG-1.1.1:** Promote the use of agroforestry in agricultural systems, which may improve soil fertility, water retention, and overall agricultural resilience.	**YES**
		Action AG-1.1.2: Coordinate with California Department of Food and Agriculture, United States Department of Agriculture, and other relevant partners to improve and integrate projected climate impacts into pest detection and management, while minimizing the use of potentially harmful pesticides	
		Action AG-1.1.3: Promote crop diversification to minimize the risk of crop failure and enhance resilience to climate impacts.	
		Action AG-1.1.4: Work with the State and other relevant partners to advocate for the subsidization and/or incentivization of obtaining crop insurance. Advocate for the inclusion of diverse crops in crop insurance offerings (such as culturally relevant crops).	
		Action AG-1.1.5: Work with ranchers to manage grazing to support oak woodland regeneration.	
		Action AG-1.1.6: Promote the use of livestock grazing near development, especially on steep hillsides and vacant lots, to support fire fuel management and provide discounted or free water supplies to ranchers whose livestock are serving this purpose.	
		Action AG-1.1.7: Promote the use of efficient irrigation systems to reduce crop water needs.	
		Action AG-1.1.8: Review County tax policies affecting land and infrastructure improvements for agriculture to avoid taxing landowners at home site improvement rates (e.g., water wells for agriculture that may be on a home site parcel).	
		Action AG-1.1.9: Promote and expand enrollment and participation in Williamson Act contracts.	
		Action AG-1.1.10: Increase awareness of BAAQMD's Agricultural Equipment assistance programs to help replace mobile, stationary, and portable agricultural equipment, and help unincorporated-area agricultural producers utilize this assistance.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	MEASURE AG-1.2: Increase soil organic matter and soil carbon content in working lands. GHG reduction: Supportive	**Action AG-1.2.1:** Promote the Alameda County Resource Conservation District's (ACRCD's) carbon farming program and technical assistance programs to develop and implement site-specific carbon farm plans and soil-beneficial conservation practices in unincorporated Alameda County.	**YES**
		Action AG-1.2.2: Assess and work to eliminate barriers to permitting carbon farm plans and allow for streamlining of permits related to carbon farm practices.	
		Action AG-1.2.3: In partnership with ACRCD, develop a healthy soil strategy for the county to support agriculture, address carbon sequestration, and increase water capture, building on the work of ACRCD's Healthy Soils Demonstration project.	
		Action AG-1.2.4: Promote the use of cover crops, hedgerows, mulch, and windbreaks and support farmers' and ranchers' pursuits of State and federal funding, in part through ACRCD's technical assistance.	
		Action AG-1.2.5: Work with ranchers, ACRCD, StopWaste, and other agency partners to increase compost application on rangelands.	
		Action AG-1.2.6: Work with horse-keepers, ACRCD, StopWaste, and other agency partners to improve on-farm composting and commercial composting acceptance of manure.	
		Action AG-1.2.7: Support partner-led (e.g., ACRCD, University of California Agriculture and Natural Resources, StopWaste, US Department of Agriculture's Natural Resources Conservation Science) educational and workshop events tailored to both the public and farmers and ranchers on topics of soil-beneficial practices and management techniques.	
		Action AG-1.2.8: Explore creation of ecosystem services payments for agricultural land management practices that promote carbon storage in soils and aboveground woody biomass.	
		Action AG-1.2.9: Undertake a study to evaluate threats to carbon sequestration and carbon storage on agricultural and working lands (e.g., incorporation, development, agricultural practices, erosion, etc.).	
AGRICULTURE & VEGETATION **2) Nature-Based Solutions**	**MEASURE AG-2.1: Increase and improve urban tree canopy and green space consistent with the goals of the County's Environmental Justice Element.** GHG reduction: 458 (2030) 1,222 (2040) 1,604 (2045)	**Action AG-2.1.1:** Partner with local park districts to ensure sustainable park maintenance and to make parks more accessible, safe, and comfortable for all. This can include providing more benches and shade in local parks, revitalizing and investing in parks that serve vulnerable communities, increasing the number of local parks throughout the unincorporated county, and improving transition points between parks and communities.	**YES**
		Action AG-2.1.2: Compile and manage a street tree inventory to help in effectively managing and maintaining urban trees, monitoring the health and condition of urban trees, guiding evidence-based decision making (e.g., tree species selection,	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		planting strategies, maintenance priorities), and raising public awareness of the value of urban and native trees.	
		Action AG-2.1.3: Develop a residential tree planting, care, and replacement program that assists single-family homeowners and provides free trees and maintenance services to low-income residents.	
		Action AG-2.1.4: Pursue funding to evaluate and expand the Alameda County Tree Program.	
		Action AG-2.1.5: Develop an Urban Greening Master Plan.	
		Action AG-2.1.6: Explore strategies to increase tree protections on private property that consider both the benefits of a healthy urban tree canopy and concerns about preserving private property rights. Strategies may include private property tree protection ordinances, Heritage, Protected, or Native tree designations, or tree stewardship incentives.	
	MEASURE AG-2.2: Utilize nature-based solutions to reduce the impacts of climate hazards and improve community resilience. GHG reduction: Supportive	**Action AG-2.2.1:** Continue to implement and expand stormwater management best practices pursuant to Chapter 17.64 of the Alameda County Ordinance Code (Water Efficient Landscape Ordinance) by using natural infrastructure to recharge groundwater, improve water quality, and minimize runoff. This can include rain gardens, infiltration beds, bioswales and basins, and constructed wetlands and retention ponds.	
		Action AG-2.2.2: Scale and incentivize the use of innovative natural infrastructure features, such as green roofs and walls, permeable pavements, vegetated corridors, and multi-functional open spaces, where appropriate.	**YES**
		Action AG-2.2.3: Use tools, such as CalEnviroScreen, to determine priority pollution-burdened communities across the unincorporated county that may benefit most from vegetative barriers and plant hazard-resistant barriers in these areas, aligning with the objectives of the Environmental Justice Element and the proposed Air Pollution Exposure Zone Ordinance.	
HEALTH & RESILIENCY **1) Resilient Communities, Equity, and EJ**	**MEASURE HR-1.1: Support the creation of resilience hubs and other place-based resilience resources to provide community members with essential services and community capacity building opportunities before, during, and after climate-related hazard events.** GHG reduction: Supportive	**Action HR-1.1.1:** Pursue funding to establish resilience hubs in frontline communities. Resilience hubs should be community-accessible centers that serve to deliver disaster preparedness messaging, facilitate stronger community ties and ongoing community capacity building, provide an accessible point of distribution for basic needs (such as food, masks, and emergency supplies), and to play a critical role in post-disruption recovery and ongoing communications needs.	**YES**
		Action HR-1.1.2: Partner with AC Transit, BART, and other public and private transportation providers to plan to transport community members most at risk to inclement weather centers and resilience hubs during hazard events.	
		Action HR-1.1.3: Develop a broad, accessible, and multilingual communication strategy for hazard events.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	MEASURE HR-1.2: Embed climate resiliency and adaptation across planning efforts. GHG reduction: Supportive	**Action HR-1.2.1:** Integrate climate resilience throughout long-term planning and current development projects.	**N/A**
		Action HR-1.2.2: Work with surrounding jurisdictions to accelerate, expand, and build new climate adaptation collaborative efforts across communities, governments, community and faith-based organizations, and businesses, such as the partnerships and efforts produced by the Bay Area Climate Adaptation Network (BayCAN) and the Coastal Hazards Adaptation Resiliency Group (CHARG).	
	MEASURE HR-1.3: Ensure essential services are available for community members most at risk. GHG reduction: Supportive	**Action HR-1.3.1:** Improve broadband connectivity through focused efforts resulting from a comprehensive Broadband Needs Assessment and through the promotion of existing programs, such as the Federal Communications Commission's Affordable Connectivity Program.	**N/A**
		Action HR-1.3.2: Promote the services of nearby health, wellness, and social service providers that serve frontline communities and support the expansion of such facilities and services throughout the unincorporated county.	
		Action HR-1.3.3: Pursue grant funding and partnerships to provide water refill stations at community gathering spots (e.g., schools, parks) throughout the unincorporated county.	
		Action HR-1.3.4: During extreme weather and climate hazard events, ensure support services for people experiencing homelessness.	
	MEASURE HR-1.4: Support local food production and improve food security. GHG reduction: Supportive	**Action HR-1.4.1:** Promote the Microenterprise Home Kitchen Operation (MEHKO) program and ensure that there are educational materials available in multiple languages.	**N/A**
		Action HR-1.4.2: Encourage the development of, and facilitate access to, healthy food retail outlets throughout the unincorporated county, such as grocery stores, healthy corner stores, and farmers' markets.	
		Action HR-1.4.3: Establish new partnerships to increase healthy food access for youth. These partnerships may optimize school-based emergency food distribution, expand youth agricultural opportunities at local schools, and enhance school garden curricula.	
		Action HR-1.4.4: Promote, incentivize, and remove barriers to urban agriculture across the unincorporated county. This may include establishing partnerships to identify and active urban agriculture sites, reviewing existing ordinances and regulations to explore removing barriers, and encouraging the inclusion of food-growing spaces in new or remodeled multifamily residential sites.	
		Action HR-1.4.5: Promote food as medicine pathways to direct locally produced and sourced food to community health centers and clinics.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action HR-1.4.6: Map local food recovery organizations currently addressing food insecurity and mobilize a network of food providers to strengthen coordination and shared resources between these organizations.	
	MEASURE HR-1.5: Prioritize measures and investments that protect frontline community residents and small businesses from displacement. GHG reduction: Supportive	**Action HR-1.5.1:** Establish a Displacement Avoidance Task Force comprising local government staff, community leaders, and others to develop policies for preventing the displacement of frontline community residents and small businesses as a result of climate impacts or as an unintended consequence of policies meant to address climate change.	
		Action HR-1.5.2: Develop and implement assistance programs to provide financial and technical support to frontline community residents and small businesses, helping them to adapt to climate change and transition to more climate-friendly practices without being displaced.	
HEALTH & RESILIENCY **2) Emergency Preparedness and Disaster Response**	**MEASURE HR-2.1: Ensure that emergency and critical service providers have adequate capacity to address increased demand due to potential impacts of climate hazards.** GHG reduction: Supportive	**Action HR-2.1.1:** Consult with other local jurisdictions, water providers, and fire departments to ensure the adequacy of emergency water flow, emergency vehicle access, and evacuation routes prior to approving any new development.	**N/A**
		Action HR-2.1.2: Maintain up-to-date emergency preparedness and evacuation plans and procedures in coordination with appropriate State, regional, and local agencies and departments.	
		Action HR-2.1.3: Revise and coordinate cross-jurisdictional emergency management plans, programs, and activities to account for changing hazard profiles and their associated impacts.	
		Action HR-2.1.4: Promote the Community Emergency Response Team (CERT) training program through the Alameda County Fire Department to improve disaster preparedness and disaster response skills among residents.	
		Action HR-2.1.5: Develop disaster documentation program to include tracking disasters affecting the unincorporated county via photos of damage incurred during and after disaster events. This data can be used for tracking and trending, and ultimately mitigation planning.	
		Action HR-2.1.6: Host regular disaster preparedness trainings at convenient locations, in widely spoken languages, to provide basic training to community members who are unable to commit to the CERT training program.	
		Action HR-2.1.7: Conduct outreach in multiple languages to ensure that all residents are aware of the County's evacuation and emergency notification systems (e.g. AC Alert, Genasys Connect).	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
	MEASURE HR-2.2: Prioritize making emergency services more accessible and equitable, especially for community members most at risk. GHG reduction: Supportive	**Action HR-2.2.1:** Encourage residents to register with the AC Alert emergency notification system for those who have access to mobile communication devices or devices with internet accessibility. Promote the availability of emergency notifications through KCBS radio 740 for those who do not have internet access, or who are at risk of losing internet access in an emergency scenario.	
		Action HR-2.2.2: Partner with local healthcare providers, community-based organizations, and Medical Reserve Corps programs to establish emergency response networks and train volunteers to assist in emergencies.	
		Action HR-2.2.3: Coordinate to deploy "pop-up" mobile emergency units to areas that may be geographically isolated or have limited access to traditional healthcare facilities. In addition to rapid response to medical emergencies, these units can help build capacity and connectedness through health education and raising awareness about emergency services.	**N/A**
		Action HR-2.2.4: Ensure that emergency service providers are prepared to serve the community with disability accessibility and language access capabilities, such as multilingual staff and/or interpretation and translation services.	
		Action HR-2.2.5: Establish an equity officer in the Alameda County Emergency Operations Center to connect disaggregated data and equity metrics, consider diverse community needs, and engage trusted messengers in outreach efforts.	
HEALTH & RESILIENCY **3) Hazard-Specific Resilience**	**MEASURE HR-3.1: Build resilience to flooding across the county, along with sea level rise in San Lorenzo.** GHG reduction: Supportive	**Action HR-3.1.1:** Work with Alameda County Flood Control & Water Conservation District and other partner agencies and jurisdictions to conduct community engagement and feasibility studies and implement further flood control improvement projects, including those related to creek restoration, sea level rise in San Lorenzo, regional detention facilities, and dredging existing facilities for increased capacity.	
		Action HR-3.1.2: Continue to improve the County's rating under the National Flood Insurance Program so that flood insurance premiums for residents in flood-prone areas may be reduced.	**N/A**
		Action HR-3.1.3: Where it is not already required, encourage property owners to purchase flood insurance to reduce the financial risk from flooding.	
		Action HR-3.1.4: Dedicate adequate resources to ensure effective and timely monitoring and maintenance of public drainage facilities, including storm drains, to maintain adequate capacity for peak flows in the area.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action HR-3.1.5: Ensure that any sea level- or flood-related barriers do not result in the diversion of flood waters or otherwise increase flooding potential near development and critical facilities.	
		Action HR-3.1.6: Incorporate future sea level rise, permanent and temporary inundation, and precipitation projections into long-term infrastructure planning processes, influencing decisions on expansion, relocation, elevation, or retrofitting of assets.	
		Action HR-3.1.7: Collaborate with neighboring jurisdictions, partner agencies, and organizations throughout the San Francisco Bay Area to encourage and expedite projects and initiatives aimed at addressing sea level rise (e.g., shoreline protection and restoration).	
	MEASURE HR-3.2: Build resilience to wildfires across the unincorporated county. GHG reduction: Supportive	**Action HR-3.2.1:** Develop a structure ignition zone assessment program (and grant funding, if feasible) that connects homeowners and businesses to mitigation specialists to develop a comprehensive report with recommended mitigation actions to increase building resilience to wildfire.	**YES**
		Action HR-3.2.2: Partner with landowners, State agencies, and others to implement vegetative fuels reduction projects that are beyond defensible space requirements, but within two miles of homes and other structures, such as pruning, utility management, removal of understory, and biomass removal. Consider developing incentives to encourage brush removal around structures in fire-prone areas.	
		Action HR-3.2.3: Require private property owners to maintain the vegetation on their property in a condition that will not contribute to the spread of wildfire. Requirements may include, but are not limited to, removing all portions of trees within 10 feet of chimneys and stovepipe outlets, maintaining a 30-foot defensible space around all buildings and structures, and removing materials that may act as a fuel or conveyance of fire.	
		Action HR-3.2.4: Consider establishing and funding an enforcement district for residents within WUI areas and establish an inspection period to be conducted annually to ensure compliance with vegetation management standards.	
		Action HR-3.2.5: Promote programs from Diablo Firesafe Council and other partner organizations to further support wildfire preparedness and the implementation of wildfire risk reduction measures throughout the unincorporated county.	
		Action HR-3.2.6: Utilize goat grazing as a cost-effective and environmentally friendly alternative to controlled burns that reduce wildfire risk, where feasible.	
		Action HR-3.2.7: Promote and expand free or low-cost fire fuel reduction programs such as ACFD's Chipper Program.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action HR-3.2.8: Research actions available to the County to support reduction of fire insurance rates for property owners in fire-prone areas.	
	MEASURE HR-3.3: Build resilience to extreme heat across the county. GHG reduction: Supportive	**Action HR-3.3.1:** Seek funding to expand upon the work piloted by "Cooling Our Communities" to provide multilingual heat preparedness materials and resources to all areas of the unincorporated county.	**YES**
		Action HR-3.3.2: Update, revise, and promote the guidance of and ensure that residents have access to the "Pocket Guide to Emergency Preparedness & Heat Events" developed by the Alameda County Health Care Services Agency and Community Development Agency through the "Cooling Our Communities" heat preparedness program. This will include ensuring language and ADA accessibility, making physical and digital copies readily available, and partnering with communities to disseminate.	
		Action HR-3.3.3: Partner with community-based organizations, faith-based organizations, businesses, and other public agencies to develop a "Community Cool Zone Network" comprised of air-conditioned spaces that are made available and accessible to community members most at risk during extreme heat events..	
		Action HR-3.3.4: Develop a "Cool Buddy" program where local volunteers are trained to build neighborhood networks, identify heat-vulnerable neighbors, and set up systems to check in on each other during extreme heat events.	
		Action HR-3.3.5: Encourage the installation or use of cool roof technologies, green roofs, and rooftop gardens in new and existing private and public development.	
		Action HR-3.3.6: Reduce heat gain from surface parking lots in new development for a minimum of 50 percent of the site's hardscape. Develop standards to provide shade from the existing tree canopy or from appropriately selected new trees that complement site characteristics and maximize drought tolerance. Where feasible, use open-grid pavement systems (at least 50 percent pervious).	
		Action HR-3.3.7: Increase resilience of existing cooling centers by increasing guidance, providing low-tech information sources, and seeking funding for additional resources, such as backup power capabilities.	
HEALTH & RESILIENCY **4) High-Road, Green Workforce and Business Development**	**MEASURE HR-4.1: Improve the quality and availability of green jobs, ensuring jobs have fair labor practices, living wages, benefits, and worker protection.** GHG reduction: Supportive	**Action HR-4.1.1:** Partner with the Alameda County Workforce Development Board, labor organizations, local community-based organizations, and community colleges to promote and connect local residents to high quality and family-sustaining local job opportunities.	**N/A**
		Action HR-4.1.2: Promote BayREN programs to support contractor training and resident education in the unincorporated areas on electric appliances and systems and their installation, operation, and maintenance.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action HR-4.1.3: Develop a robust scoring and reporting system (e.g., health and wellness scorecard) to evaluate employer practices at workplaces in the unincorporated areas of the county. Develop incentives for workplaces to meet defined scorecard standards to improve physical and mental health, wages, job security, advancement opportunities, and meaningful voices in the workplace.	
		Action HR-4.1.4: Work with regional partners to convene a multistakeholder regional board that brings together residents, small businesses, labor organizations, and workers to identify, launch, and evaluate economic investment pilot programs that align small business goals with people-focused and place-based community priorities through shared decision-making power and aligned objectives.	
	MEASURE HR-4.2: Incentivize and promote green business practices, such as work-from-home policies. GHG reduction: Supportive	**Action HR-4.2.1:** Promote business creation, retention, and entrepreneurship by providing technical assistance and financial incentives to local businesses.	**N/A**
		Action HR-4.2.2: Continue to promote and encourage participation in the Alameda County Green Business Program through the California Green Business Network.	
		Action HR-4.2.3: Work with local employers to provide subsidies to employees for using transit or active transportation to commute to work, and encourage flexible work schedules (e.g., 9/80s and 4/10s) as well as telecommuting.	
COMMUNITY ENGAGEMENT & MONITORING **1) Ongoing Equitable Community Engagement**	**MEASURE CE-1.1: Foster ongoing and deep community engagement with frontline communities.** GHG reduction: Supportive	**Action CE-1.1.1:** Develop a community climate action engagement strategy that facilitates and inspires broad community participation in community- and individual-level climate actions. To encourage frontline community participation, engagement should be offered in commonly-spoken languages and should consider providing incentives for participation time, offering childcare, adjusting meeting times to accommodate work schedules, and/or combining planning meetings with workshops or trainings related to disaster preparedness or other topics of interest to the community.	**N/A**
	MEASURE CE-1.2: Develop an array of accessible outreach programs with multilingual capacity for widely spoken languages that emphasize preparedness to climate hazards. GHG reduction: Supportive	**Action CE-1.2.1:** Create an online and offline public outreach campaign for climate hazards (e.g., Red Flag warnings, Public Safety Power Shutoff events, Air Quality Index alerts), including information about what the warning is, what areas may be closed, what individuals should do to be prepared, and what activities should be avoided.	**N/A**
		Action CE-1.2.2: Review and revise (as needed) the County's wildfire smoke and air quality communications protocols to ensure that related messaging is coordinated with other jurisdictions and can be disseminated to all populations, including those that may be difficult to reach.	

STRATEGY	MEASURE w/ ANTICIPATED GHG REDUCTION (MT of CO_2e)	ASSOCIATED ACTIONS	Discussed ?
		Action CE-1.2.3: Promote the array of extreme heat-related resources already produced or hosted by the County to bolster extreme heat preparedness and prevent heat-related illnesses through targeted outreach and awareness campaigns.	
		Action CE-1.2.4: Develop neighborhood readiness plans and promote flood/sea level rise/storm preparedness education.	
		Action CE-1.2.5: As a minimum standard, ensure that any outreach efforts that are developed are accessible, easy to understand, and available in multiple languages.	
		Action CE-1.2.6: Connect unincorporated area residents to air quality messaging by amplifying Spare the Air Alerts and other air quality communications released by BAAQMD.	
	MEASURE CE-1.3: Prioritize community-based solutions to improve climate resilience. GHG reduction: Supportive	**Action CE-1.3.1:** Form community-based committees consisting of local stakeholders, residents, and experts to actively engage in climate resilience and response planning and decision-making processes and provide micro-grants to support community-led planning and projects.	**N/A**
		Action CE-1.3.2: Establish partnerships with local businesses, institutions, and community-based organizations to leverage resources, expertise, and community networks for implementing climate resilience initiatives effectively.	
COMMUNITY ENGAGEMENT & MONITORING **2) Climate Action Monitoring**	**MEASURE CE-2.1: Monitor implementation of CCAP actions to reduce GHG emissions and enhance adaptation and resilience in unincorporated Alameda County.** GHG reduction: Supportive	**Action CE-2.1.1:** Conduct updates of the unincorporated county GHG emissions inventory every five years to monitor the progress of GHG-reducing actions.	**N/A**
		Action CE-2.1.2: Provide annual monitoring reports to the Alameda County Board of Supervisors on the implementation of CCAP actions.	
		Action CE-2.1.3: Conduct comprehensive updates of the CCAP every eight years, aligning with updates to the County's Housing Element and Safety Element.	
		Action CE-2.1.4: Proactively seek additional cost-effective implementation and strategic funding opportunities.	

B. 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.

☐Aesthetics	☐Agriculture/Forestry Resources	☐Air Quality
☐Biological Resources	☐Cultural Resources	☐Energy
☐Geology/Soils	☐Greenhouse Gas Emissions	☐Hazards and 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

C. DETERMINATION

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.

Lead Agency Representative Signature: DocuSigned by: Elizabeth McElligott 20707C604634426... Date: 4/29/2024

Lead Agency Representative Name and Title: Elizabeth McElligott, Assistant Planning Director

D. ENVIRONMENTAL CHECKLIST

1. AESTHETICS Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			x	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			x	
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			x	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			x	

Environmental Setting

Unincorporated Alameda has a combination of urban, suburban and rural areas encompassing a wide range of topography, vegetation, built structures and other visual elements that contribute to many different visual environments. There are many different officially designated state scenic highways in the County, including Interstate 580 north of San Leandro (outside the Plan areas), Interstate 680 between the Contra Costa County line and Mission Boulevard in Fremont, State Route 84 between Interstates 680 and Mission Boulevard. A very short, 0.4-mile long segment of Interstate 580 immediately west of the San Joaquin County line is also designated as a state scenic route, and the remainder of I-580 through the County to San Leandro is designated as eligible but not as an official route.[1] There are many scenic and historic resources, as well as stands of trees and other geographical features along these scenic routes; prominent rock outcroppings are not a common feature, but may be an element in some individual locations. The County has also adopted a Scenic Route Element as part of its General Plan that designates many roadways and highways as scenic routes for local purposes.[2] The visual character and quality of most rural areas of the County, separate from state and county designations of scenic routes, is considered sensitive to development.

The state scenic highway designations are for routes that have been recognized by the State of California after having been nominated by Alameda County, and where the County has adopted a Corridor

[1] California State Department of Transportation: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

[2] County of Alameda *Scenic Route Element of the General Plan*, May, 1966.

Protection Program. To serve the state Program, the County *Scenic Route Element* contains policies to avoid excessive discretionary interpretation and establish an effective strategy to maintain the scenic character of the corridor. The formally required elements of the protection program include: 1) Regulation of land use and density of development; 2) Detailed land and site planning; 3) Control of outdoor advertising; 4) Careful attention to and control of earthmoving and landscaping; and 5) The design and appearance of structures and equipment.[3] The intended benefits of the program include the prevention of incompatible land uses such as junkyards, dumps and gravel pits, ensuring appropriate siting, landscaping or screening of unsightly activities where necessary, prohibiting billboards and regulating business signs to be compatible with scenic views, regulating grading and development on steep slopes and along ridgelines, and otherwise promoting harmonious development.[4]

There is a substantial complement of rural buildings and development in the Plan areas that affects, and in various degrees either enhances or degrades, existing scenic vistas, visual character and qualities, both within, along and outside its scenic routes and corridors. The urban and suburban areas have a wide variety of residential and commercial districts, and a small number of industrial districts ranging from light to heavy industry. In many cases, these various districts are in close juxtaposition to one another, or blended together.

Light and Glare. Light and glare conditions within urbanized portions of the unincorporated County are typical of those associated with urban and suburban uses. The main sources of daytime glare are from sunlight reflecting from structures with reflective surfaces such as windows, and from vehicles on major roadways. Nighttime lighting is prevalent throughout the unincorporated County's developed areas along roadways, parking lots, building perimeters and within residential 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. The cities surrounding the Plan areas contribute greatly to nighttime light pollution (i.e., glare that causes discomfort for viewers, obscures high-contrast scenes and makes fainter stars less visible), while some of the sparsely developed rural parts of the Plan areas provide good nighttime star clarity. However, existing rural development with yard and operational lights, nighttime arena uses, and street and road lights in some locations (major highways and intersections, in particular) can also adversely compromise these qualities.

Discussion of Impacts

For the purpose of this analysis, a "substantial adverse effect on a scenic vista" would result if it can be reasonably seen that construction of transit-friendly residential development and mixed-use residential/commercial development encouraged under the CCAP would conflict with the Development Standards set forth in the Scenic Route Element, such as the substantial blocking of an "outstanding distant view", visual dominance over such a view, or placement of a strongly negative visual element (e.g., junk yard, utility substation or massing of utility poles and wires) within such a view.

Development that would result in placement of new development in contravention of the policies of the county General Plan may also be considered to have potentially significant adverse effects on scenic vistas,

[3] op. cit., http://www.dot.ca.gov/hq/LandArch/scenic/faq.htm

[4] Ibid., http://www.dot.ca.gov/hq/LandArch/scenic/can_do.htm

and/or the visual character or quality of sites and their surroundings. Similarly, development related to the CAP that is within 1,000 feet of the designated state scenic highway rights-of-way in the County would be considered to have a potentially significant adverse impact on scenic resources within a state scenic highway corridor. New and additional project-related development that substantially decreases night sky clarity by light pollution and thereby adversely affects nighttime views would be considered potentially significant as well. This assessment is meant only to be on a general basis and not specific to any particular site.

The implementation of the CCAP would result in short-term and long-term changes to the physical environment. Long-term changes could include upgrades to existing energy transmission systems (**Action BE-2.2.4**) and improvements at or near grade-level of existing roadways, such as improvements to paved areas, traffic intersections, and walkways (through implementation of **Action LU-1.1.1** , **Action LU-1.1.2**, **Action LU-1.1.4**, and **Action IN-6.3.3**) For example, **Action LU-1.1** could result in new and upgraded bikeways and walkways along existing developed roadways and rights-of-way in the unincorporated County, and **Action IN-6.3.3** could result in use of "cool pavement" as an alternative to traditional asphalt. During the short-term, temporary construction activities associated with the implementation of the CCAP, such as equipment use and staging of materials, would not result in permanent impacts to scenic vistas. 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. Additionally, the increase in planted trees, investment in urban greening and parks, and encouragement of carbon-smart agricultural practices and natural infrastructure (**Action AG-2.1.1**, **Action AG-2.1.3**, **Action AG-2.1.4**, **Action AG-2.1.5**, **Action AG-1.1.1**, **Action AG-1.2.4**, **Action AG-2.2.2**, **Action HR-3.3.6**) would offer visual improvements to the local surrounding area and would not have a substantial adverse effect on a scenic vista, would not substantially damage scenic resources, would not substantially degrade existing visual character or quality, and would not create a new source of substantial light or glare.

None of the residential or commercial development suggested in the CCAP would be located on such a site, or be large enough in dimension, to have a substantial adverse effect on a scenic vista, substantially damage scenic resources, substantially degrade existing visual character or quality, or create a new source of substantial light or glare. All the development would be located solidly in the urbanized areas and would be subject to dimensional requirements of the Zoning Ordinance and the Residential Design Guidelines and Standards (RDGS) (or applicable superseding state law or local ordinance.) Unincorporated countywide, or even across the urbanized west-central portion of Alameda County, this level of development across the area is not a large quantity or proportion of urban development relative to what exists at present, and individually no one unit or commercial space created under these Measures would be out of character generally within the context of the urban areas; and with or without the CCAP, this level of additional development is expected to occur anyway – the CAP policies are simply designed to steer this new development toward specific transit-friendly locations and locations proximate to destinations such as commercial centers and gathering places. For example, **Action IN-1.1.3** and **Action IN-1.1.6** could result in installation of solar canopies on surface parking lots; **Action LU-4.1.2** proposes streamlining the permitting processes and reducing parking requirements for affordable housing as an incentive; **Action LU-4.1.3** encourages transit-oriented development and co-location of social services with affordable housing; **Action LU-4.2.1** proposes incentive zoning for inclusion of shared mobility; **Action LU-5.1.1** proposes modifying zoning in compliance with AB 2097 to remove parking minimums for new developments within a half mile of public transit; and **Action LU-5.1.3** prioritizes implementation of the *Ashland Cherryland Business District Specific Plan Area Parking Demand and Management Strategy Study*; **Action HR-1.1.1** discusses establishing resilience hubs in frontline communities. **Action LU-4.1.1** facilitates

construction of Accessory Dwelling Units (ADUs) by connecting residents to resources and incentives. ADUs approved ministerially are statutorily exempt from CEQA pursuant to Section 15268 (Ministerial Projects) of the CEQA guidelines and Section 21080(b)(1) of the Public Resources Code.

Building energy efficiency improvements, building retrofits, and drought-ready improvements would involve minor changes to exteriors of existing buildings (e.g., rooftop solar panels and other renewable energy-generating technologies: **Action IN-1.1.4**, **Action IN-1.1.5**, **Action BE-1.1.5**, **Action BE-2.1.1**, **Action BE-2.1.2**, **Action BE-2.1.3**, **Action BE-2.1.4**, **Action BE-2.2.1**, and **Action BE-2.2.2;** and drought-ready improvements **Action IN-4.3.2**, **Action IN-4.3.3**, **Action IN-4.3.4**, **Action IN-6.2.3**), and would not otherwise involve features with substantial height, bulk, or massing that could substantially cause an adverse change to a scenic vista. These actions would not have a substantial adverse effect on a scenic vista, would not substantially damage scenic resources, would not substantially degrade existing visual character or quality, and would not create a new source of substantial light or glare.

Actions to reduce fire fuels and increase defensible space around buildings in high fire severity areas (**Action HR-3.2.2**, **Action HR-3.2.3**, **Action HR-3.2.6**, **Action HR-3.2.7**) are designed to halt the progression of wildfire and may result in the protection of wild and scenic areas of the County. These measures may also improve lines-of-site to scenic vistas by reducing the density of plant matter adjacent to buildings and roadways. These actions would not have a substantial adverse effect on a scenic vista, would not substantially damage scenic resources, would not substantially degrade existing visual character or quality, and would not create a new source of substantial light or glare.

For all of the foregoing reasons, implementation of the CCAP would not have a substantial adverse effect on a scenic vista, would not substantially damage scenic resources, would not substantially degrade existing visual character or quality, and would not create a new source of substantial light or glare.

No significant adverse impacts to scenic resources would occur, and **no mitigation is required**.

2. AGRICULTURE AND FORESTRY 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) prepared by the California Dept. 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:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 nonagricultural use?				x
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
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))?				x
d) Result in the loss of forest land or conversion of forest land to non-forest use?				x
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?				x

Environmental Setting

All of the rural, grazing, farming, viticulture, and other specialty agricultural areas including horse boarding, breeding and training facilities, are in the "A" (Agriculture) zone district. The A district requires a minimum parcel size of 100 acres; the more remote areas of the county, where large parcels are predominant or otherwise more suitable, have combining or overlay "B-E" districts requiring either 160- or 320-acre minimum parcel sizes. Virtually all of these lands are located within the East County Area Plan, which is outside the Urban Growth Boundary established by the voter-approved initiative Measure D in November 2000.

Discussion of Impacts

None of the Measures recommended in the CCAP would result in conversion of farmland to non-agricultural use or conflict with existing agricultural zoning or Williamson Act uses, and none of the measures that could affect the density and location of development or the availability of parking would affect lands outside the urban growth boundary. Implementation of the CCAP does not involve other changes in the existing environment, which, due to their location and nature, could result in conversion of Farmland to non-agricultural use.

No land zoned as forest land or timberland is located within the Plan area; accordingly, the CCAP would not conflict with existing zoning, or cause rezoning, of forest land or timberland, and implementation of the CCAP would not cause the loss or conversion of forest land to non-forest use.

No significant adverse impacts to agriculture or forest resources would occur, and **no mitigation is required**.

3. AIR QUALITY Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			x	
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?				x
c) Expose sensitive receptors to substantial pollutant concentrations?				x
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			x	

Environmental Setting

The climate of unincorporated Alameda County is characterized by warm, dry summers and cool, moist winters. The proximity of San Francisco Bay and the Pacific Ocean has a moderating influence, particularly in the urbanized western parts of the unincorporated county. While the rural and agricultural areas of eastern Alameda County experience both hotter summers and cold winters than communities closer to the Bay, the climate of eastern Alameda County is also considered temperate.

The major large-scale weather feature controlling the area's climate is a large high-pressure system located in the eastern Pacific Ocean, known as the Pacific High. The strength and position of the Pacific High varies seasonally. It is strongest during summer and located off the west coast of the United States. Large-scale atmospheric subsidence associated with the Pacific High produces an elevated temperature inversion along the West Coast. The base of this inversion is usually located from 1,000 to 3,000 feet above mean sea level, depending on the intensity of subsidence and the prevailing weather condition. Vertical mixing is often limited to the base of the inversion, trapping air pollutants in the lower atmosphere. Marine air trapped below the base of the inversion is often condensed into fog or stratus clouds by the cool Pacific Ocean. This condition is typical of the warmer months of the year from roughly May through October. Stratus clouds usually form offshore and move into the Bay Area during the evening hours. As the land warms the following morning, the clouds often dissipate, except along the immediate coast. The stratus then redevelops and moves inland late in the day along with an increase in winds. Otherwise, clear skies and dry conditions prevail during summer.

As winter approaches, the Pacific High becomes weaker and shifts south, allowing weather systems associated with the polar jet stream to affect the region. Low pressure systems produce periods of cloudiness, strong shifting winds, and precipitation. The number of days with precipitation can vary greatly from year to year, resulting in a wide range of annual precipitation totals. On average, Alameda County (including the incorporated cities), has historically received about 18 inches of precipitation annually. About 90 percent of rainfall occurs from November through April. High-pressure systems are also common

in winter, and can produce cool, stagnant conditions. Radiation fog and haze are common during extended winter periods where high-pressure systems influence the weather.

The proximity of the eastern Pacific High and relatively lower pressure inland produces a prevailing westerly sea breeze along the central and northern California coast for most of the year. As this wind is channeled through the Golden Gate and other topographical gaps, it branches off to the northeast and southeast, following the general orientation of the San Francisco Bay system. Marine air penetrates from the Bay; however, it is moderated by bayside conditions as it reaches the western urbanized parts of unincorporated Alameda County, and further moderated in rural eastern unincorporated Alameda County by the range of hills separating that area from the Bay. The prevailing wind is primarily from the northwest, especially during spring and summer. In winter, winds become variable with more of a southeasterly orientation. Nocturnal winds and land breezes during the colder months of the year prevail with variable drainage out of the mountainous areas. Wind speeds are highest during the spring and early summer, and lightest in fall. Winter storms bring relatively short episodes of strong southerly winds.

During the fall and winter months, the Pacific High can combine with high pressure over the interior regions of the western United States (known as the Great Basin High) to produce extended periods of light winds and low-level temperature inversions. Fair weather and very warm temperatures are common to the Bay Area with this weather pattern. This condition frequently produces poor atmospheric mixing which results in degraded regional air quality. Ozone standards traditionally are exceeded when this condition occurs during the warmer months of the year.

Regulatory Setting

The Plan area of unincorporated Alameda County is located within the nine county San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) monitors air quality in the basin through a regional network of air pollution monitoring stations to determine if the national and State standards for criteria air pollutants and emission limits of toxic air contaminants are being achieved.

The Federal and California Clean Air Acts have established ambient air quality standards for different pollutants. The national ambient air quality standards (NAAQS) were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants. These criteria pollutants now include carbon monoxide (CO), ozone (O3), nitrogen dioxide (NO2), particulate matter with a diameter less than 10 microns (PM10), sulfur dioxide (SO2), and lead (Pb). In 1997, EPA added fine particulate matter or PM2.5 as a criteria pollutant. The air pollutants that standards have been established for are considered the most prevalent air pollutants that are known to be hazardous to human health.

Federal Regulations

At the federal level, the United States Environmental Protection Agency (U.S. EPA) administers and enforces air quality regulations. Federal air quality regulations were developed primarily from implementation of the Federal Clean Air Act. If an area does not meet NAAQS over a set period (three years), EPA designates it as a "nonattainment" area for that particular pollutant. EPA requires states that have areas that do not comply with the national standards to prepare and submit air quality plans showing how the standards would be met. If the states cannot show how the standards would be met, then they must show progress toward meeting the standards. These plans are referred to as the State

Implementation Plan (SIP). Under severe cases, EPA may impose a federal plan to make progress in meeting the federal standards.

EPA also has programs for identifying and regulating hazardous air pollutants. The Clean Air Act requires EPA to set standards for these pollutants and sharply reduce emissions of controlled chemicals. Industries were classified as major sources if they emitted certain amounts of hazardous air pollutants.

The San Francisco Bay Area Air Basin is subject to air quality planning programs required by the federal Clean Air Act (CAA) (1977, last amended in 1990, 42 United States Code [USC] 7401 et seq.) to address ozone air pollution. The CAA requires that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards within the deadlines specified in the Clean Air Act.

State Regulations

The California Clean Air Act of 1988, amended in 1992, outlines a program for areas in the State to attain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The California Air Resources Board (CARB) is the state air pollution control agency and is a part of the California Environmental Protection Agency. The California Clean Air Act set more stringent air quality standards for all of the pollutants covered under national standards, and additionally regulates levels of vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. If an area does not meet CAAQS, CARB designates the area as a nonattainment area. The San Francisco Bay Area Air Basin currently does not meet the CAAQS for ozone, PM10 and PM2.5. CARB requires regions that do not meet CAAQS for ozone to submit Clean Air Plans that describe measures to attain the standard or show progress toward attainment. Alameda County is subject to the Bay Area Clean Air Plan, first adopted in 1991 by the Bay Area Air Quality Management District (BAAQMD, discussed below), and updated periodically.

CARB regulates the amount of air pollutants that can be emitted by new motor vehicles sold in California. Since they were first imposed in 1961, motor vehicle emissions standards in California have always been more stringent than federal standards. CARB has also developed Inspection and Maintenance (I/M) and "Smog Check" programs with the California Bureau of Automotive Repair. Inspection programs for trucks and buses have also been implemented. CARB also has authority to set standards for fuel sold in California.

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for assuring that the National and State ambient air quality standards are attained and maintained in the Bay Area. BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities. BAAQMD has jurisdiction over much of the nine-county Bay Area counties. BAAQMD's 2017 Bay Area Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Discussion of Impacts

The CCAP by itself is neutral on development, having instead the goals to 1) reduce communitywide GHG emissions consistent with State targets (and, in so doing, reduce other concomitant pollutant emissions); and 2) increase community resilience to climate change impacts. The CCAP does not encourage nor discourage development on its own; instead, *it encourages the County to focus development that is already anticipated in the County general plan documents* to areas and to styles that can be optimized for climate mitigation and adaptation. In other words, taken out of context, these measures ostensibly have potential for impact; however, when matched to existing policies in the County general plan and when accompanied by the other measures included in the CCAP, the potential for new impacts become greatly reduced and possibly not significant.

Due to the extensive number of policies in the CCAP that are consistent with the 2017 Clean Air Plan, the assessment of potential conflict between the 2017 Clean Air Plan and the CCAP depends on whether or not the proposed implementation of the policies of the CCAP in support of the County general plan would result in more or fewer vehicle miles traveled or vehicle trip increases associated with anticipated expansion of residential and commercial uses as prescribed in the County general plan and the CCAP. As discussed in this Initial Study under the heading of *Transportation* (Section 17), projected vehicle trip increases associated with the CCAP are limited and are associated with development accommodated by the already-approved General Plan documents, and is reasonably assumed to be slightly lower than the increase in trips associated with the baseline from the General Plan. In this way, the policies of the CCAP overall are in conformance with the 2017 BAAQMD Clean Air Plan.

Air pollutant emissions resulting from construction activities associated with the implementation of the CCAP would likely be relatively small in scale, occur intermittently and last for only short periods of time and would therefore not exceed BAAQMD thresholds. Similarly, operational air pollutant emissions from CCAP 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 BAAQMD thresholds. Overall, the operational air quality benefits resulting from implementation of the CCAP, including reductions in gasoline fuel consumption due to increased use of zero emission vehicles and measures to 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 CCAP would not result in exceedances of the applicable local emissions thresholds and would therefore be consistent with the 2017 Bay Area Clean Air Plan.

For the purposes of this analysis, the CCAP would not 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 BAAQMD thresholds. The CCAP 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 CCAP have the potential to directly or indirectly emit air pollutants. Emissions of PM10, PM2.5, NOx, SOX, CO, and VOCs would result from the use of construction equipment, construction worker vehicle trips, and truck hauling trips. Emissions of fugitive dust (PM10 and PM2.5) are largely associated with ground-disturbing activities, such as site preparation. GHG reduction measures that would result in the construction of new EV charging stations, roundabouts, bicycle infrastructure, new rooftop and canopy-cover solar panels, and tree planting, 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 AG-2.1 supports programs that would result in planting and protection of trees. 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 WR-2.1**, which would increase the recovery of edible food waste and eliminate the disposal of organic waste in landfills, 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 CCAP would not involve short- or long-term physical changes that could result in criteria air pollutant emissions. Therefore, implementation of the CCAP would not be expected to result in construction-phase or operational air pollutant emissions in exceedance of BAAQMD thresholds and would minimize the potential for exposing receptors to unhealthy concentrations of criteria air pollutants.

Measure WR-1.1, **Measure WR-1.2**, and **Measure WR-2.1**, which increase recycling, reduce solid waste generation, and increase home and municipal composting, could generate odors through the anaerobic decomposition of composted waste that the County 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 these measures 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 Odor Impact Minimization Plans (OIMPs) in place to prevent odors from occurring and to identify the measures that should be taken if odors do occur. The hauling of increase 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 CCAP would result in temporary generation of odorous emissions. The specific locations and emissions of possible future projects implemented under the CCAP 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 WR-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 CCAP would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Implementation of the CCAP would not significantly conflict with or obstruct implementation of the applicable air quality plan, would not 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, would not expose sensitive receptors to substantial pollutant concentrations, and would not result in other emissions adversely affecting a substantial number of people.

No significant adverse impacts to air quality would occur, and **no mitigation is required**.

4. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 U.S. Fish and Wildlife Service?			x	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			x	
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?			x	
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?				x
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				x
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?				x

Environmental Setting

Eden Area, Castro Valley, and Fairview:

The Eden Area General Plan does not include discussion of biological resources in the project area. Further, there is no critical habitat for threatened or endangered species in the Eden Area (U.S. Fish and Wildlife Service [USFWS] 2022).

According to the Castro Valley General Plan, Castro Valley has significant biological resources, primarily concentrated in creek corridors, canyons, and hillside open space areas. Many of the hillsides on the eastern side of the community have been designated as open spaces which serve as wildlife corridors. Oak riparian woodland, coastal scrub, and grassland vegetation serve as the primary wildlife movement corridors for common and special-status wildlife species within the Castro Valley area.

The western and central portions of Castro Valley are largely developed. There are small pockets of areas that provide wildlife habitat, primarily along creeks, within these developed areas. Ornamental landscaping with large trees, shrubs and other vegetation may provide potential nesting habitat for raptors known to nest in urbanized areas and other special-status bird species.

Castro Valley has the potential to support the following special status animal species, based on the type of habitat that supports these species that exists in Castro Valley: Steelhead, California tiger salamander, California red-legged frog, Alameda whipsnake, Western pond turtle, California horned lizard, Yellow warbler, Burrowing owl, Sharp-shinned hawk, white-tailed kite, Bats (Myotis spp., Pacific western big-eared bat, and greater western mastiff bat), Lum's micro-blind harvestman, great blue heron, Cooper's hawk, and red-tailed hawk. In addition, the following special-status plant species have the potential to occur in the project area: Santa Cruz tarplant, alkali milk vetch, bigscale balsamroot, fragrant fritillary, Diablo helianthella, and Robust monardella. The only special status animal species that have been observed in the Castro Valley area in the last ten years are yellow warbler and steelhead trout (Alameda County Community Development Agency 2012).

The majority of Fairview is developed or disturbed, although there are several parks, undeveloped areas and open space areas throughout Fairview and surroundings which may provide habitat and connectivity for special-status species. Don Castro Regional Recreational Area is the largest of these parks, providing about 100 acres of open space, and is located in the northern portion of Fairview, just south of I-580. Additionally, Fairview is surrounded by open space areas including the East Bay Hills, located to the west and Green Belt Park to the south.

The Fairview Specific Plan indicates that the California Department of Fish and Wildlife has not identified any sensitive natural communities or critical habitat in Fairview. There is a large area to the east of the Fairview area which is considered critical habitat for the Alameda whipsnake and California red-legged frog. In total, there are 27 special status animal species and 14 plant species that are known to occur or have the potential to occur within a five-mile radius of Fairview. Movement of species in wildlife corridors occurs along San Lorenzo Creek (northern project area), along Ward Creek (southern project area), and along the North, Middle, and South Forks of Sulphur Creek, as well as un-named tributaries and drainageways in Fairview (Alameda County Board of Supervisors 2021).

East County:

According to the 2010 East Alameda County Conservation Strategy (EACCS), eastern Alameda County has significant biological resources. East Alameda County has important statewide examples of oak woodlands and vernal pool complexes. Although species counts and analyses specific to the study area have not been performed, these national and statewide studies strongly suggest that the biological diversity within the study area is high in most plant and animal groups relative to other parts of California and the United States. The highest density of nesting golden eagles in the world has been reported in the Diablo Range. Grasslands are also dominant in east Alameda County, and they connect other ecological communities, such as oak woodlands and vernal pools. Serpentine habitats in the area support serpentine endemic plants (e.g. Cedar Mountain)[5].

[5] Alameda County et al, *East Alameda County Conservation Strategy*, October 2010. https://www.eastalco-conservation.org/documents/eaccs_covertoc_oct2010.pdf.

The EACCS groups natural communities in East County into seven natural communities as defined by land cover type: grassland; chaparral and coastal scrub; oak woodland; conifer woodland; riparian forest scrub; wetlands; and open water. Grassland corridors and areas aquatic-upland and riparian/stream connectivity throughout East County provide critical linkages for wildlife. Special status species supported by East County ecosystems are listed in Appendix A of the EACCS, including federally-listed species such as Vernal Pool Fairy Shrimp, Bay Checkerspot Butterfly, Central Coast Coho Salmon, Delta Smelt, California Red-Legged Frog, Alameda Whipsnake, Bald Eagle, Western Snowy Plover, and San Joaquin Kit Fox.

The 1993 Environmental Impact Report (EIR) and more specifically the *Biological Resources Background Report* in Volume 2 of the *East County Area Plan* (ECAP) provides a thorough, earlier description of the biological resources in each of the main vegetative communities in the East County area, some of which extend into the Castro Valley Canyonlands. The ECAP Background Report generally groups the plant communities into six vegetation associations: grassland, woodland, scrub, cultivated land, alkali sink scrub, and mixed conifers. The woodland association has a few subcategories, including coast live oak forests, mixed evergreen forests, and riparian woodland. Each vegetative community contains specific grasses, flowers, shrubs, trees, and is considered to provide essential habitat features that support certain wildlife, including fishes, amphibians, reptiles, small to larger mammals, and a wide range of bird species. Riparian and seasonal wetlands are also recognized as associated with any one of these six main vegetative community types.[6]

Plant and wildlife species that have special protected status are also identified in the *Background Report* – candidate, sensitive, or special status species identified by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS), as well as by the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California and in the Natural Diversity Data Base maintained by the CDFG. The ECAP *Background Report* indicated that significant portions of the County had not been surveyed in detail for the presence of protected and unprotected plant and wildlife species, but that its extensive inventory of recognized special-status species plants, invertebrates, amphibians, reptiles, mammals and birds were sufficient to establish an Urban Growth Boundary.[7]

Regulatory Setting

Both the ECAP and *Castro Valley General Plan* (CVGP) contain an extensive range of policies to protect open space and wildlife habitat from large-scale development, such as the growth boundary of the ECAP (Policy 1) to Policy 53 that requires the County to preserve "a continuous band of open space consisting of a variety of plant communities and wildlife habitats to provide comprehensive, rather than piecemeal, habitat conservation for all of East County." These Plans contain other important policies that cover a broad range of issues with respect to biological resources and privately-held lands:[8]

The East Alameda County Conservation Strategy (EACCS) was completed in 2011 through a partnership with Alameda County, the three cities in the East County area, the Zone 7 Water Agency, other local agencies and the state and federal resource agencies (California DFG and USFWS). The EACCS is intended as a less formal habitat conservation plan, that serves to identify areas in eastern Alameda County that

[6] Alameda County Planning Department, *Draft Environmental Impact Report, East County Area Plan*, June 1993, pp. 5-7.1-7

[7] Ibid. p. 5-7.7 through 5-7.11

[8] Alameda County Planning Department, *East County Area Plan – A Portion of the Alameda County General Plan*, Volume 1 – Goals, Policies and Programs, May 5, 1994 as amended through May 2002, pp. 18-19, pp. 33-34.

have important habitat conservation values, and to establish guiding biological principles for conducting conservation in these areas. The EACCS enables willing landowners to implement long-term conservation in the form of permanent conservation easements to offset impacts from local land use, transportation, or other infrastructure projects. It also enables local projects to comply with state and federal regulatory requirements within a framework of comprehensive conservation goals and objectives, and to be implemented using consistent and standardized mitigation requirements. The EACCS is not a formal Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP), but still serves similar purposes of enabling a coordinated and biologically sound approach to mitigation of various projects to support conservation and/or recovery of listed species, as well as streamline state and federal permitting, and guide strategies for avoiding and minimizing impacts on wildlife and plant habitat, and mitigating identified project impacts.[9]

In contrast to the rural East County and Castro Valley Canyonlands, the urbanized area of the CVGP and the *Eden Area General Plan* (EAGP), where all of the most intensive measures would be implemented, is virtually 100% urbanized landscape, with few significant habitats or corridors for wildlife and with no supporting lands for any special status species. The few potentially affected areas that could support unusual wildlife are local parks and drainage canals, and these are limited by their proximity to more extensive areas of semi-natural landscapes at the urban edge. A small number of natural or semi-natural waterways remain, including San Lorenzo Creek upstream of Don Castro Regional Park and Crow Creek and Cull Creek just upstream of Crow Canyon Road. The lower San Lorenzo Creek watershed extends from Foothill Boulevard in Hayward to the San Francisco Bay and is highly urbanized. Development in the area includes single-family homes and apartment buildings, as well as a variety of commercial uses. San Lorenzo Creek flows in engineered channels through this entire reach with little or no riparian habitat present[10]. Only landscape trees and wildlife adapted to urban environments, such as squirrels, raccoons and various birds are present in significant numbers.

Discussion of Impacts

The following policy measures of the CCAP, and their associated Actions, would apply primarily to the urbanized area of the County, with little if any application to rural or natural sites:

- **Measure LU-1.1**: *Develop and maintain a safe, connected, and continuous bicycle and pedestrian network.*
- **Measure LU-2.1:** *Continue to partner with transit agencies to improve reliability, affordability, 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-4.1:** *Increase residential and commercial density in urban areas located near transit.*
- **Measure LU-4.2:** *Promote and ensure land uses that support walking and bicycling.*
- **Measure LU-5.1:** *Reduce minimum parking requirements and strategically evaluate the parking needs of the community.*
- **Measure BE-1.1:** *Encourage decarbonization of existing residential and nonresidential buildings (e.g., replace gas infrastructure and appliances with electric alternatives).*

[9] http://www.eastalco-conservation.org/documents/090611-eaccsfaq.pdf

[10] Alameda County Food Control District, *San Lorenzo Creek Watershed,* https://acfloodcontrol.org/the-work-we-do/resources/san-lorenzo-creek-watershed/.

- **Measure BE-2.1:** *Install additional renewable energy-generating technologies (e.g., solar panels) in existing residential and nonresidential buildings.*
- **Measure BE-2.2:** *Install renewable energy-generating technologies (e.g., solar panels) beyond minimum State requirements in new residential and nonresidential development.*
- **Measure BE-4.3**: *Increase the use of low-carbon concrete and other types of sustainable materials in new construction and renovations.*
- **Measure IN-1.1:** *Transition the community to 100 percent clean energy.*
- **Measure IN-2.1**: *Increase electric vehicle (EV) charging infrastructure.*
- **Measure AG-2.1:** *Increase and improve urban tree canopy and green spaces.*
- **Measure AG-2.2:** *Utilize nature-based solutions to reduce the impacts of climate hazards and improve community resilience.*

The above measures, and their associated actions, would primarily impact already-urbanized areas, with virtually no contact with areas of significant biological resources. The above measures, and their associated actions, would have **no significant impact upon biological resources** in Alameda County.

Of the remaining measures, those listed and discussed below imply potential to impact biological resources:

- **Measure BE-4.2:** *Enhance resilience of new residential and nonresidential buildings to climate hazards.*
    - Measure BE-4.2 and its associated actions discuss requiring new buildings in flood-prone and/or fire-prone areas to be designed to be more resilient to those hazards. These actions do not require development in these areas; rather, they seek to ensure that any development that does occur is planned in such a way as to minimize hazard risk.
- **Measure IN-4.3:** *Increase the capture and use of recycled water*; and **Measure IN-6.2:** *Improve resilience of water and wastewater systems*.
    - Action IN-4.3.1 discusses adopting a drought-ready ordinance to require greywater readiness in new construction and major remodels, and Action IN-6.2.3 discusses shifting away from reliance on external water supplies through use of grey water, rainwater harvesting, etc. Action IN-4.3.2, IN-4.3.2, and IN-4.3.3 discuss encouraging installation and use of onsite rainwater harvesting and recycled water systems for landscaping use, consistent with all applicable regulations. These actions do not require any project to install or utilize greywater, rainwater, or recycled water; instead, they are designed to prepare residences and businesses for future droughts and water shortages by increasing their capacity to capture non-municipal water sources.
- **Measure IN-6.3:** *Protect vulnerable transportation infrastructure, services, and systems from climate hazards*.
    - Action IN-6.3.3 discusses piloting a cool pavement program, which would impact existing County roads only and would not result in the construction of any new roads.
- **Measure WR-2.1:** *Continue to educate the community on composting best practices and increase onsite/home composting and use of curbside green organic recycling bins*.
    - Measures WR-2.1.2 discusses expanding existing organic waste collection routes and drop-off sites to improve composting services for interested residents and businesses. As most of the urbanizes areas already receive organic waste service, this action, which will be implemented consistent with Senate Bill 1383, would primarily impact the rural communities covered by the *East County Area Plan* (ECAP). Expanded waste collection

would apply only to locations that are already accessible to waste collection vehicles, and would not result in construction or expansion of existing roadways.

- **Measure AG-1.1:** *Encourage best practices in agricultural and working lands that improve resilience to climate impacts*.
    - AG-1.1.1 promotes use of agroforestry in agricultural systems to improve soil fertility and water retention, while AG-1.1.6 promotes use of livestock grazing near development on steep hillsides that would be otherwise inaccessible to farm equipment. While either of these measures may have potential to impact biological resources in a project-specific setting, the CCAP does not require any landowner to engage in any specific agricultural practices. Rather, it encourages them to consider practices that increase resilience and may have potential to improve biological conditions.
- **Measure AG-1.2:** *Increase soil organic matter and soil carbon content in working lands*.
    - Measure AG-1.2 recognizes that agricultural and working lands in eastern and western portions of the unincorporated county offer substantial opportunities for carbon sequestration and climate resilience. This measure and its actions promote programs with potential to increase climate mitigation and adaptation on private agricultural and working lands through partnerships, technical assistance, and education. Measure AG-1.2 does not require any project to restore land in such a way so as to maximize GHG sequestering potential, nor does it encourage habitat modification projects on areas that already support good quality habitat values. Instead, it is designed to encourage landowners to take advantage of the inherent GHG reduction and climate resilience values in order to reach GHG reduction targets and resilience goals. The presence of the measure may encourage projects to maximize GHG reduction through the planting of native vegetation that would utilize CO2, but under the reasonable assumption that any approved restoration project would provide tangible benefits to important biological habitats with few or no adverse impacts, it follows that this policy would not adversely affect habitat restoration, and would have no significant impact on biological resources.

No significant adverse impacts to biological resources would occur, and **no mitigation is required**.

5. CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?			x	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			x	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			x	

Environmental Setting

The California Environmental Quality Act (CEQA, 1970, as amended, Section 21084.1) identifies historic resources as those listed in or eligible for listing in the California Register of Historic Resources, based on a range of criteria, such as association with events or patterns of events that have made significant contributions to broad patterns of historical development in the United States or California, including local, regional, or specific cultural patterns (California Register Criterion 1). Alternatively, structures which are directly associated with important persons in the history of the state or the country (Criterion 2), which embody the distinctive characteristics of type, period or other aesthetic importance (Criterion 3), or which has the potential to reveal important information about the prehistory or history of the state or the nation (such as archaeological sites) may qualify as a historic resource (Criterion 4). In addition to meeting at least one of the above criteria, structures must typically be over 50 years old (a state guideline rather than a statutory requirement) and have retained sufficient historic integrity to be clearly evident as a historic resource through a combination of location, design, setting, materials, workmanship, feeling and association with historic patterns. The definition of "integrity" in this context is based on criteria established by the National Register of Historic Places, which include, in basic terms, historical patterns and events (Criterion A), association with important persons in the past (Criterion B) and distinctive characteristics unique to a type, period, style, method of construction, the work of a recognizable master builder, or possessing high artistic value (Criterion C).

Alameda County has prepared the following surveys of historical resources in the unincorporated area:

- *Preliminary Cultural Resources Survey, Ashland and Cherryland Districts,* April 30, 1998.
- *Unincorporated San Lorenzo Historical Building Survey*, July 2000.
- *East Alameda County Cultural Resource Survey,* 2005.

The *Preliminary Cultural Resources Survey, Ashland and Cherryland Districts* includes findings of a preliminary "windshield" identification and evaluation of potential historically and architecturally significant resources in the Ashland and Cherryland communities. The survey identified 36 properties that appear eligible for listing in the California Register of Historic Resources. The *Unincorporated San Lorenzo Historical Building Survey* is a preliminary survey to identify properties that may be historically significant in the communities of San Lorenzo and Hayward Acres. This survey identified 13 properties that appear

eligible for listing in the California Register of Historic Resources. Both surveys note that additional research on each property would be necessary to confirm its eligibility for the State Register.

The East County Survey encompasses the unincorporated areas east of the East Bay Hills, and generally conforms to the boundaries of the ECAP. The survey identified 35 properties that appear eligible for listing in the California Register of Historic Resources and should be the subject of a standard historic evaluation protocol if not already completed. Another 148 properties were identified as important enough to warrant additional investigations and preparation of the standard review protocol, established by the State Department of Parks and Recreation (known as a DPR form).[11] Of the 35 "keeper" properties (appropriate for candidacy for the State Register), over 10 were categorized as consisting of combined residential and agricultural properties, and over 40 such properties were among the 145 other sites that appear worthy of further investigation.

In addition to the three surveys described above, in conjunction with the preparation of the Historic Preservation Ordinance, Carey and Company conducted a 2005-2008 comprehensive survey of potential landmarks and contributing buildings which included the Castro Valley area. The survey identified 17 Castro Valley properties as potentially eligible for listing in the California Register of Historic Resources.

In 2012, the County of Alameda adopted a Historic Preservation Ordinance, which established the Alameda County Register of Historic Resources, a voluntary list of historic properties, for which demolition or substantial alteration that alters its historic significance would be a significant adverse environmental impact. In 2014, the Board of Supervisors approved the placement of eleven properties located throughout the unincorporated area on the County Register. Placement of four county-owned properties, three in Castro Valley and one in San Lorenzo, is scheduled to be considered by the Board in May of 2024.

The unincorporated areas of the County contain many areas in which archaeological resources have been documented, which has been summarized in the County's publication, *Archaeology in Alameda County: A Handbook for Planners* (1976). The Handbook includes a map that identifies extreme, high, moderate and low levels of archaeological sensitivity throughout the County based on known sites and professional interpretation of natural features. The map in the *Handbook* identifies several areas in the Castro Valley Canyonlands and throughout the East County as having higher "extreme" and "high" levels of archaeological sensitivity.[12] These areas of the County are known to have been inhabited by Ohlone peoples speaking the Chochenyo language, related to the Costanoan family of languages that extended from the Delta south to the Monterey area. Grazing under the control of Mission San Jose (in the Fremont area) was widespread in the East County by the late 1700s, which continued with a similar Spanish-Mexican influence under five large ranchos that continued until the mid-1800s with California statehood.[13]

Regulatory Setting

[11] Alameda County Community Development Agency, *East Alameda County Cultural Resource Survey,* Prepared by Corbett, Michael R., June 117, 2005, pp 23-24.

[12] Alameda County Planning Department, *Archaeology in Alameda County: A Handbook for Planners,* October, 1976. Map.

[13] Alameda County Planning Department, *Draft Environmental Impact Report, East County Area Plan*, June 1993, p. 5-9.1

Section 15064.5 of CEQA requires certain basic measures to be completed in the event of discovery of archaeological or paleontological resources (including human remains). These procedures provide for temporary protection of any resource that is discovered until a determination can be made about its importance. These procedures are also considered necessary to address the potential of discovering presently unknown human remains that may have been interred outside of formal cemeteries or paleontological resources.

Each existing area plan of the Alameda County General Plan (*Castro Valley General Plan* - CVGP, *Eden Area General Plan* – EAGP and the *East County Area Plan* - EACP) already contains policies designed to protect cultural and historical resources in the event of project construction or incidental discovery. For example, the *Eden Area General Plan* (EAGP) contains the following policies under Land Use Goal LU-6, all of which fully cover the necessity to protect and conserve historical and cultural heritage of the County. Each of the other area General Plan documents contain similar policies that, collectively, apply to the entire County.

EAGP Policies:

- P1. Historic or culturally significant buildings and other resources in the Eden Area should be preserved.
- P2. To the extent possible, the County shall cause no substantial adverse change in the significance of a historical or archaeological resource as defined in 15064.5 of the California Environmental Quality Act […] through its direct or indirect actions.
- P4. The County should make the Eden Area a top priority when conducting historic and cultural resources inventories in the county.
- P6. New development, alterations and remodeling projects on or adjacent to historic properties should be sensitive to historic resources and should be compatible with the surrounding historic context.

Discussion of Impacts

While the CCAP neither supports nor enhances any given level of new development significantly, it does redirect some development from places where GHG emissions might be maximized to places where GHG emissions would be reduced. This probable change of location has an as-yet undefined effect on cultural and historic resources, and it is impossible to say with any precision what these effects could be, whether more or less adverse, or the same. Construction which involves excavation and earthmoving has the greatest potential for disturbance of ancient cultural resources, while aboveground redevelopment and reconstruction will more likely affect existing historic structures and districts rather than buried cultural artifacts. The CCAP could affect projects that result in both types of disturbance due to redirecting of development to more favorable GHG reduction areas – but again, it is not possible to say with any precision whether the effect would be more or less adverse overall.

Fortunately, existing policies such as those described above and contained in the EAGP, the CVGP and the ECAP supply the necessary preexisting policy and action guidance required for any project to monitor and correct its impacts on cultural and/or historic resources. These policies and implementation actions, coupled with existing laws and CEQA environmental review requirements, would substantially avert the potential for significant effects as a result of construction or grading, independent of the CCAP. Existing policies for cultural and historic preservation in the General Plan would not be displaced by any of the new policies or measures defined in the CCAP, and would collectively serve to reduce the potential loss

of archaeological, cultural or paleontological resources from any development made possible by the CCAP to a less than significant level, and no further mitigation measures are required.

No significant adverse impacts to cultural resources would occur, and **no mitigation is required**.

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

Environmental Setting

California is one of the lowest per-capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate. Most of the electricity generated in California is from natural gas-fired power plants, which provided approximately 50.2 percent of total electricity generated in 2021. According to the California Energy Commission (CEC), in 2021 California used 194,127 gigawatt hours (GWh) of electricity. California produced 57 percent (110,652 GWh) of the electricity used within the state and imported the rest from outside the state[14]. In 2018, SB 100 accelerated the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Transportation accounts for 48 percent of the state's energy consumption, amounting to approximately 2,785 trillion Btu in 2022 (U.S. Energy Information Administration 2023). Most gasoline and diesel fuel sold in California for motor vehicles is refined in California to meet state-specific formulations required by the California Air Resources Board (CARB). According to the CEC, Alameda County consumed approximately 10,237 giga-watts per hour (GWh) of electricity and 377 million therms of natural gas in 2021.

Electricity is provided to all of unincorporated Alameda County by Ava Community Energy, and natural gas service is provided by PG&E. As the county's main electricity provider, Ava Community Energy enrolls new customers in their Bright Choice program, which sources 42 percent of electricity from renewable energy sources. Customers have the option to upgrade to Ava Community Energy's Renewable 100 program which sources 100 percent of electricity from renewable energy sources[15].

[14] California Energy Commission, *2021 Total System Electric Generation.* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation.

[15] Ava Community Energy. https://avaenergy.org/.

Regulatory Setting

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 manufacturer 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.

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 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[16]. 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

[16] California Energy Commission. 2022b (August). 2022 Building Energy Efficiency Standards. Publication Number: CEC-400-2022-010-CMF. Available: 2022 Building Energy Efficiency Standards (final version) (ca.gov). Accessed: December 20, 2022.

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 the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) is Plan Bay Area 2050, jointly adopted in October 2021. Through the implementation of this plan MTC and ABAG aim to reduce GHG emissions from the transportation sector by 19 percent in 2035 [17].

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.

Alameda County General Plan

Castro Valley General Plan. Chapter 12, Air Quality and Climate Change, of the Castro Valley General Plan contains the following applicable energy goals and policies to address energy concerns in Castro Valley:

- Goal 12.2-1: Reduce greenhouse gas emissions in Castro Valley.
- Goal 12.2-2: Prepare Castro Valley for the effects of climate change through the adoption of adaptation and resiliency strategies.
- Policy 12.2-3: Renewable Energy. Decrease dependency on nonrenewable fuel by increasing availability and use of renewable energy sources.
- Policy 12.2-4: Energy Efficiency. Encourage improvement to the energy efficiency of new and remodeled buildings in Castro Valley.

Eden Area General Plan. Chapter 9, Greenhouse Gas Action Element, of the Eden Area General Plan contains the following applicable energy goals and policies to address energy concerns in the Eden Area:

- Goal GHG-3: Improve the energy efficiency of new and remodeled buildings in the Eden Area.
- Policy P1: New County-owned buildings in the Eden Area shall achieve a Leadership in Energy and Environmental Design (LEED) Silver certification (or higher) under the United States Green Building Council's LEED program, or equivalent certification.

[17] Metropolitan Transportation Commission and Association of Bay Area Governments. *Plan Bay Area 2050*. October 2021. https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf.

- Policy P2: New privately-developed construction and remodels above a certain size shall achieve certification under LEED, Build It Green GreenPoint Rated, or equivalent rating system. This policy shall be implemented through the County's Green Building Ordinance. New construction and remodels not required to achieve certification under the Green Building Ordinance shall be encouraged to incorporate green building techniques designed to reduce the energy and water use of new or remodeled buildings.
- Policy P3: The County shall encourage the adaptive reuse of existing buildings, so long as they can be used efficiently or remodeled for energy-efficient operations.
- Policy P4: The planting of trees should be required on the south- and westfacing sides of new buildings to reduce energy usage, unless trees would interfere with existing solar equipment.
- Policy P5: New development projects should be designed to maximize passive solar energy techniques, including house orientation, street and lot layout, vegetation and protection of solar access. Maximum efficiency is gained by siting homes on an east-west axis.

East County Area Plan. Chapter 2, Goals, Policies, and Programs, of the East County Area Plan, contains the following applicable energy goals and policies to address energy concerns in east county:

- Goal: To maximize the production of wind generated energy. (and associated policies 168-175 and programs 73-76)
- Policy 285: The County shall facilitate the provision of adequate gas and electric service and facilities to serve existing and future needs while minimizing noise, electromagnetic, and visual impacts on existing and future residents.
- Policy 286: The County shall work with PG&E to design and locate appropriate expansion of gas and electric systems.

Implementation of the CCAP would result in the consumption of energy resources during construction. Construction of new bicycle and pedestrian infrastructure (**Measure LU-1.1** and **Measure LU-4.2**), accessory dwelling units (**Measure LU-4.1**), solar power and other energy-generating technologies (**Measure BE-2.1** and **Measure BE-2.2**), EV charging infrastructure (**Measure IN-2.1**), recycled water infrastructure (**Measure IN-4.3**), cool pavements (**Action IN-6.3.3**), tree planting and other nature-based solutions (**Measure AG-2.1** and **Measure AG-2.2**), resilience hubs (**Measure HR-1.1**), and new rooftop and canopy-cover solar panels (**Measure BE-1.1** and **Measure BE-1.2**), 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 able to live in the greater Bay Area and would not require extended commutes to reach construction sites. Construction equipment may also be used during installation of these facilities and features, but it is likely that this equipment would be used intermittently and for relatively short periods of time, and **Measure BE-1.3** would promote the use of 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 AG-2.1** and **Measure AG-2.2** would increase tree planting activities in the urban unincorporated areas. Tree delivery would likely not require heavy equipment but could result in a small amount of fuel consumption.

Occasional operational maintenance activities for facilities and features above may be required with implementation of the CCAP. 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 CCAP would improve operational energy efficiency and reduce the use of fossil fuels through measures which reduce on-road transportation and encourage EV use, as well as measures which facilitate the increased generation and utilization of renewable energy. For example, **Measure IN-2.1** would increase EV charging infrastructure, while other transportation-related measures such as **Measure LI-1.1** would reduce reliance on cars by improving pedestrian and bicycle connectivity. Measures pertaining to EV charging, such as **Measure IN-2.1**, described above, would increase the use of electricity. However, these measures would reduce the consumption of fossil fuels. Energy-related measures such as **Measure BE-1.2** would reduce GHG emissions and decrease operational energy consumption by requiring all new nonresidential development to achieve energy efficiency above minimum State building code requirements. Measure **WR-2.1**, which will increase the recovery of edible food waste and eliminate the disposal of organic waste in landfills, 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.

Collectively, these measures are intended to reduce the 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 CCAP would not involve short- or long-term physical changes that could result in wasteful, inefficient, or unnecessary energy consumption.

The CCAP aims to reduce GHG emissions by using alternatively fueled vehicles, reducing dependency on cars for transportation, generating and utilizing renewable energy, reducing waste generation, and increasing carbon sequestration. The CCAP also sets forth actions to adapt and build resilience to climate change hazards including extreme heat, drought, floods, and wildfires. Although implementation of the CCAP 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.

The goals and measures included in the CCAP were developed consistent with the renewable energy and energy efficiency goals of the County's CVGP, EAGP, and ECAP, and consistent the long-term GHG reduction goals of the California Air Resources Board's (CARB) 2022 Scoping Plan[18], especially those pertaining to energy utilization and generation. Consistent with the Priority GHG Reduction Strategies outlined in 2022 Scoping Plan, the County's CCAP includes measures that support transportation electrification and reduction of vehicle miles traveled, which CARB has highlighted as priority GHG reduction strategies for local governments.

Implementation of the CCAP would not result in wasteful, inefficient, or unnecessary consumption of energy, during project construction or operation, nor would it conflict with or obstruct a State or local

[18] California Air Resources Board. *2022 Scoping Plan*. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

plan for renewable energy or energy efficiency. **No significant adverse energy impacts would occur, and no mitigation is required.**

7. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Division of Mines and Geology Special Publication 42.			x	
ii) Strong seismic ground shaking?			x	
iii) Seismic-related ground failure, including liquefaction?			x	
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?			x	
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?			x	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			x	
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?			x	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			x	

Environmental Setting:

The ECAP, CVGP and EAGP areas of Alameda County contain several seismic faults and other related geological hazards such as potential liquefaction, landslides, subsidence, and expansive soil. Although the well-known San Andreas Fault is located west of San Francisco Bay and outside the boundaries of the area, modest to large ruptures on it and its associated subsidiary faults can be noticeable and cause damage

throughout the Bay Area, as occurred in the 1989 Loma Prieta Earthquake. As parts of the San Andreas Fault system, the Greenville, Calaveras and Hayward Faults are well-documented fault zones that traverse Alameda County, the latter primarily along the western base of the East Bay Hills. The California Division of Mines and Geology has estimated the maximum credible earthquake magnitude on these three faults to be 6.7 to 7.5 on the established Richter Magnitude Scale. Several other potentially active smaller faults lie within the area, such as the Las Positas, Pleasanton, Mission and Verona faults, which could result in earthquakes with a magnitude of 5.5 to 6.8.[19]

Ruptures may occur within designated "Special Studies Zones" (also known or referred to as Alquist-Priolo zones, based on state legislation of that name in 1972) that overlie the known faults. Strong ground shaking may occur on many other properties in the area and have damaging effects on buildings, especially when the underlying geology is characterized by alluvial or water-saturated materials. The effects of earthquakes also can cause ground failures such as landslides, subsidence (adverse settling due to subsurface soil conditions) and liquefaction in certain soil conditions. Liquefaction occurs when water-saturated sediments, especially fine sandy layers near the ground surface (30 to 45 deep at most) lose cohesive strength and become nearly liquid, and cannot support adequately support pavements or structures.[20]

Other soil and geological hazards, not related to seismic activity, include erosive soil conditions, expansive soils (shrink-swell effects), and soil conditions that, when used for septic tank leach fields, do not provide adequate percolation of wastewater or filtering relative to the level or position of nearby water wells. Clay soils are often not compatible with septic systems, because they constrict percolation. Erosion or loss of topsoil may also occur in many rural areas of the County, without adequate controls on stormwater runoff or irrigation.

Regulatory Setting:

The County adopted a joint Seismic Safety/Safety Element in November 1976 as part of its General Plan, to establish policies on geological and seismic safety hazards, as well as wildland fires, structural fires and flooding. The Element was updated in August 1992 to include a section on hazardous materials; and then in January 2013, the County adopted a Safety Element that combines these considerations and expands upon them to suit modern needs and regulations. The Safety Element identifies goals of reducing risks to life, property and natural resources, reducing the adverse effects of such hazards, and informing the public of such hazards. Objectives and implementation measures are also set forth to protect areas subject to severe environmental hazards from being developed with incompatible land uses, and ensure environmental analysis and investigations in areas of known or suspected hazards. Some policies aim to reduce risks to existing development from geological hazards while others address public information and emergency response preparedness. The Safety Element has been amended several times since 2013, most

[19] Alameda County Planning Department, *Draft Environmental Impact Report, East County Area Plan*, June 1993, p. 5-11.1-3

[20] Ibid., p. 5.11.2-4.

recently in 2022[21] to incorporate the 2021 Alameda County Local Hazard Mitigation Plan[22]. As of this writing, the County is in the process of further amending the Safety Element to comply with new state laws related to climate adaptation and resilience (SB 379, SB 99, and AB 747).

Each existing area plan (*Castro Valley General Plan* - CVGP, *Eden Area General Plan* – EAGP and the *East County Area Plan* - EACP) already contains policies designed to address geology and soils issues in the event of project construction or earthmoving. For example, the *Eden Area General Plan* (EAGP) contains the following policies under Public Safety Goal SAF-1, all of which fully cover the necessity to address geological, seismic and geotechnical issues. Each of the other area plan documents contain similar policies that, collectively, apply to the entire unincorporated County.

EAGP policies:

- P1. Site specific geologic hazard assessments, conducted by a licensed geologist, shall be completed prior to development approval in areas with landslide and liquefaction hazards […] and for development proposals submitted in Alquist-Priolo Zones […] Hazards to be mapped include: Seismic features; Landslide potential; Liquefaction potential. Mitigation measures needed to reduce the risk to life and property from earthquake induced hazards should be included.
- P2. Buildings shall be designed and constructed to withstand ground shaking forces of a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. The County shall require that critical facilities and structures (e.g. hospitals, emergency operations centers) be designed and constructed to remain standing and functional following an earthquake…[…]
- P3. All construction in the Eden Area shall conform with the Uniform Building Code and the Alameda County Building Code, which specify requirements for seismic design, foundations and drainage.
- P4. To the extent feasible, major infrastructure including transportation, pipelines, and water and natural gas mains, shall be designed to avoid or minimize crossings of active fault traces and to accommodate fault displacement without major damage that could result in long-term service disruptions.
- P5. The County shall encourage the retrofitting of existing structures and other seismically unsafe buildings and structures to withstand earthquake ground-shaking.
- P6. New development in areas with the potential for landslides or liquefaction hazards, as indicated in Figure 8-2, shall not be approved unless the County can determine that feasible measures will be Implemented to reduce the potential risk to acceptable levels, based on site-specific analysis. The County shall review new development proposals in terms of the risk caused by seismic and geologic activity.
- P7. In order to minimize off-site impacts of hillside development, new construction on landslide-prone or potentially unstable slopes shall be required to implement drainage and erosion control provisions to avoid slope failure and mitigate potential hazards.

[21] Alameda County, *Safety Element,* amended March 17, 2022. https://www.acgov.org/cda/planning/generalplans/documents/SafetyElement-updateapprovedbyBOS31722-FINAL.pdf

[22] Alameda County, *2021 Local Hazard Mitigation Plan*. December 2021. https://www.acgov.org/cda/planning/generalplans/documents/ResolutionExhibit1FinalHMP_AlamedaCo_Dec2021.pdf.

In 2019, the Alameda County Board of Supervisors adopted a Soil Importing Ordnance (County Code Chapter 17.66[23]). This chapter regulates the importing of soil or other fill material in the unincorporated areas of the county to ensure that such importing is related to appropriate land uses in the zoning district to promote soil stability, to reduce negative environmental impacts, to reduce human health impacts, to reduce the traffic impacts from delivery vehicles, and to reduce the potential transfer of human and ecological risks between properties due to the import of polluted fill materials, and to reduce the potential import of hazardous wastes to properties accepting fill. In accordance with this ordinance, soil importing is permissible on lots in the A (or equivalent) District or on lots in the R1 (or equivalent) District that are between one and five acres in size.

Discussion of Impacts

New development with or without the direction of the CCAP could occur in areas with any number of geological or soil hazards. Each new development or substantial construction project would require review and would result in a referral of the application to the County's Grading Division of the Public Works Agency, which assesses individual proposals and their setting (location relative to known geological or seismic hazards) to determine if detailed soils or geotechnical analysis would be required, and if a peer review by Grading Division or their designated consultant should also be required. Typically, United States Geological Survey (USGS) reference maps are consulted for known landslides, faults, liquefaction hazard zones, soil conditions (such as shrink-swell effects or corrosive soils). When required, additional on-site exploratory study may also result in the discovery of additional hazards, or conclude that proposed development would not pose any risk of geotechnical hazards. Because most of the possible development guidance provided by the CCAP would tend to move development away from rural areas and into areas with urban services, such as sanitary sewer, percolation studies are unlikely to be required to be prepared by the proponent or by the Alameda County Health Care Services Agency, Environmental Health Services Department.

A large magnitude earthquake on one of the several Bay Area faults is capable of producing damaging, ***potentially significant*** levels of ground shaking on almost any given site in the County. Without appropriate assurance of review of development proposals, and implementation of corrective measures or site planning, the potential for new development to result in exposure of people or structures to potentially substantial adverse effects of an earthquake rupture, ground shaking or other forms of ground failure would be ***potentially significant***. The potential for loss of life or serious injury due to structural failure could be ***potentially significant***. New development may also result in ***potentially significant*** adverse effects due to erosion, unstable or problematic soil conditions (e.g., expansive, corrosive or without adequate drainage or percolation).

While the CCAP neither supports nor enhances any given level of new development significantly, it does redirect some development from places where GHG emissions might be maximized to places where GHG emissions would be reduced. This probable change of location would have an as-yet undefined effect on susceptibility to geological or geotechnical hazards, and it is impossible to say with any precision what these effects could be, whether more or less adverse, or the same. Such hazards can have effects of both new development and redevelopment or reconstruction. The CCAP could affect both types of projects, but primarily new construction, due to redirecting of development to more favorable GHG reduction areas

[23] Alameda County. *Alameda County Code of Ordinances*, Chapter 17.66, Soil Importing. https://library.municode.com/ca/alameda_county/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.66SOIM

– but again, it is not possible to say with any precision whether the effect would be more or less adverse overall.

Implementation of the CCAP would involve minor ground disturbing activities, including grading and excavation, 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 upgraded pedestrian and bicycle infrastructure (**Measure LU-1.1**), installation of EV charging infrastructure (**Measure IN-2.1**), and tree planting (**Measure AG-2.1**). However, given the nature of the CCAP, construction activities associated with the implementation would largely 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 sidewalks and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would focus in the urban areas, including in public rights-of-way and new development projects. Through compliance with applicable requirements, measures that would be implemented as part of the CCAP would not result in substantial soil erosion or the loss of topsoil. Through voluntary efforts with agricultural landowners, **Measure AG-1.1** and **Measure AG-1.2** aim to improve and protect soil resources and promote soil conservation practices such as native woodland restoration, efficient irrigation, carbon farming, on-farm composting, and compost application on agricultural lands.

Existing policies contained in the EAGP, the CVGP and the ECAP and the Safety Element, along with the County Uniform Building Code (UBC) supply the necessary preexisting policy, action and statutory guidance required for any project to design and build according to the geotechnical requirements of the site on which it is located. These policies and implementation actions, existing laws and CEQA environmental review requirements, would substantially avert the potential for significant effects as a result of construction or grading. As a result, the CCAP would result in no significant impact with respect to geological, soil, geotechnical, or paleontological issues.

No significant adverse impacts to geologic or soil resources would occur, and **no mitigation is required**.

8. GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			x	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				x

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 (CO2), 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 CO2 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 [24] [25] [26](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.

[24] California Natural Resources Agency. 2012. Our Changing Climate 2012, Vulnerability and Adaptation to the Increasing Risk from Climate Change in California. https://ucanr.edu/sites/Jackson_Lab/files/155618.pdf.

[25] California Department of Water Resources. 2006 (July). *Progress on Incorporating Climate Change into Management of California's Water Resources*. http://www.water.ca.gov/climatechange/docs/DWRClimateChangeJuly06.pdf.

[26] Intergovernmental Panel on Climate Change. 2007 (February). *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*. Geneva, Switzerland. https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf.

Federal Regulations

The Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Act (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 Regulations

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 [27] (United Nations 2015).

CARB adopted the 2022 Scoping Plan on December 16, 2022 [28]. 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 [29].

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

[27] United Nations. 2015. *Paris Agreement*. https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

[28] California Air Resources Board. *2022 Scoping Plan*. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

[29] California Environmental Protection Agency, California Air Resources Board, California Department of Food and Agriculture, California Natural Resources Agency, and Strategic Growth Council. 2019 (April). *California 2030 Natural and Working Lands Climate Change Implementation Plan*. https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf.

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 CO2 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 [30].

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 2018b). These plans link land use and housing allocation to transportation planning and related mobile-source emissions. The Metropolitan Transportation Commission (MTC) serves as the MPO for the Bay Area region. The current plan for the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) Plan Bay Area 2050, which MTC and ABAG jointly adopted in October 20219. Through implementation of this plan, MTC and ABAG aim to reduce GHG emissions from passenger vehicles by 19% in 2035[31].

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 were required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011). SB 100, passed by the legislature in 2018, added targets for generation from renewables of 52 percent by 2027; 60 percent by 2030; and 100 percent by 2045.

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

[30] Wade, Samuel. Branch Chief, Transportation Fuels Branch, Industrial Strategies Division, California Air Resources Board. Sacramento, CA. June 30, 2017—e-mail to Austin Kerr of Ascent Environmental Woods Rogers. 2016. *Tuolumne County General Plan and Regional Transportation Plan Update – EIR Traffic Study Addendum*.

[31] Metropolitan Transportation Commission and Association of Bay Area Governments. *Plan Bay Area 2050*. October 2021. https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf.

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 MTCO2e over the next 30 years [32].

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 mandatory 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. 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 and used as guidelines by state agencies for meeting the requirements of Executive Order B-18-12.

Senate Bill 1383: Short-Lived Climate Pollutants Strategy

Senate Bill (SB) 1383 (2016) established methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. SB 1383 aims to reduce organics waste landfill disposal by 75% (from 2014 levels) by 2025 and slow climate change by diverting organic materials from landfills, recovering 20% of edible food and redirecting it to food-insecure Californians. Beginning January 1, 2022, residences and businesses are required to sort and separately collect food scraps, yard debris and food-soiled paper from trash and recycling and subscribe to an organic waste collection service. City and county governments are required to have adopted local mechanisms to enforce the SB 1383 regulations adopted by CalRecycle[33]. The *Alameda County Solid Waste Collection and Organic Waste Reduction Ordinance* and the *Alameda County Solid Waste Collection and Organic Waste Reduction Regulations* serve as the County's enforceable mechanism in response to SB 1383[34].

Ninth Circuit Ruling - Natural Gas Bans

[32] California Energy Commission, *2021 Total System Electric Generation.* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation.

[33] CalRecycle. *California's Short-Live Climate Pollutant Reduction Strategy.* https://calrecycle.ca.gov/organics/slcp/

[34] Alameda County. *Alameda County's Waste Program.* https://www.acgov.org/wasteprogram/

In July 2019, the Alameda County City of Berkeley became the first U.S. city to prohibit natural gas infrastructure in new buildings. When the city's ordinance went into effect at the beginning of 2020, it was described as a key component in the city's effort to reduce carbon emissions driving climate change. The California Restaurant Association (CRA), filed a lawsuit in November 2019 against the City of Berkeley to block the legislation, arguing that the ban is "irresponsible" amid electrical outages and "does little to advance climate goals." In July 2021, a federal district court judge dismissed the lawsuit. The CRA challenged that decision, and in April 2023 a three-judge panel on the U.S. Court of Appeals for the Ninth Circuit unanimously ruled in favor of reversing that dismissal, deciding that Berkeley had overstepped its authority. On January 2, 2024, a federal appeals court declined to rehear the case of Berkeley's ban on new natural gas hookups. The cities of Oakland, San Francisco, Los Angeles and San Jose have similar regulations regarding the use of natural gas in new construction that could be invalidated by the ruling[35].

Local Regulations

In addition to the unincorporated countywide GHG reduction policies contained in the 2014 CCAP and the draft CCAP update that is the subject of this assessment, the Alameda County General Plan contains the following applicable GHG reduction goals and policies from the *Eden Area General Plan* (EAGP) and the *Castro Valley General Plan* (CVGP). The *East County Area Plan* (ECAP) contains no policies related to climate change or GHG emissions.

Eden Area General Plan, Chapter 9, Greenhouse Gas Action Element, of the Eden Area General Plan contains the following applicable GHG goals and policies to address GHG concerns in the Eden Area.

- Goal GHG-1: Reduce greenhouse gas emissions in the Eden Area.
    - Policy P1: The County shall continue to participate in the ICLEI Climate Protection Program or a similar program designed to guide actions toward reductions in greenhouse gas emissions.
    - Policy P2: The County shall continue to participate in State and regional efforts to reduce greenhouse gas emissions.
    - Policy P3: The County's Climate Action Plan (CAP) shall be a guiding document for reductions of greenhouse gases in the Eden Area and shall be integrated into the County General Plan.
    - Policy P4: The County shall participate in regional and statewide efforts to improve the proportion of renewable energy available to energy customers in the Eden Area.

Castro Valley General Plan, Chapter 12, Air Quality and Climate Change, of the Castro Valley General Plan contains the following applicable GHG goals and policies to address GHG concerns in Castro Valley:

- Goal 12.2-1 Reduce greenhouse gas emissions in Castro Valley.
- Goal 12.2-2 Prepare Castro Valley for the effects of climate change through the adoption of adaptation and resiliency strategies.

[35] Kwok, Iris. *Berkeleyside*. "Berkeley can't enforce natural gas ban, federal court rules again." January 3, 2024. https://www.berkeleyside.org/2024/01/03/berkeley-gas-stove-ban-ruling#:~:text=Berkeley%20became%20the%20first%20U.S.,new%20buildings%20in%20July%202019.

- Policy 12.2-1: GHG Reduction Program Participation. The County shall continue to participate in international, national, regional, and local programs to reduce greenhouse gas emissions.
- Policy 12.2-2: County Climate Action Plan. The County's Climate Action Plan shall be the guiding document for the reduction of greenhouse gases in Castro Valley and shall be implemented through all components of the County General Plan including the Castro Valley General Plan.
- Policy 12.2-3: Renewable Energy. Decrease dependency on nonrenewable fuel by increasing availability and use of renewable energy sources.
- Policy 12.2-5: Adaptation Strategies. The County shall participate in regional efforts focused on adapting communities to the effects of climate change.

Discussion of Impacts

The CCAP update is a policy document and would not result in the direct approval of any subsequent action. The CCAP update does, however, identify policies and actions that the County intends to execute to achieve GHG emission reductions and climate resilience. The CCAP identifies a specific policy framework that would establish unincorporated countywide measures and actions intended to reduce GHG emissions associated with implementation of the County's General Plan. Through implementation of the proposed CCAP Update, the County would achieve consistency with the State and local regulations adopted for the purpose of reducing GHG emissions.

Implementation of the CCAP would result in the generation of greenhouse gas emissions during construction. Construction of new bicycle and pedestrian infrastructure (**Measure LU-1.1** and **Measure LU-4.2**), accessory dwelling units (**Measure LU-4.1**), solar power and other energy-generating technologies (**Measure BE-2.1** and **Measure BE-2.2**), EV charging infrastructure (**Measure IN-2.1**), recycled water infrastructure (**Measure IN-4.3**), cool pavements (**Action IN-6.3.3**), tree planting and other nature-based solutions (**Measure AG-2.1** and **Measure AG-2.2**), resilience hubs (**Measure HR-1.1**), and new rooftop and canopy-cover solar panels (**Measure BE-1.1** and **Measure BE-1.2**), would result in the generation of GHG emissions 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 and generation of associated GHG emissions. However, workers would likely live in the greater Bay Area and would not require extended commutes to reach construction sites. Construction equipment may also be used during installation of these facilities and features, but it is likely that this equipment would be used intermittently and for relatively short periods of time, and **Measure BE-1.3** would promote the use of alternative fuel in construction equipment. **Measure AG-2.1** and **Measure AG-2.2** would increase tree planting activities in the urban unincorporated areas. This would likely not require heavy equipment but could result in a small amount of fuel consumption and associated GHG emissions when delivering trees.

Occasional operational maintenance activities for facilities and features above may be required with implementation of the CCAP. However, these trips would be infrequent and therefore operational vehicle trips would be minimal; thus, associated operational fuel consumption and GHG emissions would also be minimal. Implementation of the CCAP would improve operational energy efficiency and reduce the use of fossil fuels through measures which reduce on-road transportation and encourage EV use, as well as measures which facilitate the increased generation and utilization of renewable energy. For example,

Measure IN-2.1 would increase EV charging infrastructure, while other transportation-related measures such as **Measure LI-1.1** would reduce reliance on cars by improving pedestrian and bicycle connectivity. Energy-related measures such as **Measure BE-1.2** would reduce GHG emissions and decrease operational energy consumption by requiring all new nonresidential development to achieve energy efficiency above minimum State Building Code requirements. Measure **WR-2.1**, which will increase the recovery of edible food waste and eliminate the disposal of organic waste in landfills, 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 GHG emissions is anticipated.

Collectively, these measures are intended to reduce GHG emissions by reducing 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. Implementation of the other GHG reduction measures and adaptation strategies in the CCAP would not involve short- or long-term physical changes that could result in increased GHG emissions.

The CCAP aims to reduce GHG emissions by using alternatively fueled vehicles, reducing dependency on cars for transportation, generating and utilizing renewable energy, reducing waste generation, and increasing carbon sequestration. The CCAP also sets forth actions to adapt and build resilience to climate change hazards including extreme heat, drought, floods, and wildfires. Although implementation of the CCAP would result in temporary construction activities that would result in GHG emissions, 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.

The goals and measures included in the CCAP were developed consistent with the goals of the County's CVGP, EAGP, ECAP, and Waste Program, and consistent with the long-term GHG reduction goals of the California Air Resources Board's (CARB) 2022 Scoping Plan[36], especially those pertaining to reducing GHG emissions associated with energy utilization and generation. Consistent with the Priority GHG Reduction Strategies outlined in 2022 Scoping Plan, the County's CCAP includes measures that support transportation electrification and reduction of vehicle miles traveled, which CARB has highlighted as priority GHG reduction strategies for local governments.

Implementation of the CCAP would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

No significant adverse greenhouse gas emissions impacts would occur, and **no mitigation is required.**

[36] California Air Resources Board. *2022 Scoping Plan*. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

9. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				x
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				x
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				x
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?				x
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?				x
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				x

Environmental Setting

Unincorporated Alameda County contains a variety of urban and rural roads, highways, and freeways on which hazardous materials, including industrial chemicals, fuels, oils, pesticides, fertilizers and household and agricultural waste materials are routinely transported. Owners of parcels anywhere in the County may receive and store some of these materials, and soil and groundwater on some parcels may have become contaminated by accidental releases of toxic materials by past or present owners, or by adjacent properties. A few parcels may have past or present use as oil or gas wells, which could be a potential source of hazardous material releases. Many parcels in the County are located within one-quarter mile of an existing or proposed school and which could theoretically result in a release of hazardous materials. According to databases of hazardous material sites maintained by the Department of Toxic Substances

Control (EnviroStor[37]) and the State Water Resources Control Board (GeoTracker[38]), there are three Leaking Underground Storage Tank (LUST) Cleanup sites in the Eden Area and two in Castro Valley. There are eleven Cleanup Program Sites in the Eden Area and seven in Castro Valley.

The rural areas of the County are typically designated as within a State Responsibility Area (SRA) as defined by the California State Fire Code, making the California Department of Forestry and Fire (CDF) the primary service agency responsible for providing basic wildland fire protection. The fire season extends from late spring to fall and tends to be the highest during summer or fall dry weather and high wind conditions. With the exception of Fairview, which is served by the Fairview Fire Protection District, the urban areas of the County are under the direct jurisdiction of the Alameda County Fire Department, which would first respond to calls in those areas. New development in any area must meet the basic requirements of the Fire Code, and the Fire Department may comment upon and provide recommendations for added fire safety measures in new development.

The County has three active airports - Oakland International Airport, Hayward Executive Airport and Livermore Municipal Airport – and each of these have Safety Zones that overlap unincorporated County lands. None of these airports is located within the unincorporated County. The two airports with greatest potential for contact with the unincorporated areas are the Hayward Executive Airport and Livermore Municipal Airport, and of these two, the Hayward Executive Airport has greater potential for contact due to the higher density of the urban unincorporated areas of the County that abut this airport.

Regulatory Setting

State law defines hazardous waste materials as waste materials that may cause or substantially contribute to mortality or hazards to human health or the environment due to a combination of quantity, concentration, and its physical, chemical or infectious characteristics. The Alameda County Integrated Waste Management Plan (CoIWMP) provides an extensive glossary of the foregoing hazardous material reference terms.[39]

The California Water Board has authority over the treatment, storage, processing and disposal of solid waste to the extent it poses risks to water quality.[40]

State and local agencies responsible for managing hazardous wastes include the California Department of Toxic Substances Control (DTSC), the Alameda County Waste Management Authority (ACWMA), and the County Department of Environmental Health (a division of the Health Care Services Agency). Coordination among these agencies to reduce risks of exposure and contamination is a key implementation measure; other means include zoning controls and enforcement of the ACWMA's Solid Waste Management Plan (currently identified as the *County Integrated Waste Management Plan* (CoIWMP), discussed below and elsewhere in this Initial Study. The U.S. Environmental Protection Agency (EPA) is the primary agency

[37] California Department of Toxic Substances Control (DTSC). 2023. EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/.

[38] State Water Resources Control Board (SWRCB). 2023. Geotracker Database. https://geotracker.waterboards.ca.gov/.

[39] Alameda County Waste Management Authority, *Alameda County Integrated Waste Management Plan, County-wide Element, including Siting Element & Summary Plan*, Adopted April 22, 2020, et. seq. https://www.stopwaste.org/resource/reports/countywide-integrated-waste-management-plan-coiwmp

[40] California, State of, Health and Safety Code, Sections 25117 & 25143.5; Water Code, Section 13172; Public Resources Code, Section 41781.2.

responsible for enforcing federal regulations on hazardous materials and wastes, and for evaluation and remediation of severe cases of contamination and hazardous waste releases. The US EPA works with state and County agencies to enforce materials handling and storage regulations and site cleanup requirements. The federal Occupational Safety and Health Administration (OSHA) has certain related responsibilities, and the Department of Transportation (DOT) is authorized to regulate safe transport of hazardous materials. However, it is very unlikely that any incident involving a release of hazardous material or other circumstances would require federal involvement. The Alameda County Department of Environmental Health (ACDEH) Certified Unified Program Agency (CUPA) is the administrative agency that coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in the county.

The three area plans of the County's General Plan– ECAP, EAGP and CVGP - each include several policies regarding natural and environmental hazards and hazardous wastes, with policies to require site-specific analyses of new development proposals to reduce potential risks in areas of potential natural hazards (flooding, geologic, wildland fire, or other environmental hazards) unless feasible measures are implemented to reduce the risk to acceptable levels, or consider potential natural disasters. Each document also includes policies for the safe management and reduction of exposure to hazardous materials which, when followed, enable projects to self-mitigate any possible effects of hazardous materials on sensitive receptor sites. For example, the EAGP has the following set of policies that address hazardous materials, and similar policies exist as necessary in the CVGP and ECAP as appropriate:

- P1. The County shall strive to reduce hazardous waste using the following hierarchy of waste management strategies: Reduce the sources of hazardous waste; Recycle and reuse hazardous wastes; Treat or incinerate residual hazardous waste; Place reduced or untreatable waste in secure land disposal units.
- P2. New or expanding businesses shall be required to demonstrate compliance with the hierarchy of waste management strategies listed in Policy 1 of this Goal as a condition of receiving land use and business permits.
- P3. All existing hazardous waste generators shall be required to implement the hazardous waste management hierarchy listed in Policy 1 of this Goal to the maximum extent feasible, both technically and economically.
- P4. The County shall assist the Alameda County Waste Management Authority with the implementation of the Alameda County Integrated Waste Management Plan and the Alameda County Hazardous Waste Management Plan.
- P5. Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities.
- P6. Developers shall be required to conduct the necessary level of environmental investigation to ensure that soil, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users. This shall occur as a pre-condition for receiving building permits or planning approvals for development on historically commercial or industrial parcels.
- P7. The safe transport of hazardous materials through the Eden Area shall be promoted by implementing the following measures: Maintain formally-designated hazardous material carrier routes to direct hazardous materials; Prohibit the parking of empty or full vehicles transporting hazardous materials on County streets; Require new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the extent possible; Encourage businesses to ship hazardous materials by rail.

- P8. Emergency response plans shall be submitted as part of all use applications for any large generators of hazardous waste.
- P9. To the extent feasible, the County shall continue to support the removal of hazardous wastes from the solid waste stream in the Eden Area in accordance with Countywide plans.

The *Safety Element* of the Alameda County General Plan includes a hazardous materials section that establishes goals, objectives and implementation policies to reduce the risks of exposure of humans and natural resources to hazardous wastes. The *Safety Element* also provides an inventory and generalized mapping of hazardous land uses and fire areas and describes policies and principles intended to protect people and structures from hazardous materials and the threat of fire in the County. As noted in the *Safety Element*, the Hazardous Materials/Waste Program for waste generation was established by the County Board of Supervisors in 1985 and recognized by the State of California Department of Toxics Substances Control (DTSC) through a Memorandum of Understanding. In quick succession the county's hazardous materials management plan program, underground storage tank program, tiered permitting program, and risk management program also started. The *Safety Element* contains information on Hazardous Materials Business Plans, the Household Hazardous Waste Program and disposal, the Hazardous Waste Generator Program, Underground and Aboveground Storage Tank Programs, the California Accidental Release Program, and Tiered Permitting for onsite disposal and remediation. The *Safety Element* contains an abundance of policies and specified actions to minimize residents' exposure to the harmful effects of hazardous materials and waste. These policies sometimes mirror and often complement those found in the Area Plans. The *Safety Element* was last amended in 2021 to incorporate the *2021 Alameda County Local Hazard Mitigation Plan.*

Class I hazardous wastes are disposed of outside Alameda County, primarily to the state facility near Kettleman City, and its transport is regulated by the State Department of Transportation (Caltrans) and the State Health Department. The California Highway Patrol (CHP) responds to spills, with assistance from County or State agencies, depending on the nature of the spill; for example, the County Agriculture Department, under the authority of the Agriculture Commission, has jurisdiction in the case of spills of pesticides or other potentially hazardous agricultural materials, and a representative from the Regional Water Quality Control Board has authority regarding violation of water quality standards if adjacent streams or an underlying water table were at risk of potential contamination.[41] Storage and use of hazardous materials on an industrial scale requires a use permit from Alameda County, and is limited to the County's heavy industrial and manufacturing zoning district (M-2, Heavy Industrial).

All of these policies and regulations would remain in place and not be compromised by any policy measure within, or activity implemented as a result of the CCAP.

Aircraft and Airport Safety

Each of the airports in Alameda County – Oakland International Airport, Hayward Executive Airport and Livermore Municipal Airport – has an Airport Land Use Compatibility Plan (ALUCPs) which serves to guide development in key hazard zones around each airport. The ALUCPs are a requirement of the State Aeronautics Act (Public Utilities Code, Section 21670 et seq.) which specifies the preparation of an ALUCP for nearly all public-use airports in the state (Section 21675). The intent of the ALUCP is to encourage

[41] California Department of Transportation, Office of Emergency Management Division of Maintenance, Maintenance Manual, July 2006, Chapter D5, http://www.dot.ca.gov/hq/maint/manual/Ch_D5.pdf

compatibility between airports and the various land uses that surround them; and to provide guidance in determining appropriate land uses, appropriate structural heights and lighting requirements, noise limitation necessity and other critical characteristics of development that could affect, or be affected by, existing and anticipated future airport activities. The ALUCPs have legal bearing on land use policies and decisions in the surrounding areas, including portions of Alameda County. They modify the policies of the General Plans where conflicts between the airport activities and surrounding land uses could arise. Each policy contained within the ALUCP must be taken into account by prospective development, and the Airport Land Use Commission (ALUC), the decision-making body for airport land use issues, has the ability to review and make recommendations for projects located within the airport safety zones. In accordance with Section 21674(b) of the California Public Utilities Code, an ALUC has the authority "to coordinate planning at the state, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare"; to prepare and adopt airport land use plans; and to review and make recommendations concerning specified plans, regulations and other actions of local agencies and airport operators. When the ALUC makes recommendations for project design or approval, the lead agency is required to follow these recommendations unless a decision is made by the legislative body of the jurisdiction in which the land use would be located to override the ALUC's decision on one or more of the ALUCs recommendations.

The policies of the ALUCP, when followed, would protect both airports and new development from possible safety and environmental conflicts. The adoption of the updated CCAP would not alter these policies nor the application thereof.

Alameda County Emergency Operations Plan

The *Alameda County Emergency Operations Plan*, an extension of the California State Emergency Plan, was adopted by the County and cities in the County in December 2012 to ensure the most effective and economical allocation of resources for protection of people and property in time of an emergency or disaster. The plan establishes the emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System. The objective of the plan is to incorporate and coordinate all the facilities and personnel of the County and Operational Area member jurisdictions into an efficient organization capable of responsible effectively to any emergency. As of this writing. The *Alameda County Emergency Operations Plan* is housed with the Alameda County Office of Emergency Services (OES), a division of the County Sheriff's Office.

Discussion of Impacts

There are no policies or measures described in the CCAP that explicitly or implicitly promote actions involving hazardous materials, airport conflicts, or increased risk of fire. There are policies that promote shifting of development from certain areas to others, the enhancement of public transportation and pedestrian/bicycle access, energy efficiency and renewable energy improvements, water conservation, waste reduction and recycling, and green infrastructure; none of these policies or measures involves or affects the regulation of hazardous materials, or risk of fire danger, and none of these measures seeks to place or design construction that would be incompatible with airport operations and activities. The CCAP does contain policies involving emergency response and evacuation plans, with the goals of supporting implementation of these plans and ensuring that emergency service providers have adequate capacity to address increased demand due to potential climate hazards.

With respect to hazardous materials, which may be found associated with any land use, none of the policies would encourage the new or increased use of, or concentration of, hazardous materials, more than these chemicals or materials might currently be used or concentrated. Redirection of new residential and commercial development into specific locations designed to reduce GHG emissions would provide minor shifts in the locations where familiar household and retail hazardous materials would be found; but these materials are so highly regulated and routinely contained that their presence would provide no significantly increased cause for concern. Waste management activities, specifically recycling and composting, do not routinely involve any significant quantities of hazardous materials, and increased emphasis on these activities would not require any additional use or concentrations of hazardous materials.

Wildland fire safety concerns would not be modified by any of the policies found in the CCAP. The same fire codes and regulations would apply for residential or commercial development regardless of where it is constructed or located. Measures to improve public transit, pedestrian and bicycle access would have no effect on wildland fire or emergency access, and in some cases could improve the access if, for example, streetlight cycle control for transit buses could also be placed into effect for emergency vehicles. Renewable energy programs and projects would be constructed according to existing building and fire codes. Recycling programs would increase, but would be concentrated in areas designed to accommodate them, which means that fire suppression and emergency access would be adequate. Agriculture and vegetation restoration like the programs described would not increase the challenge of response or fire suppression for those specific activities.

As discussed above, legally required adherence with the policies of the ALUCPs for the Hayward Executive Airport and Livermore Municipal Airport for nearby development and land use within the airport safety zones would serve to fully mitigate the effect of any new development in these zones.

No significant adverse impacts related to hazards and hazardous materials would occur, and no mitigation is required.

10. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			x	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			x	
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 a substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?			x x x x	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			x	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			x	

Environmental Setting:

Unincorporated Alameda County contains a wide variety of creeks, water bodies, and surface and underground stormwater drainage systems in urban, rural and wild settings, which serve a wide range of purposes, from sustaining the ecological quality of soil, plant and animal life, to irrigation, handling stormwater runoff, storing water for municipal, industrial and agricultural purposes, restoring groundwater and natural aquifers, recreation, and aesthetic values. These are most of the beneficial uses of water resources and water management systems that are the subject of the Checklist. The creeks and water bodies of the County are geographically divided into watersheds by the uppermost hills and ranges of the County, and almost all of the creeks flow westerly towards San Francisco Bay through the East Bay Hills; only the easternmost slopes of the Altamont Hills drain eastward into the San Joaquin River in San Joaquin County (and also, eventually, to the Bay). Most of the East County area flows into the Tri-Valley basin of Pleasanton, Livermore and Dublin, into the westward flowing Arroyo Mocho and Arroyo Valle, which combine with the southward flowing Alamo Creek into the Arroyo de la Laguna that flows south to

Sunol. In the Sunol basin, this drainage joins Alameda Creek and flows eastward through Niles Canyon and beyond to San Francisco Bay. The Castro Valley Canyonlands drain along its creeks – Cull, Crow, Palomares, and Eden Canyon Creeks, primarily – and then into San Lorenzo Creek that flows along the south side of Castro Valley towards the Bay.

Flooding hazards within the Plan Area are located along waterways identified in Map S-6 of the County's *Safety Element*, and a small area of western San Lorenzo along San Francisco Bay, including inland waterways, is at risk of tsunami. To prevent flooding and ensure rapid draining of stormwater from the County's urban areas, many of Alameda County's creeks were altered and replaced with engineered channels, with concrete sides and bottoms, and many smaller creeks exist only as underground box culverts. The Alameda County Flood Control District (ACFCD) was created in 1949 to provide flood control services for the County, and it owns and manages the larger, engineered creek channels, as well as many smaller channels and almost all stormwater drainage pipes. Such is the case in the urban areas covered by the CVGP and the EAGP, mostly the San Lorenzo Creek watershed. A few isolated natural stretches of creeks remain in the urban, suburban and semi-rural areas of the County, but the largest stretches of natural or unaltered, un-engineered creeks are in the more remote or rural agricultural areas of the County. In rural areas much of the rainfall is absorbed into groundwater, where it flows to natural springs or creek banks and aquifers, but there are also few obstacles or filters to prevent the inflow of larger pieces of trash, debris, loose earth or other contaminants if such material is located in close proximity to a creek. Although streets, pavements and rooftops are widely spaced in rural areas, ground conditions, including slope, compaction, vegetation, irrigation, etc., may substantially affect the rate of runoff and the passage of pollution, trash and debris into creeks, and the resulting downstream water quality.

Potable water in unincorporated Alameda County is mainly provided by East Bay Municipal Utility District, Zone 7, the San Francisco Public Utilities Commission, and, where municipal water is unavailable, by private wells.

Regulatory Setting

To protect and improve water quality, minimize flooding and in general provide better management of water resources in California and the United States, state and federal laws have respectively evolved over the past 50 years, since the passage of the Porter-Cologne Water Quality Act of 1969 in California and the Clean Water Act (CWA) in 1972 by the U.S. Congress. Both laws have been amended over time to provide local agencies the authority to achieve those objectives. The principle objective of the federal CWA is to reduce or eliminate water pollution in the nation's rivers, streams, lakes, and coastal waters, with laws regulating discharges of pollutants from industrial sources, municipal sources (including storm drain systems and outfalls from sewage treatment systems), agriculture (fertilizers, etc.), and setting minimum water quality standards for all "waters of the United States" (as defined very specifically in the CWA). The U.S. Environmental Protection Agency (EPA) administers the CWA at an overall federal level, but the State Water Resources Control Board (SWRCB), through its subsidiary Regional Water Quality Control Boards (RWQCBs, or Water Boards), have local administrative and enforcement authority. The federal CWA requirements establish minimum standards and policies, while the State and Regional Boards carry them out with their own adopted laws, rules, regulations and standards, some of which exceed the federal

requirements. One of the key functions of the CWA is the National Pollutant Discharge Elimination System (NPDES) Permit system, which is the main framework for regulating storm water discharges.[42]

The Porter-Cologne Act, which represents the California Water Code, gives the RWQCBs the responsibility for adopting, implementing, and enforcing regional water quality control plans (Basin Plans), which set forth the water quality standards of the state and the objectives or criteria necessary to protect those beneficial uses within defined regions, such as the San Francisco Bay region. That region includes *almost* all of Alameda County; the eastern slopes of the Altamont Hills are subject to the San Joaquin regional basin plan. The California Water Code (Section 13220) formally gives authority to the RWQCBs to issue NPDES permits to counties and large cities for each of the three main categories of potential pollution sources: construction, industry and municipal facilities including stormwater systems and treated sewage. Most private development in unincorporated Alameda County falls under construction and the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity that disturbs one or more acres of soil – or less than an acre but which is part of a larger development – are required to obtain coverage under the General Permit. The permit is based on a project's overall risk and requires measures to prevent erosion and reduce sediment and other pollutants in their discharges.

The General Permit requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for construction activities. The SWPPP must be prepared and approved by the Alameda County Public Works Agency (PWA) before construction begins. The Grading Department of the Alameda County Public Works Agency (PWA) has the authority under the County's NPDES program to require revisions to the SWPPP. The SWPPP must include specifications for Best Management Practices (BMPs) to be implemented during project construction. BMPs are measures undertaken to control degradation of surface water by preventing soil erosion or the discharge of pollutants from the construction area. This General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs).

Discussion of Impacts

The CCAP neither supports nor enhances any given level of new development significantly, and there is no generalized impact one can deduce from CCAP policies. It does redirect some development from places where GHG emissions might be maximized to places where GHG emissions would be reduced (e.g. **Action LU-4.1.3**, which encourages transit-oriented development and would primarily impact the urbanized EAGP and CVGP areas). This probable shift in location would have an as-yet undefined effect on susceptibility to hydrological or clean water effects, and it is impossible to say with any precision what these effects could be, whether more or less adverse, or the same. Such impacts can result from both new development and redevelopment or reconstruction.

In the urban unincorporated areas of the EAGP and the CVGP, new development with or without the direction of the CCAP could occur in areas with any number of hydrological issues. Each new development or substantial construction project would require review, either through the CEQA process and/or the Conditional Use Permit or Site Development Review or Subdivision processes, and would result in a referral of the application to the County's Grading Division and Clean Water Division of the Public Works

[42] State Water Resources Control Board, Division of Water Quality, *Construction General Permit Fact Sheet for 2009-0009-DWQ as amended by 2010-0014-DWQ,* September 2, 2009 as modified on November 16, 2010, p. 3.

Agency, which assess individual proposals and their setting to determine if detailed hydrological analysis would be required, and if a peer review by a designated consultant should also be required.

Fortunately, existing policies contained in the EAGP, the CVGP and the ECAP, along with requirements for SWPPPs and water conservation and treatment requirements for landscaping supply the necessary preexisting policy and statutory guidance required for any project to design and build according to the hydrological requirements of the site on which it is located. These policies and implementation actions, existing laws and CEQA environmental review requirements, would substantially avert the potential for significant effects as a result of construction, grading or operation / occupancy, whether or not the amended CCAP is adopted.

Implementation of the CCAP would include improvements to the County'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 CCAP 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 CCAP would be required to comply with Alameda County Municipal Code Chapter 15.36, which specifies grading, erosion, and sediment control standards. For CCAP 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 National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Compliance with the Construction General Permit requires the applicant to develop a project-specific Stormwater Pollution Prevention Plan (SWPPP), which would identify source control, site design, and treatment-control Best Management Practices (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. **Measure AG-1.2** would increase soil organic matter and soil carbon content in working lands through carbon farming practices that build healthy soil and increase water capture, thereby decreasing runoff, increasing water infiltration, and protecting water quality. Through compliance with all applicable regulations and permits, implementation of CCAP measures under the program would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

The implementation of the CCAP would involve ground disturbing activities, including 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. CCAP **Measure AG-2.1** would increase the number of trees in the Plan area which would require water consumption for irrigation. However, landscaping for new or rehabilitated landscapes that increase irrigated landscape area by 2,500 square feet or more and are part of a project requiring a building permit would be required to adhere to Alameda County Municipal Code Chapter 17.64 - Water Efficient Landscape Ordinance (also promoted by CCAP **Measure AG-2.2**.)

Implementation of the CCAP measures related to Land Use and Mobility (LU Measures), Buildings (BE Measures), and Infrastructure (IN Measures) would primarily occur in areas developed with impervious surfaces that do not provide for substantial groundwater recharge. CCAP 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. For example, **Action AG-2.2.2** encourages use of permeable pavement,

vegetative buffers, and other nature-based solutions to reduce the impacts of climate hazards and improve community resilience. Furthermore, implementation of the CCAP 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. **Measure IN-4.1** and **Measure IN-4.2** would reduce indoor and outdoor water use, and **Measure IN-4.3** would increase the capture and use of recycled "greywater" for landscape use.

The implementation of CCAP measures that would involve ground disturbing activities, including 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 new bicycle infrastructure (**Measure LU-1.1** and **Measure LU-1.2**), installation of EV charging infrastructure (**Measure IN-2.1**), and tree planting (**Measure AG-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 such as sidewalks and bicycle infrastructure would occur along existing developed roadways. Tree planting focuses on the urban unincorporated areas and would occur within spaces like public rights-of-way and new development projects. Further, future projects would be required to comply with Alameda County Municipal Code Chapter 15.36, which specifies grading, erosion, and sediment control standards.

The implementation of CCAP 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 such sidewalks and bicycle infrastructure would occur along existing developed roadways. Implementation of CCAP measures would not substantially increase the amount of impervious surface in the Plan Area. Construction and postconstruction 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 CCAP would reduce the potential for flooding in the Plan Area by, for example, encouraging use of permeable pavement and vegetative buffers (**Action AG-2.2.2**).

The implementation of CCAP measures that would result in ground disturbing activities, including 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 CCAP 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.

Flooding hazards within the Plan Area are located along waterways identified in Map S-6 of the County's *Safety Element*, and a small area of western San Lorenzo along San Francisco Bay, including inland waterways, is at risk of tsunami. The implementation of CCAP measures does not specify placement of any structures in or adjacent to these hazards, and any future projects would be required to comply with Alameda County Municipal Code Section 16.16.090, which requires developers of proposed subdivisions located in flood hazard areas to provide adequate drainage to reduce exposure to such hazards and design

water supply and sanitary sewer systems to minimize infiltration of flood waters into the systems and discharges of sewage and other contaminants into flood waters. The CCAP does not promote construction of buildings or other facilities or store materials on site where they could be inundated by tsunami, floodwater, or seiche. In addition, as described above, CCAP 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. In addition, **Action BE-4.2.1** would require new buildings located within or in the vicinity of the 100- or 500-year floodplain, or in areas that are historically prone to flooding, to be designed and located to allow unrestricted flow of flood waters or be able to withstand flood forces.

As discussed above, future projects would be required to comply with the Alameda County Municipal Code Section 16.16.090, which requires developers of proposed subdivisions located in flood hazard areas to provide adequate drainage to reduce exposure to such hazards and design water supply and sanitary sewer systems to minimize infiltration of flood waters into the systems and discharges of sewage and other contaminants into flood waters. 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 CCAP 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.

Implementation of CCAP would not: violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality groundwater quality; substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial on- or offsite erosion or siltation, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows; in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **No significant adverse impacts related to hydrology and water quality would occur**, and **no mitigation is required.**

11. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				x
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?				x

Setting

Unincorporated Alameda County is characterized by a wide range of existing land uses comprising three Area Plans (*Castro Valley General Plan*, *Eden Area General Plan*, and *East County Area Plan*) and including seven distinct planning areas (Ashland, Cherryland, Hayward Acres, San Lorenzo, Castro Valley, Fairview, and Sunol.) These areas including residential developments, commercial/retail/office uses, industrial uses, as well as natural features, such as open space, agricultural and working lands, parks, and vacant land. Land uses within the Plan Area primarily consist of residential uses with distinct residential neighborhoods and supporting businesses, industrial employment, and commercial services. Agricultural land is the most prevalent land use pattern within the Plan Area, located largely within the East County Area Plan in the eastern portion of the county. Parks, open space, and commercial recreational uses provide substantial acreage for general recreation in the Plan Area. Commercial, office, and retail uses are located along main commercial corridors including Castro Valley Boulevard (located in the *Castro Valley Central Business District Specific Plan* area), Mission Boulevard and East 14th St (located in the *Ashland Cherryland Central Business District Specific Plan* area), and Hesperian Boulevard (located in the *San Lorenzo Village Specific Plan* area). Industrial, manufacturing and distribution facilities uses are limited to a small area of San Lorenzo along San Francisco Bay[43].

The ECAP, CVGP, and EAGP already include policies and restrictions directly intended to avoid and/or mitigate adverse environmental impacts of development and land use. It is beyond the scope of this analysis to review all of these policies as they address urban development or urban and rural land use, but the three plan documents are incorporated herein by reference. The EAGP does not contain separate policies regarding land use or development outside of the Urban Growth Boundary. The CVGP contains policies and programs that apply to both urbanized areas and to the Castro Valley Canyonlands, which lie outside the Urban Growth Boundary. CVGP *Figures 1-1* and *1-2* note that all areas outside Castro Valley's Urban Area but within its Planning Area are respectively designated as "Measure D" lands (*Figure 1-1*), or "Resource Management."[44] This is not critical for the great majority of measures contained in the CCAP as these measures almost all apply to the Urban Areas rather than the rural, wild areas. Many of those measures are represented and discussed under other topic headings in this IS/ND, such as in Section 6, Cultural Resources, and Section 7, Geology and Soils.

[43] Alameda County Community Development Agency. *General Plan, Specific Plans & Ordinances.* Accessed January 19, 2024. https://www.acgov.org/cda/planning/generalplans/index.htm.

[44] Alameda County, *Castro Valley General Plan*, Figures 1-1 and 1-2, pp. 1-7 to 1-9.

Zoning Ordinance. The Alameda County Zoning Ordinance provides guidance for land use of all kinds (with the exception of Surface Mines, which in Alameda County and most jurisdictions are covered by separate Surface Mining Ordinances), and for development restrictions and limitations for every land use type. The Zoning Ordinance provides limits for height, lot coverage, setbacks, vehicle parking, slope development, fencing and other key development characteristics. In terms of general land use, the Zoning Ordinance would have limited application, but would have substantial effect on details of development whether or not the CCAP measures are applied.

Habitat Conservation Plan. Alameda County does not have an adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP), although it participated in development of the East Alameda County Conservation Strategy (EACCS). The EACCS is not a formal HCP or NCCP, and though it serves a similar purpose of coordinating the approach to mitigation of various projects to support conservation and/or recovery of listed species,[45] it does not establish policies or requirements that, if not served or complied with, would result in adverse environmental impacts. However, there are policies in the ECAP that serve the same purposes of conservation.

Discussion of Impacts

Typically, 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 CCAP would not result in development that could physically divide a community. For example, construction of sidewalks and bikeways (**Measure LU-1.1**) would reduce vehicle congestion and encourage bicycle trips, which would increase community connectivity and access. **Measure LU-1.2** proposes programmatic improvements that would increase access to walking and bicycling, and **Measure LU-2.1** promotes partnership with transit agencies to improve the reliability, affordability, and convenience of public transportation. The measures in the CCAP are intended to improve, rather than impair, community connectivity and access throughout the unincorporated county. Therefore, implementation of the CCAP would not result in construction of physical barriers that would change the connectivity between developed areas or physically divide an established community.

CCAP measures would include improvements to the County's existing pedestrian, bicycle, and transit network within developed areas. Implementation of the CCAP would comply with all applicable zoning regulations. Furthermore, as discussed in Section 3, "Air Quality," Section 8, "Greenhouse Gas Emissions," and Section 17, "Transportation," CCAP 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 the CCAP 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 significant adverse land use and planning impacts would occur, and **no mitigation is required.**

[45] http://www.eastalco-conservation.org/documents/090611-eaccsfaq.pdf

12. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				x
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?				x

Environmental and Regulatory Setting

Alameda County has several areas that are designated as "Regionally Significant Construction Aggregate Resource Areas" and potential Mineral Resource Zones (MRZs) by the State of California Mining and Geology Board. In these areas, there is a high likelihood that deposits of gravel or hard rock of a high quality suitable for construction exist and could be extracted economically or become available in the future. These areas are so designated because the State recognizes the high value of these deposits to State infrastructure and industry and seeks to ensure that these deposits remain available for permitted use when necessary and that these resources are protected from incompatible uses. The Surface Mining and Reclamation Act (SMARA) requires potentially incompatible uses to minimize their impacts on mineral resource availability through conditions of approval. A lead agency must prepare a written statement specifying its reason for permitting a use that could threaten the ability to extract Regionally Significant Construction Aggregate Resources for submittal to the State Geologist for review. In Alameda County, "regionally significant" mineral resources include extensive sand and gravel deposits, which are found primarily in ancient lakebeds and broad river channels (notably in the Livermore-Amador Valley and the Sunol Valley), and basaltic hard and fractured rock deposits that are found in limited locations on hillsides and ridgetops. Most of these deposits are either under extraction or permitted for future extraction, but a small number of remaining unpermitted deposits are found in scattered locations in Eastern Alameda County and remotely in the ridgelines extending southward from Castro Valley. No regionally significant mineral resources are currently designated, nor mining permits currently extant, in the urban area.

Discussion of Impacts

The relative scarcity of unpermitted Regionally Significant Construction Aggregate Resource Areas in the County, coupled with the characteristic urban / suburban focus of most of the CCAP measures, make it very unlikely that these measures, or any proposal that may result from them, would intrude onto or within proximity of any State-designated Regionally Significant Construction Aggregate Resource Area so as to result in a land use incompatibility.

No significant adverse impacts to mineral resources would occur, and **no mitigation is required.**

13. NOISE Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?			x	
b) Generation of excessive groundborne vibration or groundborne noise levels?			x	
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?			x	

Environmental Setting

The rural and agricultural areas of the East County and Castro Valley Canyonlands may be characterized as having low to medium noise levels, higher on average near the roadways in the area, and less so at distance from those roadways. In the narrower valleys and canyons, homes are generally located by necessity closer to the roads, but traffic volumes on those roads, with the exception of Crow Canyon Road, are very low. Generally, new development may result in new noise that could disturb existing residents, such as added traffic noise, new outdoor activities or commercial activities. Development may also result in the introduction of persons into environments with existing high noise levels. Temporary noise resulting from construction activity may also be significant.

The suburban/urban areas of the County, including Castro Valley and all of the Eden Area, are characterized by typical urban sounds at low to high levels – noise from vehicle traffic of greatly varying levels from day to night and weekday versus weekend, railroads, aircraft, occasional construction activities, and the sounds of commercial and domestic activities such as ventilation systems, lawnmowers and yard equipment, the sounds of people and children where outdoor activities take place (child care facilities, for example) and other miscellaneous noise sources. Parks and schools experience the sounds of sports activities, unstructured children's play, and outdoor gatherings. As with the rural areas, new development may result in new noise that could disturb existing residents, such as added traffic noise, new outdoor activities or commercial activities, although in the urban setting such added uses would be less noticeable and would be mathematically less likely to result in a significant impact. Development may also result in the introduction of persons into environments with existing high noise levels.

Regulatory setting

The *Noise Element* (a part of the Alameda County General Plan) provides definitions for specific concepts of environmental noise, such as L_{dn}, the day-night average noise level measured in decibels (dB), which is

weighted to give more significance to nighttime noise. Other key terms include the dBA (weighted-average decibels), and Community Noise Equivalent Level (CNEL) which is a measure of average community noise levels such as generated by a major roadway, transit corridor or airport runway. Another term is L_{10}, defined as the level of sound exceeded 10 percent of the time, such as during the morning and evening peak hour traffic commute periods. Definitions of noise terms are also provided in the County Noise Ordinance.[46]

The *Noise Element* establishes Countywide goals, objectives, and principles (or policies) to protect residents against excessive, unnecessary, and unreasonable noises, and promotes compatibility among land uses through protection of sensitive land uses from unwanted noise. Separate policies for unincorporated areas authorize the County to adopt regulations on noise pollution, including high noise levels, frequencies, and duration of noise. In general, however, the focus of the *Noise Element* is on incompatible land uses, and exposure to land uses to unwanted noise such as freeways.

Alameda County's *Noise Ordinance* (Alameda County Municipal Code Chapter 6.60) prohibits specific noise levels of between 45 and 70 dBA from being exceeded for greater than specific numbers of minutes per hour depending on the receiving land use, with more limitations during nighttime than during daytime, and lower thresholds for noise exposure within commercial areas. For example, the exterior noise level for either a single- or multiple-family residence, school, hospital, church, public library, or commercial property may not exceed 60 dBA for more than 5 minutes in any one-hour time period between 7 a.m. and 10 p.m., or 55 dBA for more than 15 minutes during the same time period. The Ordinance, however, exempts construction activities from such limits, provided they are limited to the hours of 7 a.m. and 7 p.m. on weekdays, and between 8 a.m. and 5 p.m. on Saturdays and Sundays.[47]

The *East County Area Plan* (ECAP) also contains policies directly related to noise and development of agricultural facilities such as CHBTFs. Under the heading of Environmental Health, the Noise section has a stated goal to minimize East County residents' and workers' exposure to excessive noise, and related policies, such as Policy 289 to limit or appropriately mitigate new noise-sensitive development areas exposed to projected noise levels exceeding 60 Db, and Policy 289 to require noise studies as part of development review for projects located in areas exposed to high noise levels and in areas adjacent to existing residential or other sensitive land uses. Implementation Programs to carry out these policies include Program 104, to require the use of noise reduction techniques (such as buffers, building design modifications, lot orientation, soundwalls, etc.) to mitigate noise impacts resulting from both transportation-related and stationary sources.

Both the *Castro Valley General* Plan (CVGP) and the *Eden Area General* Plan (EAGP) contain Noise Elements which extensively address noise issues in the suburban and urban core areas. For example, the EAGP contains policies too numerous to list separately, but which fall into the following goal categories:

- **Goal N-1 – Protect citizens from excessive noise** – includes policies to control the location of sensitive land use relative to noise sources; noise standards for interior and exterior spaces; standards for residential uses located near railways, freeways and aircraft operations; requirements for acoustical studies and architectural designs that incorporate noise reduction.

[46] Alameda County , *Noise Element of the Alameda County General Plan*, Adopted by Board of Supervisors July 31, 1975, As Revised September 1975 and Amended May 5, 1994.

[47] Ibid., Section 6.60.040 and Table 6.60.040A and 6.60.040B.

- **Goal N-2 – Minimize the noise impacts from the construction and operation of land uses –** includes policies to conduct noise analyses for new projects that include mitigation for noise effects; basic requirements for noise mitigation; noise-reducing site design techniques; construction activity minimum requirements near sensitive receptors and as a requirement of permit approval; and minimum noise standards for commercial and industrial land uses to avoid impacts on sensitive receptors.
- **Goal N-3 – Control sources of excessive noise form transportation sources –** Policies and actions are included to explore and utilize innovative approaches to reduce noise levels on local roadways and to design new roadway construction to "build in" noise reduction.
- **Goal N-4 – Minimize noise impacts created by the operations of the [Hayward and Oakland Airports] –** Encourages the airports to use mitigation for noise impacts and to participate in public hearings and forums to establish good neighbor policies and attitudes when designing new projects and conducting operations.

The CVGP contains comparable and commensurate levels of noise policies to protect sensitive land uses from excessive noise levels. These two documents and their respective Noise Elements are incorporated by reference into this discussion.

Discussion of Impacts

The CCAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. Construction of new bicycle and pedestrian infrastructure (**Measure LU-1.1** and **Measure LU-4.2**), accessory dwelling units (**Measure LU-4.1**), solar power and other energy-generating technologies (**Measure BE-2.1** and **Measure BE-2.2**), EV charging infrastructure (**Measure IN-2.1**), recycled water infrastructure (**Measure IN-4.3**), cool pavements (**Action IN-6.3.3**), tree planting and other nature-based solutions (**Measure AG-2.1** and **Measure AG-2.2**), resilience hubs (**Measure HR-1.1**), new rooftop and canopy-cover solar panels (**Measure BE-1.1** and **Measure BE-1.2**), and tree planting activities **Measure AG-2.1** and **Measure AG-2.2** would result in noise during the construction phase. 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, operation of these projects would not result in any increases in permanent noise sources. Alameda County's *Noise Ordinance* (Alameda County Municipal Code Chapter 6.60) exempts construction activities from the County's noise standards, provided they are limited to the hours of 7 a.m. and 7 p.m. on weekdays, and between 8 a.m. and 5 p.m. on Saturdays and Sundays. Outside these hours, construction activities would be subject to the noise standards specified in Alameda County Municipal Code Chapter 6.60. 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}[48] (day) and 80 dBA L_{eq} (night)
- Commercial/Industrial: 100 dBA L_{eq} (day and night)

Implementation of the CCAP, including but not limited to **Measure LU-1.1**, **Measure LU-4.2**, **Measure LU-4.1**, **Measure BE-2.1, Measure BE-2.2**, **Measure IN-2.1**, **Measure IN-4.3**, **Action IN-6.3.3**, **Measure AG-2.1, Measure AG-2.2**, **Measure HR-1.1**, **Measure BE-1.1,** and **Measure BE-1.2**, would result in increases

[48] 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).

in ambient noise levels from construction-related vehicle trips that generate noise. Construction-related vehicle trips would travel along multiple roads throughout the County, 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 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 CCAP activities. Construction equipment that could be used includes concrete saws, 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[49].

During the normal daytime hours specified above, the construction activities for each project would be exempt from the County's construction noise requirements. If construction activities were to occur outside these hours, they would be subject to the County's noise standards. 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 County. 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 [50]. 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[51].

For construction activity along the loudest roadways in the County, construction noise would be masked by existing ambient noise levels. However, at other locations, such as in quieter, rural 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.

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[49] Federal Transit Administration. 2018 (September). *Transit Noise and Vibration Impact Assessment Manual.* https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-andvibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed April 3, 2023.

[50] California Department of Transportation. 2013 (September). *Technical Noise Supplement.* Division of Environmental Analysis. Sacramento, CA. Prepared by ICF International.

[51] See footnote 49

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 CCAP would be short-term, lasting for approximately one to two weeks. Construction activities 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 at an approximate rate of 250 to 350 feet per day. 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. Based on the above discussion, implementation of the CCAP 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.

Similarly, operation of projects described above would not introduce stationary or transportation-related sources of groundborne vibration or noise, and 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 CCAP, including but not limited to **Measure LU-1.1**, **Measure LU-4.2**, **Measure LU-4.1**, **Measure BE-2.1, Measure BE-2.2**, **Measure IN-2.1**, **Measure IN-4.3**, **Action IN-6.3.3**, **Measure AG-2.1, Measure AG-2.2**, **Measure HR-1.1**, **Measure BE-1.1,** and **Measure BE-1.2** 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, 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 at an approximate rate of 250 to 350 feet per day. 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.

Implementation of the CCAP would not result in substantial temporary increases in noise levels that would adversely affect human health or well-being in the County, and would not generate excessive groundborne vibration or groundborne noise levels.

No significant adverse noise impacts would occur, and **no mitigation is required**.

14. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?				x
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				x

Environmental Setting

The population of unincorporated Alameda County as of the 2020 U.S. Census was 152,107, which includes the urbanized areas of Castro Valley, Ashland, Cherryland, Hayward Acres, San Lorenzo, and Fairview, the rural residential area of Sunol, and numerous rural-residential and agricultural lands outside of the aforementioned planning areas. While portions of the urban unincorporated areas are relatively dense, the Castro Valley Canyonlands and the rural, unincorporated areas of the East County area range from very low density to extremely low density.

Discussion of Impacts

The proposed CCAP concerns the reduction of GHG emissions by a variety of measures, the bulk of which affect transportation, renewable energy and energy efficiency, green technology and carbon sequestration. Only a fraction of the measures would affect new development, and none of these measures would either encourage population increases or displacement of persons or housing.

Implementation of the CCAP would not directly or indirectly induce substantial unplanned population growth or displace substantial numbers of existing people or housing.

No significant adverse population or housing impacts would occur, and **no mitigation is required**.

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

Environmental and Jurisdictional Setting

Except in Fairview, which is served by the Fairview Fire Protection District, fire protection in the unincorporated County generally is provided by the Alameda County Fire Department (ACFD), which has a wide range of fire stations and equipment spread throughout the unincorporated areas. Fire protection and risk management also includes provision of services related to hazardous materials, paramedic services, urban search and rescue, fire prevention, and public education. Prevention of fires, accidents and injuries before they occur is accomplished through fire prevention, building code enforcement, and public education. ACFD and the Fairview Fire Protection District provide for review of Site Development Review proposals and building permits for projects within their districts to ensure fire protection is adequate. ACFD also has agreements for mutual cooperation with cities in the area, as well as with CalFire for the rural and wildlands areas.

Law enforcement in the unincorporated area is provided by the Alameda County Sheriff's Office (ACSO) via its local substations. ACSO provides numerous other services, including operations of the County Office of Emergency Services (OES), operating the County jail, Coroner services, and other duties.

The County constitutes a large geographic area, which is served by a variety of school districts, including:

- Castro Valley Unified School District (CVUSD)
- San Lorenzo Unified School District (SLUSD)
- Hayward Unified School District (HUSD)
- San Leandro Unified School District, serving the Hillcrest Knolls neighborhood of Castro Valley
- Pleasanton Unified School District in the western portion of the Livermore-Amador Valley
- Dublin Unified School District, serving an area west of Dublin on the Contra Costa County border
- The single-site Sunol Glen Unified School District in the Sunol Area

- Livermore Valley Joint Unified School District (LVJUSD) in the eastern portion of the Livermore-Amador Valley
- The single-site Mountain House Elementary School District on the far eastern boundary of the County

Park facilities in the Unincorporated County are provided by a mixture of park districts, primarily including the East Bay Regional Park District (EBRPD), the Livermore Area Recreation and Park District (LARPD) serving the Livermore-Amador Valley area, and the Hayward Area Recreation and Park District (HARD) that serves the City of Hayward and the unincorporated areas of Ashland, Cherryland, Hayward Acres, Castro Valley, San Lorenzo, and Fairview. There are very few state parks in Alameda County, with state lands limited to a few parks within cities along the western shoreline, Bethany Reservoir State Recreation Area northeast of Livermore, Lake Del Valle State Recreation Area south of Livermore, and a portion of the Carnegie State Vehicular Recreation Area (SVRA) on the extreme eastern edge of the County south of Tesla Road. The majority of the SVRA is in San Joaquin County. Public services in the County include roadway development and maintenance, provided by the County Public Works Agency, Social Services, Environmental Health Services including Vector Control, and Agricultural Inspection and Planning services.

Discussion of Impacts

No new development or areawide increases in population or density beyond those of the existing General Plan would be encouraged by the Measures in the CCAP, and per capita service ratios would theoretically remain the same with or without the CCAP amendment. The shifting of the location of development encouraged by the CCAP would not, in itself, result in significant changes in difficulty of providing essential services such as police and fire services as long as prevailing building and fire codes continue to be followed as required by law, and demand for the use of schools, parks and other public facilities would be unaltered. New development would generally be steered away from the urban-rural interface by the CCAP Measures, which would instead tend to direct new development toward redevelopment around transit hubs and community commercial centers, so that wildland fire risk would not be enhanced and would not require special effort on the part of firefighters.

The CCAP emphasizes renewable energy, such as through solar empowerment zones (**Measure BE-2.1**) and the use of possible solar panels over parking lots (**Measure IN-1.1**). As electrical installations, these types of projects would require specific consideration to minimize risk of electrical fire. However, as with any other electrical installation, conformance with the Building Codes would be required for any construction, and no specific increase in fire service would be required to accommodate these installations.

Implementation of the CCAP would not result in significant impacts on police and fire services, parks, schools, or other public facilities.

No significant adverse impacts to public services would occur, and **no mitigation is required**.

16. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				x
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			x	

Environmental Setting

See Section 15 *Public Services*, above.

Discussion of Impacts

As indicated in Section 15, *Public Services*, there is no expectation that implementation of the CCAP would increase demand or need for additional recreational facilities on parklands compared to that of the existing General Plan.

The CCAP does not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **Action AG-2.1.1** would require the County to partner with local park districts to ensure sustainable park maintenance and to make parks more accessible, safe, and comfortable for all, which may include providing more benches and shade in local parks, revitalizing and investing in parks that serve vulnerable communities, increasing the number of local parks throughout the unincorporated county, and improving transition points between parks and communities. Development of any new park or recreation facilities would require review through the CEQA process and/or the Conditional Use Permit or Site Development Review processes. Existing environmental protections contained in the EAGP, the CVGP and the ECAP and State law (discussed in previous sections), and CEQA environmental review requirements, would substantially avert any adverse physical environmental effects that might arise from future development of new parks.

No significant adverse recreation impacts would occur, and **no mitigation is required**.

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

Environmental Setting

Alameda County is served by a complex network of freeways, highways and local roads and transit services. Local streets, roads and highways also accommodate varying levels of pedestrian and bicycle travel. Interstate freeways serving the unincorporated County include I-880, I-580, I-680, and I-80 to the north of area, and other key highways include State Route 84 (including both Vallecitos and Niles Canyon Roads), State Routes 238 and 185 (Hesperian Boulevard) in the Castro Valley / Eden areas, and numerous major local roadways that provide more direct access to communities and neighborhoods. Many of these roads are used as commuter travel routes, while others provide local access to the neighborhoods and commercial areas that serve the area. Still others are only lightly used as access to rural or rural residential areas and properties in the County.

Rail transit services include Bay Area Rapid Transit (BART), the major regional rail system serving the Castro Valley, Eden and East County areas and providing connections to other Bay Area locations. Major stations that serve the unincorporated areas include the Castro Valley station in downtown Castro Valley, the Bay Fair BART station near the northern edge of the Eden Area; and the stations of the Tri-Valley, the Dublin and Pleasanton (Stoneridge) stations which, despite their locations in the cities, serve commuters and passengers from the unincorporated East County. Also, the Union Pacific Railroad routes that run north – south along the urban core of the East Bay and from Altamont Pass, through the Livermore-Amador Valley and into the urban core via Niles Canyon, provide a route for Amtrak rail service via the Capitol Corridor Express, along with the Altamont Corridor Express (ACE) trains that run four times daily from the Stockton area into the South Bay.

Surface transit services, specifically bus routes, are generally common throughout the urban core of Castro Valley and the Eden Area, and are provided by the Alameda - Contra Costa Transit District (AC

Transit). AC Transit has regularly scheduled bus services throughout the area including heavy service at commute hours in the morning and evening. In the Tri-Valley / Livermore – Amador Valley area, the Livermore Amador Valley Transit Authority (LAVTA) runs its "Wheels" bus service on weekdays and weekends with routes tailored to various times and purposes, such as school, commuting and shopping. Communities served include the municipalities of Dublin, Livermore and Pleasanton, and by extension the unincorporated areas surrounding them.

Regulatory Setting

The County's road and highway network is the subject of various federal, state and regional plans, as well as the County General Plan documents, which include planning policies regarding the transportation network. Federal and state funding of highways generally requires that regional plans meet specific standards, and past voter-approved initiatives also impose certain requirements, such as state Proposition 111 (approved in 1990) that required a Congestion Management Plan (CMP) in specified urban areas of California. Each local CMP must identify new highway and transportation projects to be included for funding in the State Transportation Improvement Program (STIP). Other important state laws have been adopted in recent years to address the role of transportation in climate change and greenhouse gas emissions (GHGs), in particular SB 375, legislation approved in 2008 which requires better planning and decision-making to coordinate transportation networks and land use development patterns, while still meeting the housing needs of the region.[52] The County's original 2014 CCAP also was prepared, in part, pursuant to SB 375.

At the Bay Area regional level, the Metropolitan Transportation Commission (MTC) is responsible for preparing and implementing a Regional Transportation Plan (RTP) for the nine-county San Francisco Bay Area, and updating it at least once every four years. *Plan Bay Area* 2050, adopted in 2021 in collaboration with the Association of Bay Area Governments (ABAG), serves as the Bay Area's RTP. The plan identifies how anticipated federal, state and local transportation funds will be spent in the region through 2050. It establishes a region-wide network of regional roads and highways, defined as the Metropolitan Transportation System (MTS), within which is the Alameda County roadway network subset that is the subject of the Congestion Management Plan (CMP).[53]

The Alameda County Transportation Commission (ACTC) is currently responsible for maintaining and funding the County CMP, as well as planning and administration of county-wide transportation improvements approved by the voters under Measure B, which included specific projects to improve roadways, transit, and bicycle and pedestrian travel.[54] ACTC Alameda Countywide Transportation Plan (CWTP), last updated in 2020, guides the CMP and identifies priority projects and improvements.[55] The CWTP includes a description of roadway characteristics, such as major areas of freeway congestion, measurements by hours of delay and travel speed, safety and existing measures to reduce and avoid congestion.[56]

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[52] Alameda County Transportation Commission, http://www.alamedactc.org/app_pages/view/1696, and *Administrative Draft - Alameda Countywide Transportation Plan*, September 1, 2011, p. 1-1.

[53] http://www.mtc.ca.gov/planning/plan_bay_area, and Alameda County Transportation Commission, *Draft Congestion Management Plan*, Sept. 2011, pp. ES-3 – ES-4.

[54] Alameda County Transportation Commission, *Alameda Countywide Transportation Plan 2020.* https://www.alamedactc.org/planning/countywidetransportationplan.

[55] Alameda County Transportation Commission, *Planning Page*: http://www.alamedactc.org

[56] Op. cit., pp. 3-2 – 3-5.

The County General Plan area plans (ECAP, CVGP, EAGP) contain numerous policies that address transportation and transit, both directly by encouraging transit, expanding bicycle and pedestrian facility expansions, and reducing single-occupant vehicle trips; and indirectly by encouraging climate-smart land use planning and transit-oriented development to enable residents to live in the community with minimal dependence on motor vehicles. The updated CCAP Measures also generally follow these guidelines and its adoption would be internally consistent with the General Plan as it presently exists.

For two reasons, the CCAP as a policy document would have a greater influence on the Castro Valley and Eden Areas than on the East County.

1 – The urban development measures contained in the CCAP are focused primarily on developed areas within the Urban Growth Boundary and/or near transit hubs; and the only transit hubs in unincorporated Alameda County are in Castro Valley and the Eden Area; otherwise, the transit hubs are located in cities where the CCAP would not apply; and

2 – In East County, most of the essential transportation facilities (roadways and transit hubs) directly serve urban development that is already in the urban core; no urban development is located on unincorporated lands in the East County. As a result, transportation-related CCAP measures, except for bicycle infrastructure on roadways, would have far less application in the East County than the jurisdictional urban areas of the Castro Valley and Eden Areas.

Thus, this analysis concentrates on the lands and roadways covered by the CVGP and the EAGP.

The CVGP and EAGP each contain many goals and policies related to transportation and the enhancement of alternative transportation modes. The EAGP, for example, contains the following general array of goals and policies, tailored to the communities of the Eden Area:

- **Goal CIR-1 – Provide attractive streets designed to serve a broad spectrum of land use patterns and travel modes** – includes policies to enhance roadways and new development to comfortably accommodate bicycles, transit and pedestrian modes as well as motor vehicles, and to adjust traffic control technologies to better accommodate bicycles and pedestrians.
- **Goal CIR-3 – Provide for efficient motor vehicles circulation** – Includes policies and actions to support regional efforts to improve the freeway, arterial and transit systems, along with measures to improve traffic congestion, street connectivity and emergency vehicle access.
- **Goal CIR-4 – Provide access and circulation along corridors and in Districts while respecting the intensity of adjacent development** – several policies to properly match street size, speed, access and parking to the adjacent developed environment.
- **Goal CIR-5 - Ensure that public transit is a viable alternative to driving… -** Numerous policies to encourage continued and improved transit service in the Plan area, including service frequency, hours and areas served are increased, and that opportunities for Transit-Oriented Development (TOD) be pursued.
- **Goal CIR-6 – Complete and enhance the pedestrian circulation network… -** Eleven major policies and four actions are included, designed to improve infrastructure, access, utility and attractiveness of facilities to encourage more pedestrian travel, and to direct future construction to follow TOD principles so that the pedestrian-transit network becomes a coherent and effective method of travel.
- **Goal CIR-7 – Promote bicycling as a form of transportation** – Seven major policies and three distinct actions are included to promote and enhance ease and opportunities for cycling, including street improvements, bicycle facilities and expanded bicycle path networks.

- **Goal CIR-8 – Promote adequate truck circulation while protecting neighborhoods from related impacts** – Several policies to coordinate and route truck traffic for efficiency and minimal effect on the community.
- **Goal CIR-9 – Minimize the negative effects of traffic on adjacent land uses and improve traffic safety** – Six policies and three actions would work to minimize the effects of traffic on neighborhoods using speed reduction, traffic calming, limiting roadway size to preserve neighborhood character, and using creative methods to mitigate noise and safety impacts.

The CVGP contains a complementary set of policies and actions, again designed to address transportation and traffic issues related to Castro Valley including Castro Valley Boulevard and the urban core.

Discussion of Impacts

Implementation of the CCAP 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 CCAP would implement new bicycle lanes through the County's Bicycle and Pedestrian Master Plan (**Action LU-1.1.1**), provide a bikeshare and EV share programs (**Measure LU-3.1**), increase transit ridership (**Measure LU-2.1**), and encourage transit-oriented development (**Measure LU-4.1**).

Implementation of the CCAP would not conflict with any measures included in the General Plan or the Alameda County Municipal Code. Retrofits to existing buildings would introduce some level of new vehicle trips; however, this increase in vehicle movement would be dispersed throughout the Plan Area and would not be substantial to the degree that any County standards would be exceeded.

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).

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 of 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 CCAP includes the GHG reduction measures that would meaningfully reduce the rate of VMT in the Plan Area over the long-term including, but not limited to:

- **Action LU-1.1.1:** Implement specific recommendations for improving bicycle and pedestrian infrastructure (e.g., bike paths, sidewalks) included in the 2019 Alameda County Bicycle & Pedestrian Master Plan for Unincorporated Areas and its future updates.
- **Action LU-1.1.2:** Continue to eliminate gaps in the existing network and improve bicycle and pedestrian connections to transit, schools, parks/trails, retail and employment centers, community/senior centers, and libraries as identified in the 2019 Alameda County Bicycle & Pedestrian Master Plan for Unincorporated Areas.
- **Action LU-1.1.3:** Work with Alameda County Transportation Commission, local cities, school districts, and community-based organizations to launch a Vision Zero program for the unincorporated county.
- **Action LU-1.1.4:** Consider establishing temporary and permanent car-free areas.
- **Action LU-4.2.1:** Develop incentive zoning for the inclusion of shared mobility and other transportation demand management measures. Incentive zoning could include parking reduction or substitution, greater floor-to-area ratios, increased dwelling units, and greater height allowances.
- **Action LU-5.1.1:** Modify the zoning code in accordance with Assembly Bill (AB) 2097 to remove parking minimums for new developments within half a mile of public transit and consider establishing parking maximums in new developments.
- **Action LU-2.1.1:** Request that AC Transit evaluate the potential for increasing service frequency on key routes.
- **Action LU-2.1.2:** Prepare formal request for AC Transit to extend bus rapid transit service to the unincorporated county and determine the conditions necessary for bus rapid transit route expansion.
- **Action LU-2.1.3:** Ensure that bus stops provide shade, weather protection, seating, lighting, route information, and are frequently cleaned and maintained.
- **Action LU-2.1.4:** Develop a "first and last mile" plan to connect riders to public transit.
- **Action LU-2.1.5:** Work with regional transit providers (e.g., BART, AC Transit) to make public transit safer for all riders.
- **Action LU-2.1.6:** Promote discounted transit passes such as the Clipper START program and the Student Transit Pass Program.

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 CCAP.

The implementation of the CCAP would result in ground disturbing activities, including grading and excavation, that could, depending on their location, result in alterations of public roadways. Construction of new bicycle and pedestrian infrastructure (**Measure LU-1.1** and **Measure LU-4.2**), accessory dwelling units (**Measure LU-4.1**), solar power and other energy-generating technologies (**Measure BE-2.1** and **Measure BE-2.2**), EV charging infrastructure (**Measure IN-2.1**), cool pavements (**Action IN-6.3.3**), tree planting and other nature-based solutions (**Measure AG-2.1** and **Measure AG-2.2**), resilience hubs (**Measure HR-1.1**), and new rooftop and canopy-cover solar panels (**Measure BE-1.1** and **Measure BE-1.2**) 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 CCAP 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. Any future construction of the GHG reduction measures would need to comply with the relevant traffic- and street-related regulations overseen by the County.

Implementation of the CCAP's GHG reduction measures would not result in new development or land uses that would require installation of emergency access routes. However, construction of new bicycle infrastructure, for example, could permanently alter existing roadways that serve as emergency access routes. All future roadway improvements would be required to comply with the California Fire Code, adopted by reference in the Alameda County Municipal Code Chapter 6.04, which 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.

Implementation of the CCAP would not adversely affect the performance of the circulation system and would not conflict with any applicable transportation plans, ordinances, or policies; would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b); would not substantially increase hazards due to a geometric design feature; and would not result in inadequate emergency access.

No significant adverse transportation impacts would occur, and **no mitigation is required**.

18. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			x	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			x	

Environmental Setting

The unincorporated communities of Alameda County sit on the unceded ancestral homelands of the Ohlone, Bay Miwok, and Northern Valley Yokuts peoples, who are the original inhabitants of the region. These diverse groups of people prospered in the greater San Francisco Bay Area for millennia prior to European contact, using traditional land management practices to purposefully shape the region's ecosystems. Ohlone, Bay Miwok, and Northern Valley Yokuts people, and Indigenous peoples from many nations, continue to make their home in Alameda County today.

Regulatory Setting

Assembly Bill 52 of 2014

As of July 1, 2015, AB 52 was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Senate Bill 18 of 2004

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005); "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places." SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9)
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the

California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

Discussion of Impacts

The CCAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. 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, tribal cultural resources are common throughout the San Francisco Bay Area, and their locations often are unknown or confidential. Ground-disturbing activities associated with individual development projects during CCAP implementation could expose previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources and could be adversely affected by construction.

Adherence to the requirements of AB 52 would require Tribal consultation with local California Native American Tribes prior to implementation of project activities subject to CEQA. AB 168 would require Tribal consultation with local California Native American Tribes prior to implementation of project activities

subject to SB 35. In compliance with AB 52, a determination of whether project-specific substantial adverse effects on tribal cultural resources would occur along with identification of appropriate project-specific avoidance, minimization, or mitigation measures would be required.

Due to the programmatic nature of the proposed CCAP it is not possible to fully determine impacts of specific Measures on specific sites. Future projects subject to CEQA and SB 35 would require project-specific tribal cultural resource identification and consultation, and the appropriate avoidance, minimization, or mitigation would be incorporated. Project-specific tribal cultural resource consultation will occur when specific projects are implemented, and consultation conducted pursuant to the requirements of AB 52.

For the reasons above, implementation of the CCAP would not cause a substantial adverse change in the significance of a tribal cultural resource. **No significant adverse impacts to tribal cultural resources would occur**, and **no mitigation is required**.

19. UTILITIES AND SERVICES SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			x	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			x	
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			x	
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?				x
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				x

Environmental Setting

Water

The East Bay Municipal Utility District (EBMUD) is the principal supplier of municipal water in unincorporated Alameda County. Approximately 90 percent of the water used by EBMUD comes from the Mokelumne River watershed, and EBMUD transports it through pipe aqueducts to temporary storage reservoirs in the East Bay hills. EBMUD has water rights that allow for delivery of up to a maximum of 325 million gallons per day (MGD) from this source, subject to the availability of runoff and to the senior water rights of other users, downstream fishery flow requirements, and other Mokelumne River water uses. EBMUD is obligated to meet multiple operating objectives, including providing municipal water supply benefits, stream flow regulation, fishery/public trust interests, flood control, temperature management and obligations to downstream diverters. Among these factors, EBMUD's Mokelumne River flow commitments are generally tied to the variability in the Mokelumne River watershed rainfall and runoff patterns which govern the release requirements for the year[57].

[57] East Bay Municipal Utility District. *Water Shortage Contingency Plan 2020*. https://www.ebmud.com/download_file/force/9150/735?WSCP-2020-FINAL.pdf.

In the rural East County area of unincorporated Alameda County, water delivery is managed by Zone 7 of the Alameda County Flood Control and Water Conservation District (ACFCWCD) and, for a limited number of residents, by the San Francisco Public Utilities Commission. Most of the rural areas of the County, including the East County and Castro Valley Canyonlands, rely on on-site groundwater pumping for water supply and have no public water connection.

Northern California's water resources have been stressed by periodic drought cycles. Historical multi-year droughts have significantly diminished the supplies of water available to residents of California, including in unincorporated Alameda County. During the early stages of a drought and throughout a drought period, EBMUD, for example, imposes drought management programs to reduce customer demands, thereby saving water for the following year in case drought conditions continue. EBMUD established a goal of reducing water use by 20 percent from baseline levels by 2020 district-wide. Executive Order B-37-16, Making Water Conservation a California Way of Life, requires continued conservation beyond 2020. EBMUD's 2020 Urban Water Management Plan (UWMP) projected that the utility district would be able to meet current and future water needs during normal years, single dry, and second dry years through 2050 but would experience supply shortfalls in third dry years under base conditions starting in 2040. In high demand scenarios, EBMUD would experience supply shortfalls in third dry years as early as 2030, and in extreme drought scenarios as early as 2035. These shortfalls would remain even with mandatory 15 percent rationing[58]. As indicated by EBMUD's Water Supply Management Program, supplemental supply will also be needed to reduce the degree of rationing and to meet the need for water in drought years. EBMUD also released a *Water Shortage Contingency Plan* in 2020 which outlines actions to reduce water demand and mitigate water supply shortage[59].

Wastewater

Eden Area. Wastewater treatment service in most of the Eden Area is provided by the Oro Loma Sanitary District (OLSD), which serves Ashland, Cherryland, San Lorenzo, and Hayward Acres. OLSD collects wastewater flows from an approximately 12.8 square mile service area that includes the Eden Area. The OLSD treats flows collected from its service area, as well as from the Castro Valley Sanitary District (CVSan) service area at the Castro Valley/Oro Lomo Wastewater Treatment Plant (WTP) which has a permitted capacity of 20 MGD. The WTP is jointly owned by OLSD (75 percent) and CVSan (25 percent). An average daily flow of 11.1 MGD of sewage is treated each day. The treated effluent is disposed of through a discharge pipe into the San Francisco Bay [60]. According to the Public Facilities Element of the Eden Area General Plan, the capacities of the sewer facilities are considered adequate. OLSD also has a maintenance and capital improvement plan that provides for the continuing rehabilitation and replacement of sewer pipelines and other facilities. The plan identifies a comprehensive, multi-million dollar set of improvements including manhole sealing, manhole raising to grade, private property repair, sewer grouting, sewer lining, sewer replacement and lower lateral replacement[61].

[58] East Bay Municipal Utility District. *2020 Urban Water Management Plan*. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan.

[59] East Bay Municipal Utility District. *Water Shortage Contingency Plan 2020*. https://www.ebmud.com/download_file/force/9150/735?WSCP-2020-FINAL.pdf

[60] Oro Loma Sanitary District (OLSD). *2023 Statistical Information*. https://oroloma.org/statisticalinformation/.

[61] Alameda County Community Development Agency. *Eden Area General Plan*. Adopted March 30, 2010. https://www.acgov.org/cda/planning/generalplans/index.htm.

Castro Valley Urban Area. CVSan provides and maintains the sewage collection system that serves most of Castro Valley. Wastewater produced within CVSan's boundaries are collected and conveyed to the Castro Valley/Oro Loma WTP in San Lorenzo. CVSan transports, treats, and disposes of more than 3.5 million gallons of wastewater to the San Francisco Bay every day (CVSan 2023). OLSD provides the sewage collection system for the Hillcrest Knolls and El Portal Ridge neighborhoods. The only developed areas within the Castro Valley General Plan that continue to rely exclusively on private septic systems are off Crow Canyon Road beyond Cold Water Drive, off Cull Canyon Road, and in Palomares Canyon[62].

Fairview. OLSD provides wastewater collection and treatment services to over 90 percent of Fairview households. The remaining 10 percent are in the Castle Homes area of southeast Fairview and are served by private septic systems. Most of the sewer lines in Fairview are six-inch vitrified clay pipes. The pipes are being systematically replaced and upgraded to reduce infiltration and outflow of wastewater during heavy rains. Wastewater from Fairview is transported to the Castro Valley/Oro Loma Wastewater Treatment Plant in San Lorenzo[63].

East County/Castro Valley Canyonlands. The rural areas of eastern unincorporated Alameda County and the Castro Valley Canyonlands have very few if any connections to public wastewater treatment systems. The Alameda County Health Care Services Agency's Department of Environmental Health (DEH) oversees and inspects septic and leach field systems, which are utilized throughout the rural areas of the Castro Valley Canyonlands and the East County. DEH is responsible for ensuring that each such system complies with San Francisco Regional Water Quality Control Board (SFRWQCB) requirements, and that they are located, designed, constructed, and operated effectively to prevent surfacing or percolating of sewage effluent in a manner that could adversely affect public health or safety.

Stormwater

Alameda County Municipal Code Chapter 13.08 *Stormwater Management and Discharge Control*, serves to reduce or eliminate the pollution of receiving waters, including creeks and the San Francisco Bay, and to protect and enhance the water quality in county water bodies, including watercourses, wetlands, creeks, and flood control facilities, in a manner pursuant to and consistent with the Federal Clean Water Act, the State Porter-Cologne Act of 1969, and the county National Pollutant Discharge Elimination System (NPDES) permit. New development in Alameda County must comply with the requirements and criteria for stormwater quantity controls established in the Alameda County Hydrology and Hydraulics Criteria Summary (HHCS) to control surface runoff from new development[64].

Eden Area, Castro Valley, and Fairview. The Alameda County Flood Control and Water Conservation District (ACFCWCD) governed by the Alameda County Board of Supervisors owns and manages most storm drains in the Eden Area, Castro Valley, and Fairview, located in ACFCWD Zone 2. Zone 2 contains 81 miles of natural creek, five miles of earth channel, 12 miles of concrete channel, two miles of improved channel, 44 miles of underground pipe, and two pump stations. In addition, there are two reservoirs, Cull Canyon

[62] Alameda County Community Development Agency. *Castro Valley General Plan*. Adopted March 2012. https://www.acgov.org/cda/planning/generalplans/documents/CastroValleyGeneralPlan_2012_FINAL.pdf.
[63] Alameda County Board of Supervisors. *Fairview Specific Plan*. Adopted June 3, 2021. https://www.acgov.org/cda/planning/generalplans/documents/FairviewSpecificPlanAdopted060321.pdf.
[64] Alameda County Community Development Agency. *Safety Element*. Amendment adopted March 17, 2022. https://www.acgov.org/cda/planning/generalplans/documents/SafetyElement-updateapprovedbyBOS31722-FINAL.pdf.

and Don Castro, which are maintained for flood control. ACFCWD ensures that storm drains are designed and constructed to meet existing and projected needs for the area to avoid flooding. Stormwater runoff that does not infiltrate into the subsurface is directed into a constructed stormwater drainage system consisting of crowned streets, curbside gutters, drainage inlets, subsurface pipes, and engineered canals and creeks[65].

Surface water runoff from the Eden Area drains to Estudillo Canal (located in San Leandro), San Lorenzo Creek, or Bockman Canal, and eventually to the San Francisco Bay. In the Castro Valley and Fairview areas, stormwater flows down from the Hayward hills to storm drains, channels, and pipelines leading to San Lorenzo Creek and on to San Francisco Bay. Storm drainage flows into two channels: San Lorenzo Creek and Bockman Canal. San Lorenzo Creek begins at the top of the Dublin grade and runs from east to west through Castro Valley and the Eden Area. In general, the creeks throughout the San Lorenzo Creek Watershed are in a natural state. However, from Foothill Boulevard to the San Francisco Bay, San Lorenzo Creek exists primarily as a rectangular-concrete flood control channel. Bockman Canal is considered its own watershed which contains a series of storm drains and canals that drain western San Lorenzo. The canal itself runs east to west through San Lorenzo. Like the lower section of San Lorenzo Creek, Bockman Canal is concrete lined and tidal west of the westernmost Union Pacific railroad tracks [66]

East County. In the East County area, the Alameda County Flood Control and Water Conservation District (ACFCWCD) Zone 7 (commonly known as "Zone 7") manages storm water drainage systems. Stormwater in the area flows generally into open creeks and water bodies, but may pass through or into improved downstream water channels such as Arroyo Mocho.

Solid Waste

The *Alameda County Countywide Integrated Waste Management Plan Countywide Element*[67] (CoIWMP) was developed by StopWaste, also known as the Alameda County Waste Management Authority (ACWMA) – a public agency formed in 1976 by a Joint Exercise of Powers Agreement among the County of Alameda, each of the 14 cities within the County, and the two sanitary districts that provide solid waste collection service. The CoIWMP includes a Countywide siting element, a summary plan, a source reduction and recycling element, a household hazardous waste element, and non-disposal facility element. Each StopWaste member agency is responsible for preparing and updating the Source Reduction and Recycling Element (SRRE), Household Hazardous Waste Element (HHWE), and the Non-Disposal Facility Element (NDFE) for its jurisdiction. However, the County has a memorandum of understanding for joint preparation of the SRRE and NDFE. Waste reduction and disposal facilities in the county that require Solid Waste Facility Permits must conform to policies and siting criteria contained in the CoIWMP. The CoIWMP was first adopted in 1997 and most recently amended in April 2020.

[65] Alameda County Flood Control & Water Conservation District. *Get Involved: Neighborhood Zones: Zone 2*. https://acfloodcontrol.org/get-involved/get-involved-neighborhood-zones/get-involved-neighborhood-zones-zone-2/

[66] Alameda County Community Development Agency. *Eden Area General Plan*. Adopted March 30, 2010. https://www.acgov.org/cda/planning/generalplans/index.htm.

[67] Alameda County Waste Management Authority, *Alameda County Integrated Waste Management Plan, County-wide Element, including Siting Element & Summary Plan*, Adopted April 22, 2020, et. seq. https://www.stopwaste.org/resource/reports/countywide-integrated-waste-management-plan-coiwmp

Eden Area, Castro Valley, and Fairview. Solid waste disposal and recycling services in the Eden Area and Fairview are mostly provided by the Oro Loma Sanitary District (OLSD), which is a member agency of the ACWMA. OLSD contracts with Waste Management of Alameda County, a private hauler, for solid waste and recycling collection service[68]. The Castro Valley Sanitary District (CVSan) handles solid waste collection and disposal in most of the Castro Valley area, contracting with Alameda County Industries, a private hauler. Most solid wastes from these areas are transferred to the Altamont Landfill which has a remaining capacity of 65,400,000 cubic yards (91,560,000 tons) and a maximum permitted capacity of 124,400,000 cubic yards (174,160,000 tons). The estimated cease operation date for the landfill is December 1, 2070 [69].

East County. Alameda County's Waste Program, a program of the Community Development Agency (CDA), oversees solid waste collection and organics waste reduction and recycling in the unincorporated areas of the County (excluding the areas within the Castro Valley Sanitary District and the Oro Loma Sanitary District). The County's Waste Program is implemented under the *Alameda County Solid Waste Collection and Organic Waste Reduction Ordinance* and the *Alameda County Solid Waste Collection and Organic Waste Reduction Regulations*. Waste Connections, a private hauler, has been authorized to provide solid waste and recycling services in County Collection Zone 1, which includes the unincorporated areas around the City of Livermore. The remainder of the County's unincorporated Waste Program Jurisdiction is not currently under an agreement with a particular hauler. As of this writing, the County is in the process of authorizing additional haulers[70].

Electricity, Natural Gas, and Telecommunications

PG&E supplies natural gas to most of unincorporated Alameda County. Ava Community Energy, a Community Choice Energy Service joint powers authority serving local jurisdictions, including unincorporated Alameda County, within Alameda and San Joaquin Counties, supplies electricity to its member jurisdictions, which is delivered via PG&E infrastructure. Telecommunications services are provided by private companies, including AT&T and Xfinity.

Discussion of Impacts

Implementation of the CCAP would not induce increased development or population growth directly or indirectly because does not encourage or discourage development on its own. Instead, it encourages the County to focus development that is already anticipated in the County General plan documents to areas and to styles that can be optimized for public transportation use and energy efficiency. In other words, taken out of context, these measures that ostensibly have potential for impact, when matched to existing policies in the CVGP and the EAGP, instead would result in less-than-significant effects. 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 as a result of the CCAP.

[68] Alameda County Community Development Agency. *Eden Area General Plan*. Adopted March 30, 2010. https://www.acgov.org/cda/planning/generalplans/index.htm.

[69] CalRecycle. *Altamont Landfill and Resource Recovery*. 2023. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7.

[70] Alameda County Community Development Agency. *Alameda County's Waste Program*. Accessed January 20, 2024. https://www.acgov.org/wasteprogram/.

Implementation of the CCAP would incrementally increase electricity consumption, for example through measures to increase the installation of EV charging stations, consume energy more efficiently within buildings, install on-site solar energy systems, 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 this IS/ND 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, CCAP implementation would increase the number of publicly-available charging stations, which increases off-peak hour charging when ample grid capacity is available. Ava Community Energy/PG&E rate plans would also result in off-peak charging. 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). CCAP measures resulting 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 CCAP's support for transitioning from natural gas to electric and more efficient natural gas consumption would lessen and not increase demand for natural gas infrastructure.

Implementation of the CCAP would involve ground disturbing activities, including 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. CCAP implementation would increase the number of trees in the Plan Area which would require water consumption for irrigation. However, landscaping for new or rehabilitated landscapes that increase irrigated landscape area by 2,500 square feet or more and are part of a project requiring a building permit would be required to adhere to Alameda County Municipal Code Chapter 17.64 - Water Efficient Landscape Ordinance (also promoted by CCAP **Measure AG-2.2**.)

Implementation of the CCAP measures would primarily occur in areas developed with impervious surfaces and existing stormwater infrastructure. Additionally, CCAP 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, **Action AG-2.2.2** encourages use of permeable pavement, vegetative buffers, and other nature-based solutions to reduce the impacts of climate hazards and improve community resilience, which could also have the effect of increased groundwater recharge. **Measure IN-4.1** and **Measure IN-4.2** would reduce indoor and outdoor water use.

Implementation of the CCAP 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.

Implementation of the CCAP 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. Implementation of the CCAP would not exceed the capacity of any wastewater treatment provider. Implementation of the CCAP 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 CCAP.

No significant adverse impacts related to Utilities and Services Systems would occur, and **no mitigation is required.**

20. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			x	
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?			x	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			x	
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?			x	

Environmental Setting

The areas most susceptible to wildfire across the entirety of Alameda County are the central and southeastern portions of the unincorporated county, largely because of their topography. There are approximately 33,000 unincorporated county residents that are at risk of being directly affected by wildfire that reside within a "High" or "Very High" fire hazard severity zones (as determined by CAL FIRE, discussed further below). Thousands of homes and dozens of critical facilities are directly threatened by wildfire events. In addition, wildfire-induced loss of power affecting facilities could diminish emergency dispatching, communications, and response capabilities, especially when coupled with evacuation-related traffic congestion[71].

Of the 21 hazard events resulting in Major Disaster Declarations that Alameda County, as a whole, has experienced from 1953 to 2021, two of them were wildfire events[72]. In addition to these two wildfire events, it should be noted that Alameda County has been notably affected by other wildfires that have resulted in Major Disaster Declarations, including the SCU Lightning Complex Fire in 2020, which burned over 396,000 acres in the county and was one of the largest wildfires in California history[73]. However,

[71] Alameda County Community Development Agency. *Safety Element (2024 draft amendment).* Accessed January 22, 2024. https://www.acgov.org/cda/planning/ccapse-public-draft.htm.

[72] Federal Emergency Management Agency. 2021. Disaster Declarations for States and Counties. Available: https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties. Retrieved August 28, 2022.

[73] County of Alameda. *2021 Alameda County Local Hazard Mitigation Plan*. https://lhmp.acgov.org/documents/FinalHMP_AlamedaCo_Mar2022.pdf. Accessed July 15, 2022.

wildfires originating outside of Alameda County's boundaries, such as the SCU Lightning Complex Fire, are not included in the county's count of hazard events resulting in Major Disaster Declarations.

Wildland Urban Interface (WUI) Classification

The Governor's Office of Planning and Research (OPR) has recognized that although high-density structure-to-structure loss can occur, structures in areas with low- to intermediate-density housing were most likely to burn, potentially due to intermingling with wildland vegetation or difficulty of firefighter access. In general, increasing density decreases the risk of wildfire. The risk of loss of human life, property, natural resources, or economic assets from wildfire is highest at the Wildland Urban Interface (WUI), areas of urban development located adjacent to or even within wildland areas. Development that has spread into less densely populated, often hilly areas has increased the number of people living in heavily-vegetated areas that are prone to wildfire. Approximately one-third of houses in California are within the WUI area[74]. It is important to note that there are varying definitions of what constitutes a WUI, and some local or regional agencies consider some areas to be WUI that are not defined as Wildland Interface or Intermix zones under the Wildland-Urban Interface Building Standards in CCR Title 24, Part 2; these standards are discussed under Regulatory Setting below. Wildland Urban Interface is dense housing adjacent to vegetation that can burn in a wildfire; Wildland Urban Intermix is housing development interspersed in an area dominated by wildland vegetation subject to wildfire; Wildfire Influence Zone is wildfire susceptible vegetation up to 1.5 miles from Wildland Urban Interface or Wildland Urban Intermix[75].Within the unincorporated county, there are over 25,000 residents residing in interface areas, over 4,000 residents residing in intermix areas, and over 31,000 residents residing in influence areas. Each represents approximately 11.1 percent, 1.8 percent, and 13.7 percent of the unincorporated county population, respectively[76].

Very High Fire Hazard Severity Zone

In California, federal, state and local agencies share responsibility for wildfire prevention and suppression. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). Though the FRA does exist within the county, it is all encompassed within incorporated city limits, and thus, is not discussed here. The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas (SRA). The California Department of Forestry and Fire Protection (CAL FIRE) manages SRAs. All incorporated areas and unincorporated lands not in FRAs or SRAs are classified as Local Responsibility Areas (LRA).

While nearly all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (Public Resources Code 4201-4204, California Government Code 51175-89). The primary factors that increase an area's susceptibility to fire hazards

[74] California Governor's Office of Planning and Research (OPR). 2020. https://www.opr.ca.gov/docs/20201109-Draft_Wildfire_TA.pdf.

[75] CAL FIRE. *GIS Mapping and Data Analytics*. Accessed January 22, 2024. https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/GIS-Mapping-and-Data-Analytics.

[76] County of Alameda. *2021 Alameda County Local Hazard Mitigation Plan*. https://lhmp.acgov.org/documents/FinalHMP_AlamedaCo_Mar2022.pdf. Accessed July 15, 2022.

include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as Fire Hazard Severity Zones (FHSZ). There are three levels of severity: 1) moderate FHSZs; 2) high FHSZs; and 3) Very High Fire Hazard Severity Zones (VHFHSZ). Only the VHFHSZs are mapped for LRAs. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildland fires. However, none of the fire zones specifically prohibits development or construction. To reduce fire risk under State regulations, development within VHFHSZs must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life in those areas. CAL FIRE develops initial boundaries for VHFHSZs throughout California, but the final boundaries of a VHFHSZ are adopted by each jurisdiction.

Eden Area, Castro Valley, and Fairview

According to the Eden Area General Plan, the Eden Area does not fall within any VHFHSZ, although the hillside area to the northeast of Ashland is within a VHFHSZ. Therefore, wildland fires are not a concern in the Eden Area. According to CAL FIRE, there are some areas in the eastern portion of the Eden Area that are within the WUI Interface and Influence zones.

The Castro Valley General Plan indicates that the areas with the greatest wildfire risk are along the perimeters of the community to the north, east, and south where residential neighborhoods border undeveloped wooded or grassy areas. As indicated in the Castro Valley General Plan, wildfire risk is reduced in areas where development meets more stringent design requirements. Fire risk is also reduced in areas with public streets, which are typically better maintained and where parking restrictions are enforced. Most of the Castro Valley Canyonlands and small portions of northeastern Castro Valley proper are designated SRA VHFHSZ/HFHSZ or LRA VHFHSZ. Castro Valley includes areas within the WUI Intermix and Influence Zones.

CAL FIRE does not currently consider most of Fairview to be a high hazard area; however according to the Alameda County Local Hazard Mitigation Plan, nearly 80 percent of Fairview residents live in a "High Fire Hazard" risk area. In addition, maps prepared by ABAG indicate that almost all of Fairview has been designated an Urban-Wildland interface fire threat area (Fairview Specific Plan 2021) and according to maps prepared by CAL FIRE the area is considered to be Wildland Urban Interface (WUI) Intermix or Interface zones according to CAL FIRE[77].

East County

According to Alameda County's *2021 Local Hazard Mitigation Plan*, a majority of the lands within the East County Area Plan are in a SRA high or moderate fire severity zone, with sizable SRA VHFSZs in the sparsely populated areas of far southeastern Alameda County and, notably, in and around the rural residential community of Sunol. The unincorporated East County areas of Sunol, South Livermore, North Livermore and Mountain House contain areas within the WUI Urban Influence, Urban Interface, and/or Urban Intermix zones. The largest wildfire to occur in Alameda County occurred in East County in 2020: the SCU

[77] CAL FIRE. *GIS Mapping and Data Analytics*. Accessed January 22, 2024. https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/GIS-Mapping-and-Data-Analytics.

Lightning Complex burned 396,624 acres (24,0642 acres within Alameda County) and destroyed 222 structures in Santa Clara, Contra Costa, Alameda, Stanislaus, and San Joaquin Counties[78].

Regulatory Setting

California Fire Code

The State of California provided a minimum standard for building design through the 2022 CBC, which is located in Part 2 of Title 24 of the California Code of Regulations. The 2022 CBC is based on the 2021 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

The following includes applicable wildfire goals and policies from the Alameda County Safety Element, Eden Area General Plan, Castro Valley General Plan, and East County Area Plan.

Alameda County Emergency Operations Plan

The Alameda County EOP establishes policies and procedures to guide Alameda County's preparation for, response to, and recovery from natural or human-caused disasters. The EOP prioritizes saving lives, protecting health and safety, protecting property, and preserving the environment. The EOP includes the roles and responsibilities for local agencies in the event of a disaster to effectively coordinate a county-wide response[79].

Alameda County Local Hazard Mitigation Plan

Alameda County adopted the 2021 Local Hazard Mitigation Plan (LHMP) in March 2022[80]. This plan identifies the County's vulnerability to various hazards including wildfire and includes recommended mitigation measures to reduce the risk of these hazards. The plan includes mitigation measures such as implementation of a red flag warning system, implementation of the Defensible Space Fuel Reduction Program, fireproof costing of critical assets, implementation of a structure ignition zone assessment for homeowners, and hazardous fuel reduction.

Alameda County Community Wildfire Preparedness Plan

The Alameda County Community Wildfire Preparedness Plan was adopted in 2015 and contains an analysis of wildfire and wildfire risk in the wildland-urban interface areas of Alameda County. The plan contains recommendations including the following to support new development and construction:

[78] County of Alameda. *2021 Alameda County Local Hazard Mitigation Plan*. https://lhmp.acgov.org/documents/FinalHMP_AlamedaCo_Mar2022.pdf. Accessed July 15, 2022.
[79] Alameda County. Emergency Operations Plan. 2012. https://www.acgov.org/ready/documents/EmergencyOperationsPlan.pdf.
[80] County of Alameda. *2021 Alameda County Local Hazard Mitigation Plan*. https://lhmp.acgov.org/documents/FinalHMP_AlamedaCo_Mar2022.pdf. Accessed July 15, 2022.

- Integrate fire safety into local policies.
- WUI building standard (State Chapter 7A or more stringent) – roofs, gutters, windows, siding, vents, decks, Other. Educational materials to designers, builders, plan checkers and code officials to address inside the home, external shell, ember hardening and non-ignition zone. Use variety of outreach tools including DVD, website, flyers and presentations.
- Local building requirements for fire sprinklers.
- Review of infrastructure design – roads (access for evacuation and emergency equipment), bridges, water, underground utilities, fire stations. This is especially important where infill development occurs on previously un-buildable lots where existing infrastructure may not be adequate for protection of new development.
- Mechanisms for fuel reduction in community open space (privately or jointly owned).
- Provide education and tools to planning commissions to allow them to be more selective in their approval of appropriate new construction in very high fire hazard zones.

Alameda County Safety Element (Draft 2024 amendments)

The following are the applicable goal and policies related to wildfire in the Alameda County *Safety Element* (2024 draft amendments), which the County is in the process of updating to comply with Senate Bill 99, Assembly Bill 747, and Senate Bill 375[81].

Goal 2: To reduce the risk of urban and wildland fire hazards.

- **Policy P1:** Urban and rural development and intensive recreational facilities should be discouraged in hill open space areas lacking an adequate water supply or nearby available fire protection facilities.
- **Policy P2:** Hill area development, and particularly that adjoining heavily vegetated open space area, should incorporate careful site design, use of fire retardant building materials and landscaping, development and maintenance of fuel breaks and vegetation management programs, and provisions to limit public access to open space areas in order to minimize wildland fire hazards.
- **Policy P3:** Development should generally be discouraged in areas of high wildland fire hazard where vegetation management programs, including the creation and maintenance of fuel breaks to separate urban uses would result in unacceptable impacts on open space, scenic and ecological conditions.
- **Policy P4:** All urban and rural development, existing and proposed, should be provided with adequate water supply and fire protection facilities and services. Facilities serving hill area development should be adequate to provide both structural and wildland fire protection. The primary responsibility falls upon the owner and the developer.
- **Policy P6:** Plan new public and private buildings to minimize the risk of fires and identify measures to reduce fire hazards to persons and property in all existing development.
- **Policy P8:** The County shall limit residential development to very low densities in high fire hazard zones.
- **Policy P10:** The County shall require the design of adequate infrastructure if a new development is located in a state responsibility area (SRA) or in a very high fire hazard severity zone, including

[81] Alameda County Community Development Agency. *Safety Element (2024 draft amendment).* Accessed January 22, 2024. https://www.acgov.org/cda/planning/ccapse-public-draft.htm.

safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.

- **Policy P11:** The County shall require the use of fire resistant building materials, fire resistant landscaping and, and adequate clearance around structures in "high" and "very high" fire hazard areas.
- ***Draft* Policy P19:** The County shall require new residential development to include at least two emergency evacuation routes.
- ***Draft* Policy P20:** The County shall require development to provide additional access roads where feasible to provide for safe access of emergency equipment and civilian evacuation concurrently. The width, surface, grade, radius, turnarounds, turnouts, bridge construction, and lengths of fire apparatus access roads shall meet the requirements of the State and existing County requirements.
- ***Draft* Policy P21:** The County shall advise, and where appropriate, require all new developments to help eliminate impediments to evacuation within existing community plan areas, where limited ingress/egress conditions could impede evacuation events.
- ***Draft* Policy P22:** The County shall implement warning systems and evacuation plans for developed areas located within known hazard areas, and periodically analyze the capacity, safety, and viability of the County's evacuation routes under a range of emergency scenarios during updates to the County's Emergency Operations Plan.

Eden Area General Plan

The following goal and policy are included in the Public Facilities Element of the *Eden Area General Plan*.

Goal PF-4: Promote coordination between land use planning and fire protection.

- **Policy P1:** Fire hazards shall be identified and mitigated during the project review and approval process for new development.

Castro Valley Plan

The *Castro Valley General Plan* includes the following actions related to wildfire:

- **Action 10.1-4:** Interdepartmental Review Process. Establish an interdepartmental review process for proposed projects where Fire, Public Works, Planning, and other County Departments consult and establish reasonable and consistent requirements for streets, driveways, and emergency access prior to zoning approval.
- **Action 10.1-13**: Emergency Access Requirements for Hillside Areas. In hillside areas where street widths are substantially below the minimum 20-foot width standard required for emergency access, such as Upper Madison Avenue/ Common Road and Hillcrest Knolls, one or more of the following requirements should be imposed to ensure adequate emergency access: Sprinklers; Turnouts along the paved roadway; Additional on-site parking; Increased roadway width along the front of the property; or Parking Restrictions.

East County Area Plan

The *East County Area Plan* contains the following goal and policies related to wildfire:

Goal: To minimize the risks to lives and property due to fire hazards.

- **Policy 318:** The County shall limit residential development to very low densities in high fire hazard zones as identified by the Fire Hazard Severity Scale.
- **Policy 320:** The County shall consider, in reviewing development projects and subdivision of agricultural lands, the severity of natural fire hazards, potential damage from wildland and structural fires, the adequacy of fire protection services, road access, and the availability of an adequate water supply and pressure.
- **Policy 321:** The County shall require all new homes in rural residential areas that are located in "high" and "very high" fire hazard areas to be sited and designed to minimize risks to life and property.
- **Policy 322:** The County shall support fire service agencies in maintaining and improving existing Insurance Safety Organization (ISO) ratings.
- **Policy 323:** The County shall refer development applications to the County Fire Patrol, or local fire district, for review and recommendation.
- **Policy 324:** The County shall require the use of fire-resistant building materials, fire-resistant landscaping, and adequate clearance around structures in "high" and "very high" fire hazard areas.

Discussion of Impacts

The CCAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. The CCAP's goals are to 1) reduce communitywide GHG emissions consistent with State targets; and 2) increase community resilience to climate change impacts, *including wildfire*. The CCAP does not encourage nor discourage development on its own; instead, it encourages the County to focus development that is already anticipated in the County general plan documents to areas and to styles that can be optimized for climate mitigation, adaptation, and resilience to climate hazards.

Neither the CCAP nor the County's General Plan include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. Any future projects contemplated under the CCAP would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements as part of the projects' approval process. Infrastructure required to serve development allowed under the CCAP, as part of the County General Plan, would generally be located in and along established County roadways and would be located in areas that are already developed and are currently served by infrastructure. As such, implementation of the CCAP would not exacerbate wildfire risks, and all future development projects would be required to be consistent with the County's municipal code standards related to the California Fire Code. Actions implemented under the CCAP would be required to demonstrate consistency with applicable regulations governing wildfire safety.

Implementation of the CCAP would result in a variety of actions that include implementation of educational campaigns, new incentive policies, and installation of small equipment or upgrades at existing buildings throughout the unincorporated county. These actions would not interfere with implementation of an adopted emergency response plan, exacerbate wildfire risk, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. On the contrary, implementation of CCAP explicitly aims to reduce wildfire risk and increase resilience to wildfire and other

climate hazards in unincorporate Alameda County by, for example: encouraging building owners located in the WUI or in High or very high fire hazard severity zones to conduct hardening retrofits (**Action BE-4.1.2**), requiring new buildings located within "High" or "Very High" FHSZs to use fire-resistant building materials, fire-resistant landscaping, and adequate clearance around structures (**Action BE-4.2.3**), promoting the use of livestock grazing near development, especially on steep hillsides and vacant lots, to support fire fuel management (**Action AG-1.1.6**), requiring the County to consult with other local jurisdictions, water providers, and fire departments to ensure the adequacy of emergency water flow, emergency vehicle access, and evacuation routes prior to approving any new development (**Action HR-2.1.1**), requiring development of a structure ignition zone assessment program to help landowners increase building resilience to wildfire (**Action HR-3.2.1**), implementing vegetative fuels reduction projects beyond defensible space requirements (**Action HR-3.2.2**), requiring property owners to manage vegetative fire fuels on their property (**Action HR-3.2.3**), considering establishing an enforcement district for WUI areas (**Action HR-3.2.4**), promoting Diablo Firesafe Council programs (**Action HR-3.2.5**), encouraging goat grazing to control wildfire risk (**Action HR-3.2.6**), and promoting expansion of free or low-cost fire fuel reduction programs (**Action HR-3.2.7**).

Installation of EV charging infrastructure (**Measure IN-2.1**) and tree planting (**Measure AG-2.1**) may imply additional wildfire risk. However, given the nature of the CCAP, activities associated with CCAP implementation would largely occur in already urbanized, developed areas that are outside the county's VHFSZs. EV charging stations would be installed in new and existing developments, and roadway improvements such as sidewalks and bicycle infrastructure would occur along existing developed roadways and cul-de-sacs. In addition, tree planting would focus in the urban areas, including in public rights-of-way and new development projects. The potential for upgraded and modified infrastructure would not 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. In all areas of the unincorporated county – and especially in the WUI and VHFSZs—measures and actions provided in the CCAP would reduce wildfire risk and would lessen significant risks to people or structures.

No significant adverse wildfire impacts related would occur, and **no mitigation is required.**

21. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			x	
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.)			x	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			x	

Environmental Setting

Environmental settings provided throughout Environmental Checklist Sections 1 to 20 were used in preparing the impact discussion for this section.

Discussion of Impacts

Implementation of the CCAP 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 bicycle infrastructure (**Measure LU-1.1** and **Measure LU-1.2**), installation of EV charging infrastructure (**Measure IN-2.1**), and tree planting (**Measure AG-2.1**). Because ground disturbance would be limited to shallow depths, generally 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 CCAP 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 sidewalks and bicycle infrastructure would occur along existing developed roadways. In addition, tree planting would focus in the urban areas, including in public rights-of-way and new development projects. As a result, CCAP 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 Environmental Checklist Sections 4, "Biological Resources", 5, "Cultural Resources", and 18, "Tribal Cultural Resources", for additional discussion of the reasons why CCAP implementation would not result in significant adverse effects to any biological, cultural, or tribal cultural resources.

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 1 through 20 of this checklist, construction activities implementing the CCAP 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 1 through 20 of this checklist, operations related to CCAP implementation would not result in substantially adverse environmental effects. Rather, CCAP implementation would reduce vehicle trips, with the co-benefits of reducing air pollution and greenhouse gas emissions, reducing the rate of vehicle miles traveled, and reducing reliance on fossil fuels. CCAP implementation also would reduce natural gas consumption within building energy systems in unincorporated Alameda County, which also improves air quality, reduces GHG emissions, and reduces 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 unincorporated Alameda County would be subject to the same land use and environmental regulations as described throughout the checklist. Development projects within the unincorporated county are guided by policies identified in the County's General Plan and by the regulations established in the Alameda County 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 CCAP implementation to produce a cumulatively considerable impact.

As discussed in Environmental Checklist Section 3, "Air Quality"; Section 8, "Greenhouse Gas Emissions"; Section 9, "Hazards and Hazardous Materials"; Section 10, "Hydrology and Water Quality"; Section 13, "Noise"; and Section 17, "Transportation"; project construction associated with CCAP implementation would result in 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 CCAP 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 vehicle miles traveled.

CCAP implementation would not result in significant adverse effects to any biological, cultural, or tribal cultural resources, would not result in a cumulatively considerable contribution to environmental impacts, and would not result in substantial adverse effects on human beings.

No significant adverse impacts related to the above would occur, and **no mitigation is required**.