



City of Pinole Climate Action and Adaptation Plan and CEQA GHG Emissions Thresholds

Final Initial Study – Negative Declaration

prepared for

City of Pinole

Community Development Department

2131 Pear Street

Pinole, California 94564

prepared by

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

June 14, 2024

Table of Contents

Initial Study	1
Proposed Plan Title	1
Lead Agency/Plan Sponsor and Contact	1
Plan Location and Physical Setting	1
Existing Sustainability Setting	4
General Plan Designation and Zoning	14
Description of Plan	14
Cumulative Projects Scenario	55
Required Approvals	55
Environmental Factors Potentially Affected	57
Determination	57
Environmental Checklist	59
1 Aesthetics	59
2 Agriculture and Forestry Resources	65
3 Air Quality	68
4 Biological Resources	73
5 Cultural Resources	78
6 Energy	80
7 Geology and Soils	83
8 Greenhouse Gas Emissions	87
9 Hazards and Hazardous Materials	91
10 Hydrology and Water Quality	96
11 Land Use and Planning	100
12 Mineral Resources	102
13 Noise	103
14 Population and Housing	107
15 Public Services	109
16 Recreation	111
17 Transportation	113
18 Tribal Cultural Resources	116
19 Utilities and Service Systems	119
20 Wildfire	124
21 Mandatory Findings of Significance	126
References	128
1. List of Preparers	131

Tables

Table 1 Pinole 2017 Communitywide GHG Emissions Levels 16

Table 2 Pinole CAAP GHG Emissions Reduction and Climate Adaptation Strategies, Measures, and Actions 17

Table 3 Pinole 2030 GHG Emissions Forecasts (MT of CO₂e) 51

Table 4 Targets Versus GHG Reductions 52

Table 5 Cumulative Projects Scenario 55

Figures

Figure 1 Regional Location 2

Figure 2 Plan Location 3

Figure 3 Pinole Transit Routes 4

Figure 4 Pinole GHG Emissions Projections and Targets 51

Figure 5 Determining CEQA GHG Emissions Analysis Methodology 54

Appendices

Appendix A Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Appendix B Description of Greenhouse Gases of California Concern

Initial Study

Proposed Plan Title

City of Pinole Climate Action and Adaptation Plan (CAAP) and California Environmental Quality Act (CEQA) Greenhouse Gas (GHG) Emissions Thresholds

Lead Agency/Plan Sponsor and Contact

Lead Agency/Plan Sponsor

City of Pinole
Community Development Department
2131 Pear Street
Pinole, California 94564

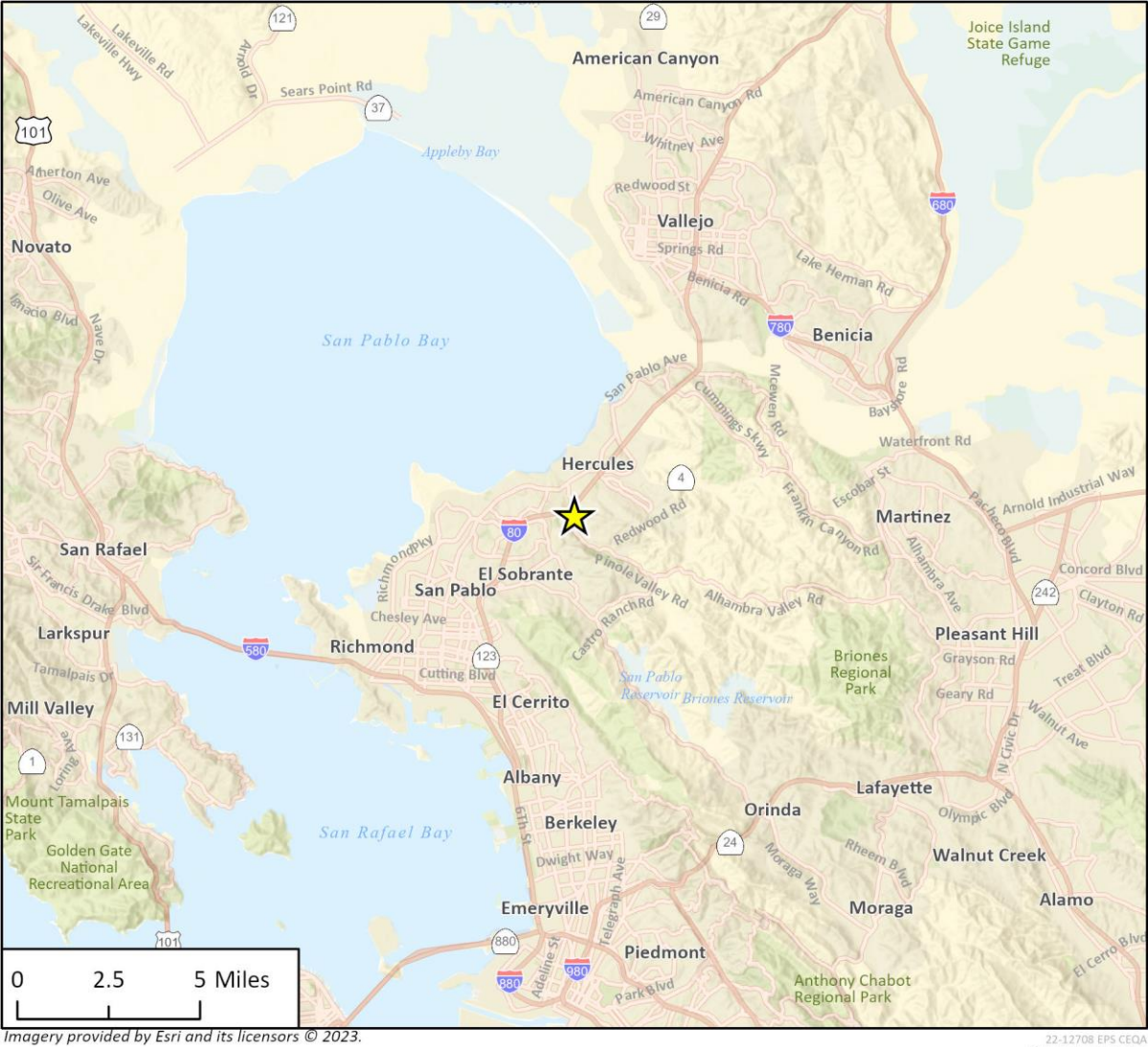
Contact Person

Lilly Whalen
Community Development Director
(510) 724-9832
lwhalen@ci.pinole.ca.us

Plan Location and Physical Setting

The Pinole CAAP and CEQA GHG Emissions Thresholds would apply to all areas and plans and projects within the City of Pinole limits. Figure 1 shows the regional location, and Figure 2 shows the plan location.

Figure 1 Regional Location



★ City of Pinole

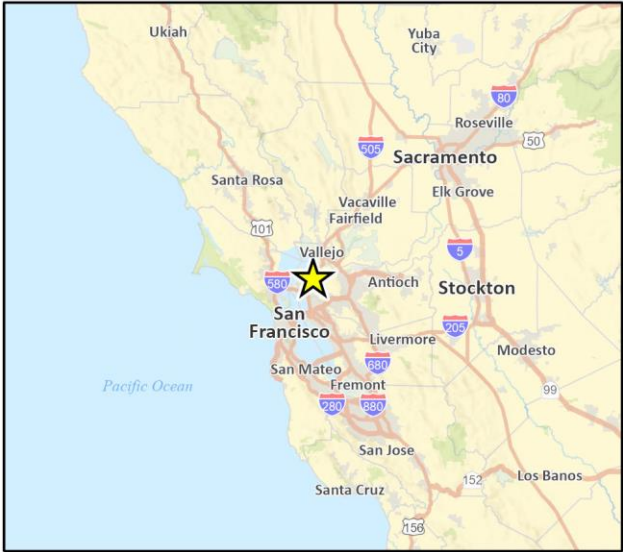
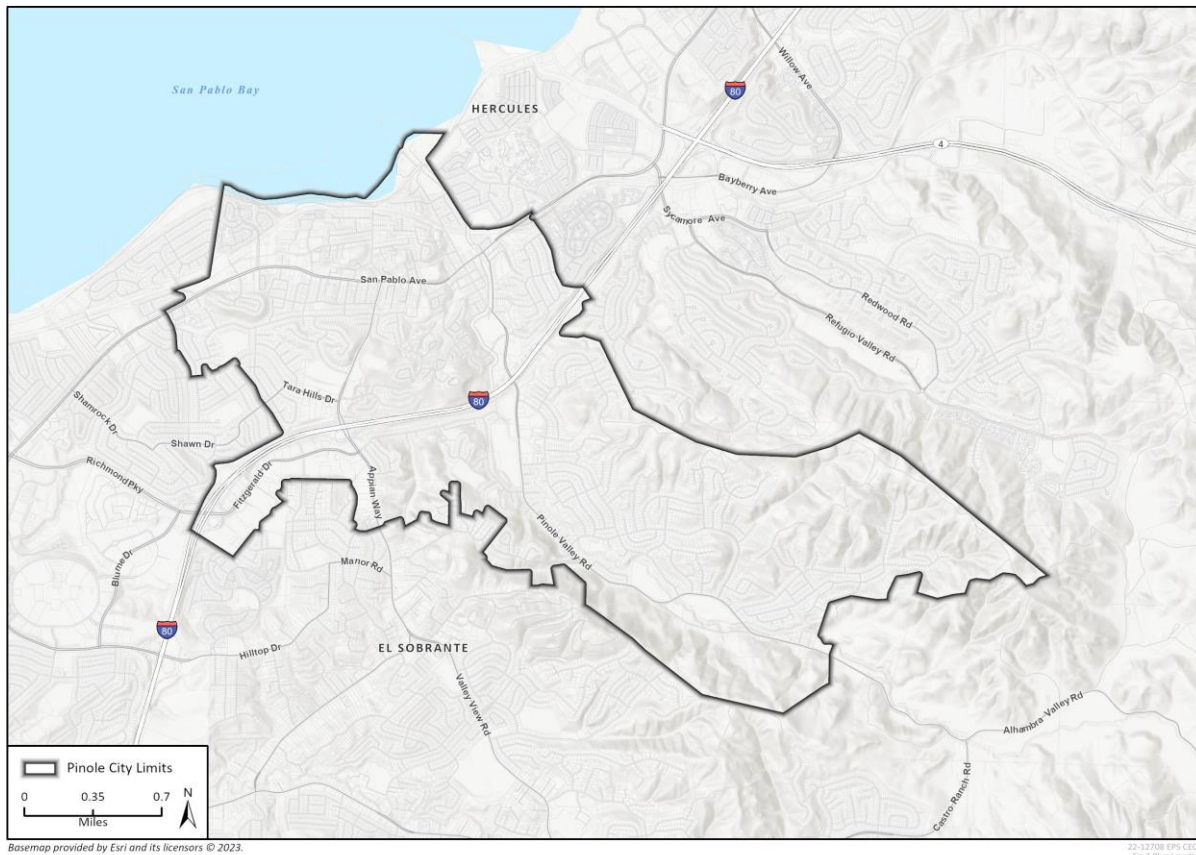


Figure 2 Plan Location

Regional Location and Setting

The City of Pinole is approximately 12 square miles and located in Contra Costa County, within the east San Francisco Bay area. Pinole is bordered by Richmond and San Pablo to the southwest, Hercules to the northeast, the unincorporated area of El Sobrante to the south, and the San Pablo Bay to the west. The City is connected to the rest of the County and the Bay Area by State Route 4 (SR 4) and Interstates 80 (I 80), which traverse the City. These freeways provide regional access to Pinole, which is also served by public transit facilities, including the Western Contra Costa Transit Authority (WestCAT) bus lines. Transit routes in Pinole are shown in Figure 3. In addition, nearby airports include the Buchanan Field Airport, which is located over 12 miles to the east.

Local Setting

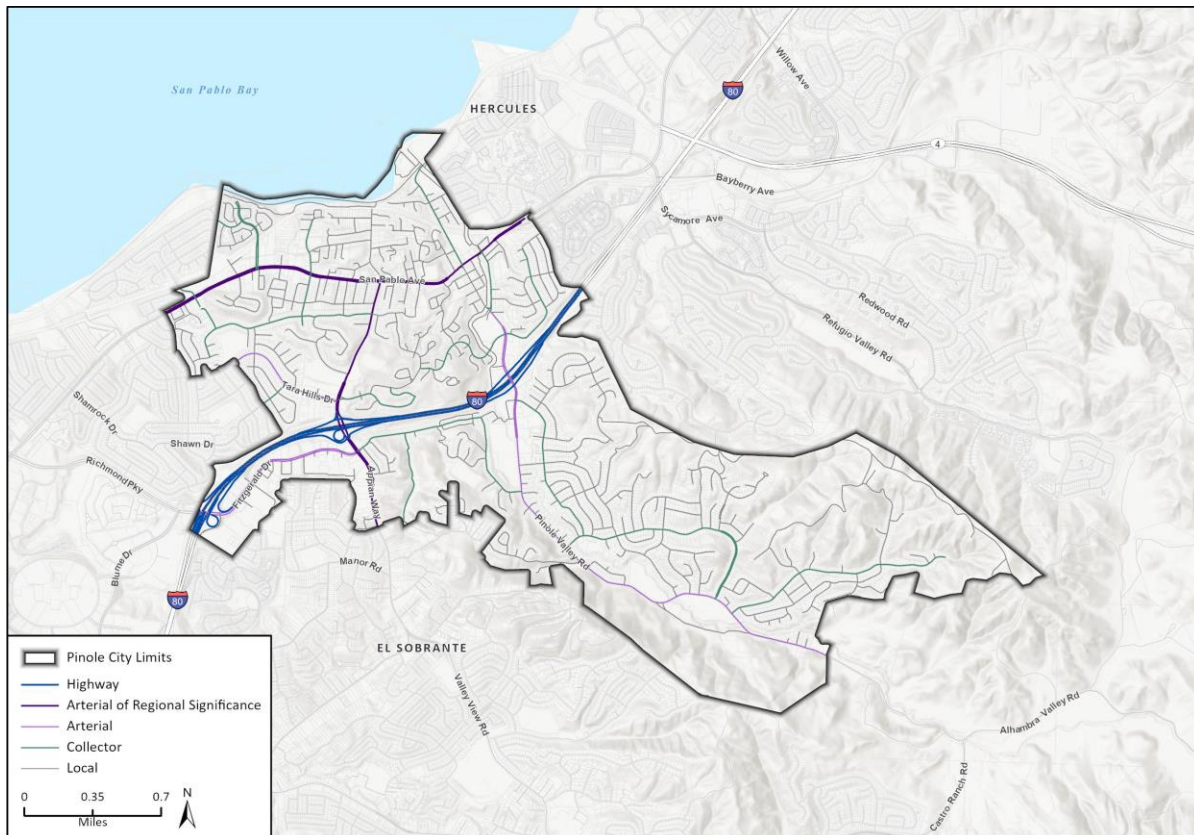
Pinole had a population of 18,244 in 2023 according to the California Department of Finance (DOF).¹ According to the General Plan,² the City's existing land use pattern is generally a mix of residential neighborhoods and commercial and business centers combined with parks and open spaces. Although the City of Pinole is largely built out, it includes opportunities for infill mixed-use

¹ California Department of Finance (DOF). 2023. E-5 Population and Housing Estimates. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/> (accessed January 2024).

² Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsnm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

development in a strategically located area near the Berkeley/Oakland and San Francisco employment centers. The City also has several distinct areas that characterize the City and surrounding area, including the Historic Old Town area north of I 80 that contains historic residences built for individuals who worked in Pinole or at the Hercules Powder Plant during the City's formative years as well as a commercial and business core that contains important civic and recreational facilities; Pinole Vista and Pinole Ridge Shopping Center, a regionally serving shopping district along Fitzgerald Avenue between the Richmond Parkway and Appian Way exits of Interstate 80; and Pinole Valley, an area that includes community serving retail, Pinole Valley High School, and residential areas with access provided primarily by Pinole Valley Road.³

Figure 3 Pinole Transit Routes



Existing Sustainability Setting

Pinole Sustainability and Greenhouse Gas Emissions Reduction Efforts

The City has actively implemented a variety of environmental programs contributing to GHG emissions reductions. The following is a list of Pinole's primary sustainability and climate protection programs and policies:

- Pinole Creek Watershed Vision Plan (2004)

³ Pinole, City of. 2010. General Plan, Introduction. https://cdnsnm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/City_of_Pinole_General_Plan_12.2010-Chapter1.pdf (accessed January 2024)

- General Plan – Sustainability Element (2010)
- Three Corridors Specific Plan (2010)
- Pinole Green Infrastructure Plan (2019)
- Climate Resolution (2021)
- Pinole Economic Development Strategy (2022)
- Updated Community Inventory and Prepared Municipal Inventory, as well as community forecast and targets (2022)
- Capital Improvement Plan (2024)

The City has also taken several additional sustainability actions, such as initiating a municipal energy audit that will evaluate all City facilities and identify solutions for upgrades, retrofits, and replacements of existing energy systems to enhance efficiency, reduce environmental impact, and optimize resource utilization, aligning with the City's commitment to fostering sustainable practices and minimizing its carbon footprint. A Local Road Safety Plan is also being prepared to identify and improve corridors to make it safer and more convenient to actively commute. Pinole is also working towards banning single-use plastics for packaging consumer goods and takeout food (e.g., plastic bags and plastic foodware such as plates, cups, accessories, and cutlery) and expanding its Procurement Policy to capture more green goods and services. Additionally, The City is preparing a Draft Parks Master Plan which will include development of sustainable recreation and park development.

Regional Sustainability and GHG Reduction Efforts

In coordination with Contra Costa County, the State of California, and the federal government, the City of Pinole has committed to implementing regional and State policies related to GHG emissions reductions. As follows is a summary of the existing regional GHG emissions reduction efforts, which the Pinole CAAP is intended to be consistent with or exceed.

Plan Bay Area: Strategy for a Sustainable Region

In October 2021, the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) jointly adopted Plan Bay Area 2050, which serves as the Bay Area regional long-range plan and identifies how the Bay Area would meet its GHG emission reduction goals. Plan Bay Area is also considered the ABAG/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with Senate Bill (SB) 743, Plan Bay Area includes elements designed to encourage the type of land-use development to preserve affordable housing, improve economic mobility, enhance the transit network to reduce vehicle miles traveled (VMT) per capita, and reduce hazard risks including through adaptation to sea level rise and reducing GHG emissions.⁴

Bay Area Air Quality Management District CEQA Guidelines

In 2022, the Bay Area Air Quality Management District (BAAQMD) adopted the CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans and is in the process of updating their 2017 CEQA Guidelines.⁵ The CEQA Thresholds for Evaluating the

⁴ ABAG-MTC. 2021. Plan Bay Area 2050. <https://www.planbayarea.org/finalplan2050> (accessed November 2023).

⁵ BAAQMD. 2022. CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-b-thresholds-for-evaluating-significance-of-climate-impacts_final-pdf.pdf?la=en (accessed November 2023).

Significance of Climate Impacts from Land Use Projects and Plans include requirements for projects and plans in jurisdictions that do not have an adopted local GHG reduction strategy that meets the criteria of CEQA Guidelines Section 15183(b). In addition, according to the BAAQMD, if a project is consistent with a local GHG reduction strategy, then it can be presumed that the project will not have significant GHG impacts.⁶ This approach is consistent with CEQA Guidelines, Section 15183.5:

Lead agencies may analyze and mitigate the significant impacts of GHG emissions at a programmatic level, such as...a plan to reduce GHG emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an [Environmental Impact Report] containing a programmatic analysis of GHG emissions.

Contra Costa Countywide Comprehensive Transportation Plan

In 2017, the Contra Costa Transportation Authority adopted the Countywide Transportation Plan (CTP), which serves as the blueprint for Contra Costa's transportation system through 2040. Five key goals have been adopted by the Contra Costa Transportation Authority for the 2017 CTP, which include: supporting the efficient, safe, and reliable movement of people and goods using all available travel modes; managing growth to sustain Contra Costa's economy, preserving its environment and supporting its communities; expanding safe, convenient, and affordable alternatives to the single-occupant vehicle; maintaining the transportation system; and continuing to invest wisely to maximize the benefits of available funding.⁷ In support of the Countywide CTP, the Contra Costa Transportation Authority has also prepared separate draft action plans for each subregion in Contra Costa County. Pinole is in the West County subregion,⁸ which encompasses the incorporated jurisdictions of El Cerrito, Richmond, San Pablo, Pinole, and Hercules, as well as unincorporated portions of western Contra Costa County. This update of the West County Action Plan has been prepared concurrently with, and in conjunction with, updates to the other four subregional action plans which will be used to determine the policies and actions that the Authority can adopt in the 2024 CTP Update which is currently being drafted and is intended to serve as the 25- year blueprint for improving transportation, reducing congestion, improving mobility, supporting a robust economy, and improving quality of life throughout Contra Costa. It is anticipated that the Draft CTP will be published in late 2024 and the Final CTP will go to the Authority Board for adoption in Spring 2025.⁹

Contra Costa County Climate Action Plan

In 2008, the County adopted its first Municipal Climate Action Plan¹⁰ identifying strategies to make government operations more sustainable. The Municipal Climate Action Plan identified thirteen existing and planned GHG reduction measures including employee carpool and vanpool programs; direct digital control for heating, ventilation, and air conditioning systems in County buildings; and

⁶ Ibid

⁷ Contra Costa Transportation Authority. 2017 Countywide Comprehensive Transportation Plan, Volume 1. September 10, 2017. <https://ccta.net/wp-content/uploads/2021/07/2017-CTP-Vol-1.2017.10.05.pdf> (accessed January 2024)

⁸ Contra Costa Transportation Authority. West County Action Plan. March 2023. https://ccta.net/wp-content/uploads/2023/03/Draft-West-County-Action-Plan_03-13-23.pdf (accessed January 2024)

⁹ Contra Costa Transportation Authority. Countywide Transportation Plan and Action Plans. 2024. <https://ccta.net/planning/countywide-transportation-plan/> (accessed January 2024)

¹⁰ Contra Costa County, California. Municipal Climate Action Plan. December 2008. <https://www.contracosta.ca.gov/DocumentCenter/View/2905/Municipal-Climate-Action-Plan-1208-Attachment-A?bidId=> (accessed January 2024)

flexible employee work schedules. The CAP was updated in 2015¹¹ to reflect legislation at that time and is currently being updated in parallel with the County’s General Plan.¹²

Marin Clean Energy

Marin Clean Energy (MCE) formed in 2010 as California’s first community choice energy program and currently provides electricity to more than 1.5 million residents and businesses in 37 member communities across Contra Costa, Marin, Napa, and Solano Counties. As demonstrated in MCE’s 2019 Integrated Resource Plan,¹³ MCE’s base energy product (Light Green) was 60 percent renewable starting in 2019 and is expected to rise to 70 percent by 2030. This would put MCE 11 years ahead of schedule in meeting Senate Bill 100’s 2030 RPS targets. Additionally, MCE’s GHG-free content was 100 percent in 2022, 23 years earlier than the State mandate.

State Sustainability and GHG Reduction Efforts

As follows is a summary of existing State GHG emissions reduction efforts, which the CAAP is intended to be consistent with or exceed.

GHG Reduction Policies

CALIFORNIA EXECUTIVE ORDER S-3-05

In 2005, the California governor issued Executive Order (EO) S-3-05, which identifies statewide GHG emissions reduction goals to achieve long-term climate stabilization as follows:

- Reduce GHG emissions to 1990 levels by 2020
- Reduce GHG emissions to 80 percent below 1990 levels by 2050

In response to EO S-3-05, California Environmental Protection Agency (CalEPA) created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”). The *2006 CAT Report* identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to meet the emission reduction targets in EO S-3-05 with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, among others.

CALIFORNIA ASSEMBLY BILL 32, CALIFORNIA GLOBAL WARMING POLLUTION SOLUTIONS ACT

In 2006, the California legislature signed Assembly Bill (AB) 32 – the Global Warming Solutions Act – into law, requiring a reduction in Statewide GHG emissions to 1990 levels by 2020 and California Air Resources Board (CARB) preparation of a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to

¹¹ Contra Costa County. Contra Costa County Climate Action Plan. December 15, 2015. <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=> (accessed January 2024)

¹² Contra Costa County. Envision Contra Costa 2040. <https://envisioncontracosta2040.org/overview/#cap> (accessed January 2024)

¹³ Marin Clean Energy (MCE). 2018. 2019 Integrated Resource Plan. https://www.mcecleanenergy.org/wp-content/uploads/2020/01/MCE-Integrated-Resource-Plan_2019.pdf (accessed January 2024)

require reporting and verification of Statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 MT of CO₂e.

CALIFORNIA SENATE BILL 375, SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT

In 2008, Senate Bill (SB) 375 enhanced the State's ability to reach AB 32 targets by developing regional GHG emissions reduction goals to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a sustainable community's strategy (SCS) that contains a growth strategy to meet such regional GHG emissions reduction targets for inclusion in the respective regional transportation plan (RTP).

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Association of Bay Area Governments was assigned targets of a ten percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a nineteen percent reduction in per capita GHG emissions from passenger vehicles by 2035.¹⁴

CALIFORNIA CLIMATE CHANGE SCOPING PLAN

In 2008, CARB approved the original California Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted and implemented since approval of the Scoping Plan.

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2013)

In 2013, CARB approved the first update to the California Climate Change Scoping Plan. The 2013 Scoping Plan Update defined CARB climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide GHG emissions reduction goals. The 2013 Scoping Plan Update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

CALIFORNIA EXECUTIVE ORDER B-30-15

In 2015, the California governor issued Executive Order B-30-15, which established a statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030. The EO also calls for another update to the CARB Scoping Plan.

CALIFORNIA SENATE BILL 32, CALIFORNIA GLOBAL WARMING POLLUTION SOLUTIONS ACT UPDATE

In 2016, SB 32 was passed, extending AB 32 by requiring further reduction in statewide GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below).

¹⁴ CARB. 2023. SB 375 Regional Plan Climate Targets. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed November 2023).

2016 Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires CalRecycle, in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills. The bill further requires 20 percent of edible food disposed of at the time to be recovered by 2025.

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2017)

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 goal set by SB 32. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383.

The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2014 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050. As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.¹⁵

CALIFORNIA EXECUTIVE ORDER B-55-18

In 2018, the California governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 32.

ASSEMBLY BILL 1279

In September 2022, AB 1279 was approved, which established a legally binding requirement for California to achieve and maintain carbon neutrality no later than 2045. Assembly Bill 1279 also established the requirement to achieve a Statewide reduction in GHG emissions of 85 percent below 1990 levels by 2045. This indicates that the remaining 15 percent to achieve carbon neutrality can be achieved via carbon sequestration and other non-direct-GHG-emissions-reductions techniques.

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2022)

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB adopted the Final 2022 Climate Change Scoping Plan in November 2022. The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous

¹⁵ CARB. 2017. California 2017 Climate Change Scoping Plan. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf (accessed November 2023).

updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action in natural working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from the governor, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work.¹⁶

For more information on the Senate and Assembly Bills, Executive Orders, and Scoping Plans discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

Energy- and Vehicle-Related Policies

ASSEMBLY BILL 1493, PAVLEY BILL VEHICLE EFFICIENCY STANDARDS

In 2002, the California State Legislature enacted Assembly Bill 1493 (aka "the Pavley Bill"), which directs the CARB to adopt standards that will achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles," taking into account environmental, social, technological, and economic factors. In September 2009, CARB adopted amendments to the "Pavley" regulations to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley Bill is considered to be the national model for vehicle emissions standards. In January of 2012, CARB approved a new emissions control program for vehicle model years 2017 through 2025. The program combines the control of smog, soot, and GHGs and the requirement for greater numbers of zero emission vehicles into a single package of standards called Advanced Clean Cars.

CALIFORNIA ENERGY EFFICIENCY STRATEGIC PLAN OF 2008

In 2008, the California Public Utilities Commission (CPUC) adopted California's first Long Term Energy Efficiency Strategic Plan, presenting a single roadmap to achieve maximum energy savings across all major groups and sectors in California. The Strategic Plan was subsequently updated in January 2011 to include a lighting chapter. The Strategic Plan sets goals of all new residential construction and all new commercial construction in California to be zero net energy (ZNE) by 2020 and 2030, respectively. In 2018, the California Energy Commission voted to adopt a policy requiring all new homes in California to incorporate rooftop solar. This change went into effect in January 2020 with the adoption of the 2019 California Code of Regulations (CCR) Title 24 Code and is a step towards the State achieving its goal of all residential new construction being zero-net energy (ZNE) by 2020. Additionally, the Strategic Plan sets goals of 50 percent of existing commercial buildings to be retrofitted to ZNE by 2030, and all new State buildings and major renovations to be constructed to ZNE by 2025.

¹⁶ CARB. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf> (accessed November 2023)

CALIFORNIA CODE OF REGULATIONS TITLE 24 (CALIFORNIA BUILDING CODE)

Updated every three years through a rigorous stakeholder process, Title 24 of the CCR requires California homes and businesses to meet strong energy efficiency measures, thereby lowering their energy use. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California. (Health and Safety Code § 17950 and 18938(b).)

The regulations receive input from members of industry, as well as the public, with the goal of "[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy." (Pub. Res. Code § 25402.) These regulations are carefully scrutinized and analyzed for technological and economic feasibility (Pub. Res. Code § 25402(d)) and cost effectiveness (Pub. Res. Code § 25402(b)(2) and (b)(3)). The 2022 Title 24 standards went into effect on January 1, 2023.

Part 6 – Building Energy Efficiency Standards

CCR Title 24 Part 6 is the Building Energy Efficiency Standards. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. The Building Energy Efficiency Standards is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission.

Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective on January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards applicable to air quality require:

- Minimum 20 percent reduction in indoor water use relative to specified baseline levels;¹⁷
- Waste Reduction:
 - Minimum 65 percent non-hazardous construction/demolition waste diverted from landfills;
 - Non-residential and multi-family dwellings with five or more units: Provide readily accessible areas identified for the depositing, storage and collection of nonhazardous

¹⁷ Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastic, organic waste, and metals; and/or

- Non-residential: Reuse and/or recycling of 100 percent of trees, stumps, rocks, and associated vegetation soils resulting from primary land clearing;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards; and
- EV Charging for New Construction:¹⁸
 - One- and two-family dwellings and town houses with attached private garages: Dedicated circuitry to facilitate installation of electric vehicle (EV) charging;
 - Multi-family dwellings and hotels/motels with less than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable and at least 25 percent of the total number of parking spaces shall be EV-ready;
 - Multi-family dwellings and hotels/motels with greater than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable, at least 25 percent of the total number of parking spaces shall be EV-ready, and at least 5 percent of the total number of parking spaces shall be equipped with a Level 2 charging station;
 - Non-residential land uses shall comply with the following EV charging requirements based on the number of passenger vehicle parking spaces:
 - 0-9: no EV capable spaces or charging stations required;
 - 10-25: 4 EV capable spaces but no charging stations required;
 - 26-50: 8 EV capable spaces of which 2 must be equipped with charging stations;
 - 51-75: 13 EV capable spaces of which 3 must be equipped with charging stations;
 - 76-100: 17 EV capable spaces of which 4 must be equipped with charging stations;
 - 101-150: 25 EV capable spaces of which 6 must be equipped with charging stations;
 - 151-200: 35 EV capable spaces of which 9 must be equipped with charging stations; and
 - More than 200: 20 percent of the total available parking spaces of which 25 percent must be equipped with charging stations;
 - Non-residential land uses shall comply with the following EV charging requirements for medium- and heavy-duty vehicles: warehouses, grocery stores, and retail stores with planned off-street loading spaces shall install EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s), or subpanel(s) at the time of construction based on the number of off-street loading spaces as indicated in Table 5.106.5.4.1 of the California Green Building Standards;
- Bicycle Parking:
 - Non-residential short-term bicycle parking for projects anticipated to generate visitor traffic: permanently anchored bicycle racks within 200 feet of visitor entrance for 5 percent of new visitor motorized vehicle parking spaces with a minimum of one 2-bike capacity rack; and/or

¹⁸ EV Capable = a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways to support EV charging; EV-ready = a vehicle space which is provided with a branch circuit and any necessary raceways to accommodate EV charging stations, including a receptacle for future installation of a charger (see 2022 California Green Building Standard Code, Title 24 Part 11 for full explanation of mandatory measures, including exceptions).

- Non-residential buildings with tenant spaces of 10 or more employees/tenant-occupants: secure bicycle parking for 5 percent of the employee/tenant-occupant vehicle parking spaces with a minimum of one bicycle parking facility.
- Shade Trees (Non-Residential):
 - Surface parking: minimum No. 10 container size or equal shall be installed to provide shade over 50 percent of the parking within 15 years (unless parking area covered by appropriate shade structures and/or solar);
 - Landscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years; and/or
 - Hardscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years (unless covered by applicable shade structures and/or solar or the marked area is for organized sports activities).

ASSEMBLY BILL 117, COMMUNITY CHOICE AGGREGATION

AB 117 allows the creation of Community Choice Aggregation (CCA) that fosters clean and renewable energy markets. CCA allows cities and counties to aggregate the buying power of individual jurisdictions. The California CCA markets were created as an answer to the brownouts and energy shortages of the early 2000's. AB 117 was passed in 2002 as an answer to California's increased energy independency by incorporating more alternative and renewable energy sources into its energy portfolio. With AB 117, municipalities can provide alternative energy choices to their local carrier (e.g., Pacific Gas and Electric). MCE was the first CCA in the State of California to go online with a 50 percent to 100 percent clean energy portfolio in 2010. In 2017, SVCE began supplying south bay area communities, including Pinole, with options for 100 percent renewable energy-sourced electricity or electricity from a mix of renewable and non-renewable sources. CCAs are governed by the CPUC. SB 790 further ensures fair and transparent competition by creating a code of conduct and guiding principles for entrants into the CCA field.

SENATE BILL 1275, CHARGE AHEAD INITIATIVE

In 2014, SB 1275 established a State goal of one million zero-emissions and near-zero-emissions vehicles in service by 2020 and directed CARB to develop a long-term funding plan to meet this goal. SB 1275 also established the Charge Ahead California Initiative requiring planning and reporting on vehicle incentive programs and increasing access to and benefits from zero-emissions vehicles for disadvantaged, low- and moderate-income communities and consumers.

SENATE BILL 350, CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015

In 2015, SB 350 established new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 codified Governor Brown's aggressive clean energy goals and established the State 2030 GHG reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 (legislation originally enacted in 2002) to 50 percent by 2030. Renewable resources include wind, solar, geothermal, wave, and small hydroelectric power. In addition, SB 350 requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030 from a base year of 2015.

SENATE BILL 1020, CLEAN ENERGY, JOBS, AND AFFORDABILITY ACT OF 2022

Established in 2002 under SB 1078, and accelerated by SB 107 (2006), SB X 1-2 (2011), SB 100 (2018), and SB 1020, California's Renewable Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to transition the electricity supply to renewable resources. The RPS requires energy service providers to supply renewable energy as follows: 90 percent of retail sale electricity and 100 percent of electricity procured to serve state agencies by 2035, 95 percent by 2040, and 100 percent by 2045. The CPUC and the CEC are jointly responsible for implementing the program.

Other GHG Emissions-Related Policies

ASSEMBLY BILL 197, STATE AIR RESOURCES BOARD GHGS REGULATIONS

In 2016, the California legislature approved AB 197, a bill linked to SB 32, which increases legislature oversight over CARB and directs CARB to prioritize disadvantaged communities in its climate change regulations, and to evaluate the cost-effectiveness of measures it considers. AB 197 requires CARB to protect the State's most impacted and disadvantaged communities [and] consider the social costs of the emissions of GHGs when developing climate change programs. The bill also adds two new legislatively appointed non-voting members to CARB, increasing the Legislature's role in CARB's decisions.

SENATE BILL 97, CEQA GUIDELINES FOR ADDRESSING GHG EMISSIONS

CEQA requires public agencies to review the environmental impacts of proposed projects, including General Plans, Specific Plans, and specific kinds of development projects. In February 2010, the California Office of Administrative Law approved the recommended amendments to the State CEQA Guidelines for addressing GHG emissions. The amendments were developed to provide guidance to public agencies regarding the analysis, mitigation, and effects of GHG emissions in draft CEQA documents.

General Plan Designation and Zoning

The Pinole CAAP and CEQA GHG Emissions Thresholds would be implemented throughout the City and would occur in all General Plan designations and in all zoning designations.

Description of Plan

Pinole CAAP

The City of Pinole CAAP was developed to achieve a resilient and climate-ready community and support regional, State, and global climate goals through achieving the City's 2030 and 2045 climate action targets. The City's GHG targets were developed relative to the 2017 Community GHG emissions by back-casting to 1990. This back-cast utilized the change in statewide GHG emissions between 2017 and 1990 as a proxy for change in Pinole during the same period.¹⁹ The estimated 1990 GHG emissions were then reduced by 40 percent to establish a 2030 target for the City and

¹⁹ The City of Pinole's 1990 GHG emissions were estimated to be [78,982](#) MT CO₂e based on a nine percent increase in state GHG emissions seen between 2017 and 1990.

reduced to zero to establish a 2045 target for the City. The targets, established as follows, remain consistent with the State’s 2030 and 2045 goals:

- Reduce GHG emissions to 47,389 MT CO₂e by 2030 (the SB 32 target year)
- Reduce GHG emissions to 0 MT CO₂e by 2045 (the AB 1249 target year)

The CAAP provides a foundation for future sustainable development efforts in Pinole, and it is anticipated that environmental review documents for future development projects would identify and incorporate applicable GHG reduction measures and actions from the CAAP. The CAAP addresses communitywide GHG emissions and includes a discrete target for Pinole to reach maximum emissions of 47,389 CO₂e by 2030. The CAAP includes a summary of the emissions inventory and forecast, measures and actions to achieve the City’s climate mitigation and resilience goals and focuses on actions through 2030 for purposes of meeting the City’s 2030 GHG emission target.

The 2017 GHG emissions inventory provides the basis for emissions forecasts for the years 2025, 2030, 2035, 2040, and 2045. The GHG emissions inventory was completed in compliance with all relevant protocols and guidance documents, including U.S. Community Protocol, Local Government Operations Protocol, the Global Protocol for Community Scale GHG Emissions, and the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National GHG Inventories. In 2017, Pinole’s total GHG emissions were estimated to be 73,513 MT of CO₂e. GHG emissions in the inventory are categorized based on sectors. These sectors include off-road vehicles and equipment, solid waste, water and wastewater, on-road transportation, residential energy use, and nonresidential energy use. Table 1 provides the summary of Pinole’s 2017 GHG emissions by sector, as well as each sector’s percentage of communitywide emissions.²⁰ As shown therein, the largest GHG emissions are related to transportation and building energy use.

²⁰ Rincon Consultants, Inc. City of Pinole 2017 Community Inventory. Updated January 2024.

Table 1 Pinole 2017 Communitywide GHG Emissions Levels

GHG Emissions Sector/Source	CO ₂ e (MT)	Percent of Total Emissions
Residential Energy	21,878	30
Electricity	3,738	5
Natural Gas	18,140	25
Nonresidential Energy	11,210	16
Electricity	5,918	8
Natural Gas	5,291	7
On-road Transportation	30,483	42
Off-Road Equipment	5,236	7
Water and Wastewater	166	<1
Solid Waste	3,300	5
Total	72,273	100

CO₂e = carbon dioxide equivalent; MT = Metric Tons

Source: Rincon Consultants, Inc. City of Pinole 2017 Community Inventory. Updated January 2024.

Note: Values may not add up due to rounding.

The Pinole CAAP establishes a target to reduce communitywide GHG emissions to 40 percent below 1990 levels by 2030 (47,389 MT of CO₂e), which aligns with the SB 32 State GHG emissions target, consistent with CEQA for a qualified GHG emissions reduction strategy and to be achievable by City-supported measures and actions identified in the Pinole CAAP. The CAAP includes a business-as-usual (BAU) forecast and an adjusted BAU (ABAU) forecast of GHG emissions, based on the 2017 inventory, that enables Pinole to estimate the emissions reductions required to meet its communitywide reduction targets.

The Pinole CAAP is organized into 13 strategies for GHG emissions reduction and climate adaptation, each of which includes measures and actions. These strategies focus on clean electricity, building decarbonization, transportation decarbonization and sustainable land use planning, solid waste and water use reductions, community engagement, and climate adaptation. Table 2 includes a complete list of the strategies, measures, and actions established by the City for inclusion in the CAAP, as well as anticipated annual GHG reductions attributable to mitigation-related measures in 2030. Measures that focus on adaptation will note “Not Applicable” or “N/A” in the emissions reduction quantification column below.

Table 2 Pinole CAAP GHG Emissions Reduction and Climate Adaptation Strategies, Measures, and Actions

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Strategy CR: Cornerstone to Climate Action and Adaptation Planning		
Measure CR-1. Leverage the CAAP's work around electrification, transportation infrastructure buildout, organic waste diversion, and carbon sequestration to establish Pinole as a center for green economic development and high-road jobs.		
CR-1a	Coordinate with the City's Economic Development staff to review and update the Pinole Economic Development Strategy every three years (2026/28, 2029/31, 2032/34, etc.) and adjust fees to specifically attract green and clean energy businesses to Pinole by reflecting changing economic trends, evolving community needs, and emerging opportunities. Include an annual review of the fee schedules (including a survey of competitor's fees) to assess their impact on green businesses.	2030: N/A 2045: N/A
CR-1b	Work with the City's Economic Development staff to perform direct outreach to existing Pinole businesses to identify climate change impacts (e.g., climate hazards, increasing water and natural gas costs, etc.) that may affect the long-term viability and growth of existing core industries and small business. Include regional green and clean energy businesses in a "short list" of industries to focus these initial outreach and business retention efforts during Phase 1.	
CR-1c	In partnership with organizations such as the Workforce Development Board of Contra Costa County or Contra Costa College, create a green workforce development program to connect Pinole residents to workforce development training courses for climate industries with high-road jobs. Additionally, use the program to develop a network of local professional associations active in Pinole and to incorporate green workforce development training courses into the periodic "Pinole Workforce Development Consortium" meetings identified in the Economic Development Strategy. Focus this program on members of the most disadvantaged and vulnerable communities in the City and track enrollment and success rate by zip code to monitor the reach and distribution of the initiative.	
CR-1d	Partner with the Contra Costa County Green Business Program to help small- and medium-sized businesses in Pinole minimize their impact on the environment and increase the number of certified Green Businesses in Pinole.	
CR-1e	Create a Green Technology Incubator in partnership with the Workforce Development Board of Contra Costa County, Contra Costa College, the Renaissance Entrepreneurship Center, the East Bay Economic Development Alliance, or similar partners, to help startups and companies working on innovative solutions for climate-related challenges to succeed in the market. The Green Technology Incubator would provide access to funding through identification and partnership opportunities for grants, technical assistance, networking support, and community exposure.	
CR-1f	Incentivize optimal use of properties with a water view by adoption of Municipal Code Amendments allowing for height exceptions for mixed use developments that include top-floor restaurants that are dense, transit rich and connected to Pinole's growing active transportation network.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CR-1g	Based on the findings and recommendation of the broadband feasibility study (currently in progress), a subsidy or grant program may be developed to improve existing infrastructure of multi-family units (i.e., upgrade internal wiring etc.) to update policies to increase Pinole residents' work-from-home rate, including incorporating work-from-home strategies into the Transportation Demand Management standards of Action TR-3a.	
CR-1h	Explore locations within the City to create a plan to develop a climate resilience district. The district would receive focused City resources, support, partnerships with local businesses, and engagement to develop resilient communities. Examples could include the Pinole Valley area to focus on funding projects related to wildfire risk, for example.	
Strategy BE: Building Energy		
Measure BE-1. Electrify 100% of new construction in the City by 2024.		
BE-1a	Adopt a single margin source energy score or more stringent ordinance in 2024 to avoid new natural gas construction.	2030: 1,509 2045: 5,962
BE-1b	Partner with organizations such as MCE, Bay Area Regional Energy Network (BayREN), the Building Decarbonization Coalition and the U.S. Green Building Council (USGBC) to compile a suite of case studies (e.g., document/guide on all-electric best practices and examples applicable to Pinole or the Bay Area) and cost-effective strategies (e.g., energy efficiency improvements) for electric buildings by prototype. Provide digital copies on the City's website and hard copies at City Hall for residents and business owners to review and utilize.	
BE-1c	Partner with organizations such as MCE, BayREN, the Building Decarbonization Coalition, and USGBC to educate building owners, developers, and contractors on the cost savings, environmental benefits, and versatility associated with all-electric construction, as well as the advantages all-electric construction provide for United States Green Building Council LEED certification. Utilize the case studies and cost-effective strategies as well as existing resources such as those provided by MCE as educational materials and share the information on the City's website, at City events (such as Dumpster Day and Earth Walk), and at the City's permit counter.	
BE-1d	Partner with PG&E to conduct an electrification infrastructure and capacity feasibility study to identify expected increases in electricity demand due to building and vehicle electrification and identify infrastructure improvements (including local renewable energy and storage projects) to increase capacity to meet demand. During this process, work with MCE to provide projections on load changes due to electrification.	
BE-1e	Partner with MCE, the WFDCCCC and/or other organizations to host regular workforce development trainings for installers, local contractors, and building owners/operators. Trainings would provide financial resources and technical requirements, including information on new electric appliances and approaches to electrification. Partner with community-based organizations to connect members of vulnerable communities to these training programs in plain language and in a culturally appropriate manner.	
BE-1f	Advocate for regional policy and programs that allow for utility rates that are supportive of electrification (i.e., electricity rates lower than natural gas rates).	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Measure BE-2. Electrify existing residential buildings to reduce natural gas consumption 26% by 2030 and 100% by 2045.		
BE-2a	Adopt a reach code in 2024 requiring all central air conditioning unit installations and replacements be two-way, providing both heating and cooling with a single unit for residential buildings. The ordinance would apply to projects after calendar year 2024. The ordinance would be implemented through the building permit process.	2030: 4,778 2045: 19,273
BE-2b	After calendar year 2024, include major renovations (i.e., projects that affect over 50% of the building, add an additional 50% of gross floor space to the building, or value more than 50% of the assessed value of the property at time of application submittal) in the all-electric new residential building requirements.	
BE-2c	Complete a residential existing building electrification feasibility analysis by 2024 to determine the upfront and on-bill costs associated with building electrification strategies and draw on existing ordinances from similar jurisdictions to identify barriers to replacement and permit compliance (including equity barriers). This information will be used to inform and support future updates to the existing building electrification ordinances as well as the building electrification resource center (Action BE-2e).	
BE-2d	Partner with Contra Costa County to create a virtual all-electric building resource center to provide residents information on available electrification assessments, turn-key installations by BayREN/state vetted contractors, low up-front costs and on-bill financing, and equipment and labor warranties.	
BE-2e	As part of the building electrification resource center, provide free assessments to rental and multi-family properties, as well as seniors and residents living on low incomes.	
BE-2f	Partner with MCE and PG&E to review incentives, rebates, and on-bill financing options for procedural equity and then update the incentives to remove the identified barriers.	
BE-2g	Partner with properties in Pinole that provide deed-restricted affordable housing, MCE, PG&E, and BayREN to initiate and complete an affordable housing electrification pilot project. Project will implement energy efficiency strategies to mitigate increased energy bills for occupants. Promote the pilot project as a case study for future projects in the City.	
BE-2h	Work with MCE and PG&E to conduct a cost-effectiveness study and design electricity and natural gas billing rates that make electrification the most cost-effective option to reduce energy bill burdens for residents living on low and medium incomes.	
BE-2i	Provide education around cooking with electric appliances and partner with local chefs and/or restaurants to host cooking demonstrations at community events such as the Farmers' Market. Integrate locally sourced food into the demonstrations to also educate community members on the GHG emission reduction and resilience benefits of local food.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
BE-2j	Enforce ordinance compliance through a comprehensive permitting compliance program which may include, but is not limited to: ▪ Providing dedicated time for routine staff training to incorporate into existing building inspections. ▪ Imposing fees for noncompliance to offset staff costs and encouraging voluntary compliance. ▪ Establishing easy-to-understand web-based compliance checklists and permit applications. ▪ Facilitating online permitting. ▪ Providing zero-cost permit fees for heat pump installations.	
BE-2k	Develop and implement a water heater loan program where residents who are replacing their natural gas-powered water heaters with electric-powered water heaters at the end of their useful lives can borrow or rent at no cost a working natural gas water heater from the City for a limited period of time (e.g., three weeks) to use during any electrical panel upgrade requirements to install an electric water heater. Participation in this program could serve as a mechanism to support thoughtful residential transition. Consider expanding the loan program to induction stoves as well.	
BE-2l	Partner with Rising Sun, or similar entity, to continue providing “Green House Calls” to residents to recommend energy-saving appliances and programs to help offset the costs of electrification.	
BE-2m	Work with PG&E to identify opportunities for natural gas infrastructure pruning to reduce the chance of stranded assets, provide potential funding, and establish an efficient transition to carbon-neutral buildings. Engage local developers, MCE, and vulnerable populations to assess the feasibility of adopting an end-of-flow ordinance that would require natural gas lines be capped and decommissioned in existing buildings by 2045.	
BE-2n	Adopt an end-of-flow ordinance that would require natural gas lines be capped and decommissioned in existing buildings by 2045.	
Measure BE-3. Electrify existing commercial and mixed-use (i.e., combined commercial and residential) buildings to reduce natural gas consumption 26% by 2030 and 100% by 2045.		
BE-3a	Complete an existing commercial building electrification feasibility analysis by 2024 to determine the upfront and on-bill costs associated with building electrification strategies and draw on existing ordinances from similar jurisdictions to identify barriers to replacement and permit compliance (including equity barriers).	2030: 997 2045: 5,868
BE-3b	Adopt a reach code in 2024 requiring all central air conditioning unit installations and replacements be two-way, providing both heating and cooling with a single unit for commercial and mixed-use buildings. The ordinance will be implemented through the building permit process. Track annual progress on commercial and mixed-use building electrification through the same permit tracking program developed for residential building electrification.	
BE-3c	Evaluate the success of the pilot Pinole Energy Efficiency Rebate Program which offers for calendar year 2024 additional rebates to Pinole residents for energy efficiency improvements stacked on top of federal, state, or regional rebates or discounts. Work with Contra Costa County Department of Conservation and Development to restructure the pilot program as needed. Seek annual grant funding sources to sustain and support the program through.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
BE-3d	Develop a building performance standard program to meet a specific level of energy use per square foot for all commercial and industrial buildings over 20,000 square feet. Implementation and compliance support, including resources and tools which will be implemented through four phases: 1. Pre-development phase – Phase 1 – Staff to receive technical assistance from the Building Technologies Office in the Federal Office of Energy Efficiency and Renewable Energy (EERE). Per the EERE, technical assistance may take the form of: a. Building stock analyses, including analysis of energy and emission impacts associated with building performance standard adoption b. Performance target-setting and trajectories c. Measure and technology prioritization and packaging d. Cost-effectiveness analyses 2. Data collection phase – Phase 2 – All commercial and industrial building owners with floor area over 20,000 square feet report electricity and natural gas data through energy star portfolio manager 3. Retro commissioning phase – Phase 3 – All covered building owners complete a retro commissioning process to identify and correct system inefficiencies while identifying opportunities for electrification and downsizing of oversized equipment. 4. GHG Performance Standard – Phase 4 – Implement a building performance standard that requires buildings to meet a specific GHG performance level	
BE-3e	Conduct targeted outreach and complete tailored campaigns during development of the building performance program (Action BE-3d) and electrification ordinance (Action BE-3b) to identify potential barriers to commercial and mixed-use electrification (including equity barriers) and educate commercial and mixed-use property owners on the potential cost savings and other benefits of electrification. Include targeted outreach to building owners that rent or lease space to small or minority-owned businesses and minority-owned businesses as well as the business owners and conduct a survey to such businesses to identify specific resources needed to support an equitable building electrification.	
BE-3f	Partner with Contra Costa Health Services to provide small and minority-owned businesses/commercial property owners or property owners that rent or lease space to small or minority-owned business, electrification assessments, turn-key installations by BayREN/state vetted contractors, low up-front costs, and equipment and labor warranties through the building electrification resource center (Action BE-2e). Additionally, partner with MCE or PG&E to provide on-bill financing.	
BE-3g	Partner with the Bay Area Council, Bay Front Chamber of Commerce, and Contra Cost County Green Business Program to inform, encourage, and facilitate electrification for commercial business owners.	
BE-3h	Review incentives and rebates (from Action BE-3g) for procedural equity and develop a process so that existing and updated incentive programs continue to be equitably distributed to the community. Hurdles to equitable implementation could include credit checks, excessive procedural roadblocks, and lack of targeted outreach.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
BE-3i	Work with MCE, PG&E, and BayREN to incentivize all-electric retrofits by combining rebate programs and financing mechanisms to create cost-effective electrification packages and develop bulk-purchasing opportunities for multi-unit development owners. Additionally, work with BayREN to educate the business community about the available incentives and include direct outreach to small, and frontline community-owned businesses and property owners who rent and lease space to frontline community-owned businesses.	
BE-3j	Work with BayREN to identify highly efficient net zero energy building owners that meet the CPUC's hard-to-reach criteria and publicize commercial tax breaks to these building owners as well as commercial developers in Pinole.	
BE-3k	Re-evaluate the building performance program (Action BE-3d) every three years to gauge implementation progress and phase expansion of program to smaller buildings.	
BE-3l	Review and update Section 15.46.020 of the Municipal Code to require upon a transfer of ownership the disclosure of additional relevant weatherization information (e.g., ventilation standards, wall insulation, and installation of programmable thermostats) for residences and commercial buildings over 5,000 square feet. As part of this, work with Contra Costa County Department of Conservation and Development to promote the Weatherization Program for qualifying residents. Additionally, develop a City-specific disclosure checklist and coordinate with realtors/brokers to engrain the City's resale requirements into their work with buyers and sellers.	
Measure BE.4 Work with MCE to provide carbon-free and renewable energy to at least 95% of the community by 2030.		
BE-4a	Support MCE in building capacity and funding to provide all Pinole customers 100% carbon-free and renewable energy and adopt a City resolution to enroll all Pinole residents and businesses in carbon-free and renewable from MCE (e.g., MCE's Deep Green option) by 2030. The resolution shall include identification of a funding or subsidy plan/program to avoid cost increases to customers enrolled in the California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs (Action BE-4b).	2030: 3,200 2045: 0
BE-4b	In support of Action BE-4a, work with MCE to create a funding and subsidy plan/program for customers enrolled in the CARE or FERA programs to opt-up to MCE's Deep Green option. This may include subsidizing costs to customers who participate in CARE/FERA programs through non-discounted customer rate increase or obtainment of funding for vulnerable communities.	
BE-4c	Continue to work with MCE to conduct an annual analysis of opt-out rates in the City and expand the research to understand why residents and businesses opt out of MCE. Include targeted outreach to residents living on low and fixed incomes and vulnerable communities to identify barriers to remaining with MCE.	
BE-4d	Continue to partner with MCE to conduct educational campaigns, including tabling at community events, establishing informational resources on the City's website, regularly posting on social media, and developing energy bill inserts, to highlight the benefits of 100% renewable energy and promote the available incentives.	
BE-4e	Conduct targeted outreach campaigns to convert PG&E direct access customers to MCE by promoting available incentives and promoting the economic and business benefits of 100% renewable energy.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Measure BE-5. Increase generation and storage of local community-scale renewable energy.		
BE-5a	Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems and storage that meet minimum requirements of Tier 2 Voluntary Standards under CalGreen.	2030: N/A 2045: N/A
BE-5b	Continue to establish and streamline standards and permit requirements for electrification-related installations and battery storage systems to allow for easier implementation of these technologies in the City.	
BE-5c	Install a co-located community solar and storage facility to benefit affordable housing sites using Equity Resilience Incentives under the Self-Generation Incentive Program available through the California Public Utilities Commission.	
BE-5d	Collaborate with PG&E, MCE, and/or other community partners to support and incentivize local on-site energy generation and storage resources. This could include: ▪ Connecting home and business owners, particularly those in vulnerable communities, to incentives for renewable energy and storage including Net Metering Programs through PG&E for bill credits, the Disadvantaged Communities-single-family Solar Homes (DAC_SASH) program, Self-Generation Incentive Program (SGIP), and Equity Resilience rebates that provide an upfront rebate for battery storage, as well as the federal investment tax credit. ▪ Promoting installation of storage technology in concert with renewable energy infrastructure through multilingual education programs, outreach, and information provided via City platforms. ▪ Providing workshops to large commercial developers and large business property owners on the benefits of microgrids and energy resilience. ▪ Creating a strike team to conduct engagement efforts for the commercial sector to identify ways the City can support commercial energy storage installations and neighborhood scale microgrid opportunities.	
BE-5e	Expand the partnership with GRID Alternatives through increased funding/support and promote the benefits of renewable energy through multi-lingual educational programs to facilitate an equitable transition to renewable energy.	
BE-5f	Partner with CBOs and homeowner's associations (HOAs) through the City's professional grant writing consultant, who will support the identification, conceptualization, preparation, and submittal of grant applications to secure funding for community-scale renewable energy projects. Utilize any grant funded projects as City pilot projects to demonstrate the success of the program and opportunities available.	
Strategy TR: Transportation		
Measure TR-1. Create a safe and connected active transportation network linked to Pinole Creek to increase active transportation mode share to 5.5% by 2030 and 11.5% by 2045.		
TR-1a	Conduct an analysis of existing bicycle and pedestrian conditions during the development of the Active Transportation Plan with a focus on identifying residential communities, commercial uses, schools, and open spaces currently disconnected from the Creek, due to freeways and lack of connections on busy roads. Build on the interactive map created to solicit community input regarding the Active Transportation Plan on "Pinole Speaks," the City's public input website to display the active transportation conditions identified and allow community feedback through the webpage.	2030: 107 2045: 256

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
TR-1b	Complete the Active Transportation Plan with a focus on creating safe and connected active transportation networks that link residential neighborhoods, schools, and commercial centers to Pinole Creek and thereby to each other. The plan will include: ▪ A prioritized list of pathways to be installed or upgraded to include shared-use paths, buffered bike lanes, bike boulevards, and separated bikeways. ▪ A prioritized list of bicycle parking or storage and equipment repair infrastructure. ▪ Information on additional infrastructure installed as part of the plan, such as trash and recycling receptacles to prevent waste from entering the creek due to increased usage. ▪ A schedule for reducing vehicle speed limits at prioritized locations. ▪ Available funding sources for infrastructure buildout. ▪ Use of sustainable materials, when feasible Prioritization shall focus on achieving an equitable active transportation system where all Pinole residents have access to critical connections and mobility options.	
TR-1c	Partner with Contra Costa Transportation Authority to pursue funding from Caltrans' Active Transportation Program or similar funding opportunities to implement improvements from the City's Active Transportation Plan.	
TR-1d	Partner with an entity such as the Metropolitan Transportation Commission, 511 Contra Costa, or the Contra Costa Transportation Authority to expand existing rebate programs to help families living on low- and fixed-incomes purchase alternative modes of transportation (e.g., bicycles, scooters, rollerblades, skates, skateboards) and appropriate safety gear.	
TR-1e	Partner with Bike East Bay and/or other non-profit groups to periodically close streets with connections and vistas of the Creek to cars to host walk/bike/roll (car-free) community events that demonstrate the benefits of a safe and connected active transportation network. Coincide these community events with regular active transportation events to encourage and reward residents for participation.	
TR-1f	Partner with schools, youth sports leagues, the Pinole Police Department, and community groups such as Friends of Pinole Creek Watershed, 511 Contra Costa, Pinole Valley Earth Team, Pinole Rotary, Pinole Community Services Commission and local Tribes to teach students and families bicycle and pedestrian safety and educate them on the safe route availability and the health and environmental benefits of walking and bicycling, as well as the history of the Pinole Creek ecosystem and surrounding natural lands.	
TR-1g	Partner with an electric bike provider or rental company to pilot an electric-bike rental program at the Pinole Library. Track use of the program, including equity indicators, to monitor its success and evaluate continuation of the program.	
TR-1h	Install bike repair stations along the Pinole Creek and consider partnering with a local bike shop to provide quarterly bicycle repair support for residents traveling along the bike path or at a designated, central location.	
TR-1i	Implement 100% of the Active Transportation Plan by 2030 to achieve a 5.5% active transportation mode share by 2030 and 11.5% by 2045.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Measure TR-2. Implement public and shared transit improvements and programs to achieve a 14% public transit mode share by 2030 and 18% by 2045.		
TR-2a	Partner with Western Contra Costa Transit (WestCAT) to conduct a prioritization study to determine transit priority corridors and best potential locations for WestCAT expansions (including the Hercules Intermodal Transit Center and Richmond BART Station) to reduce transit travel times from/to Pinole. The study shall include an analysis of existing stops and schedules, a survey of existing commuter patterns, analysis of potential latent demand, and targeted outreach to residents living on low- and moderate-incomes and members of vulnerable communities to understand the concerns around or equity barriers to using public and/or shared transit.	2030: 256 2045: 559
TR-2b	Conduct a feasibility study to assess the potential impacts and costs of a park-and-ride facility in Pinole and identify potential locations.	
TR-2c	Work with WestCAT to complete an analysis of potential design improvements, such as seating and shading bus stops and along active transportation routes to increase use.	
TR-2d	Work with WestCAT to improve transit accessibility for people with disabilities by ensuring physical accessibility (i.e., ramps, lifts, and tactile paving), providing both audio and visual information; training staff on how to assist people with disabilities and handle equipment; and actively engage people with disabilities in the decision-making process.	
TR-2e	Partner with WestCAT and the Contra Costa Transportation Authority to implement a free public transit pilot program for students, foster youth, and unhoused youth in Pinole that makes it free for participants to travel via WestCAT.	
TR-2f	Based on the prioritization studies (TR-2a - TR-2c), develop a plan to prioritize infrastructure improvements in existing neighborhoods that increase access to and use of public transit. The plan shall include projects and timelines to: - Expand WestCAT routes and schedules - Cohesively label all existing and new stops - Provide safe and convenient shelters with benches, shade, hand sanitizing stations, area maps, and native plants - Establish a schedule to annually monitor routes and schedules to confirm they meet the needs of the community	
TR-2g	Engage with Caltrans to design and install a park and ride facility, which may include implementing efficient traffic flow systems.	
TR-2h	Partner with 511 Contra Costa to educate Pinole residents, commuters, and students on available transit opportunities through free commute consultations, and provide qualifying commuters with financial incentives to take transit, such as pre-loaded Clipper cards and a Guaranteed Ride Home program.	
TR-2i	Partner with WestCAT and the Contra Costa Transportation Authority to pursue funding for the prioritization study and plan (TR-2a - c and TR-2f) through MTC's One Bay Area Grant funding, or similar funding opportunities.	
TR-2j	Partner with the West Contra Costa Unified School District and/or private schools to evaluate mobility needs and expand bus routes where necessary to increase access to and use of school bus transportation to schools, including services for after-school hours for student and their guardians.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Measure TR-3. Develop programs and policies to discourage driving single passenger vehicles and to support the active transportation and public transit mode share goals of Measures TR-1 and TR-2.		
TR-3a	Adopt an ordinance requiring all employers to develop a Transportation Demand Management (TDM) Plan and require large employers (i.e., more than 25 employees) to include money-based incentives for employees to bike, walk, carpool, or take public transit to work. Additionally, complete a comprehensive study to establish an Average Vehicle Ridership (AVR) that accurately reflects Measure TR-1 and TR-2's goals.	2030: N/A 2045: N/A
TR-3b	Create a Pinole Parklets Program to install parklets in the downtown and other commercial areas of the City and engage with businesses to gain sponsorship for the parklets.	
TR-3c	Require informative signage be included at the parklets designed through the Pinole Parklet Program (Action TR-3b) that provide information on the benefits of ecosystem services at all scales, and the health impacts associated with reducing single occupancy vehicle trips.	
TR-3d	Partner with local jurisdictions, public transit providers, and CBOs to identify gaps in the transportation network that can be prioritized for cross-jurisdictional collaboration to connect the region and reduce the need for single occupancy vehicles.	
TR-3e	Conduct an analysis of the potential community impacts and feasibility and benefits of implementing disincentive-based policies for driving single-passenger vehicles, including a congestion charge program, limiting parking options, increased local taxes (income tax, gasoline tax, or car registration tax), and Transportation Network Companies (TNC) user taxes. Include analysis of potential equity impacts of the policies and identification of potential equity metrics to address equity concerns when developing policies.	
TR-3f	Consider opportunities to fund transportation system improvements through disincentive-based program revenues and/or a tiered TDM fee for employers who do not achieve the established AVR by 2030 to establish an equitable transition to more sustainable modes of transportation.	
TR-3g	Conduct AVR surveys of Pinole businesses every three years to determine weekday AVR and mode share split as well as perceived barriers to telecommuting and alternative modes of transportation (i.e., modes other than single occupancy vehicles), and interest in sustainable transportation amenities, infrastructure, and events/resources.	
TR-3h	Consider development applications that will improve the community by increasing density in transit-rich areas and connecting residents of multi-family, and/or affordable housing sites to public and shared transit options.	
Measure TR-4. Increase passenger zero-emission vehicle (ZEV) use and adoption to 33% by 2030 and 100% by 2045.		
TR-4a	Adopt an EV reach code by 2025 requiring new commercial and multifamily construction to install the minimum number of EV chargers based on Tier 2 CalGreen requirements (20% of total parking spaces).	2030: 3,832 2045: 13,839
TR-4b	Adopt an EV reach code by 2026 requiring major multifamily building retrofits to install the minimum number of EV chargers based on Tier 2 CalGreen requirements (20% of total parking spaces) and major commercial retrofits (with a square footage larger than 10,000 square feet or modifications for electric service panels) to meet CalGreen requirements for "EV Ready" charging spaces and infrastructure.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
TR-4c	Adopt an ordinance that bans the development of any new, or expansion, renovation or replacement of any existing, fossil fuel stations in the City prior to the expiration of the Urgency Ordinance. The process should include: 1. Determine and define an outreach process. 2. Prepare a General Plan, Specific Plan, and Zoning Ordinance text amendment, which would establish Service Station land use as Not Permitted by Table 17.20.030-1 in the PMC, making all existing service stations legal non-conforming and subject to Section 17.14.080 of the Municipal Code. 3. Determine if any streamlining enhancements to existing provisions in the PMC that incentivize the expansion, modification, or retrofit of an existing service station to incorporate biodiesel or other alternative fuels or charging stations for electric vehicles should be considered. 4. Take the Amendments through the required public review process, including Planning Commission recommendation and City Council adoption. 5. Continue to direct staff to explore options for additional charging at City-owned/maintained properties and private facilities for public benefit.	
TR-4d	Update Pinole's permit process for EV chargers to create a streamlined process for residents and businesses that is consistent with the State's Electric Vehicle Charging Station Permitting Guidebook (as well as AB 970, AB 1236).	
TR-4e	Prepare a feasibility study to evaluate opportunities for installation of EV charging stations at City owned facilities. The feasibility study will assess electrical capacity, electrical demand, financial constraints, and parking utilization to provide a prioritized list of locations to install new publicly accessible EV charging stations.	
TR-4f	In the feasibility study, include evaluation of opportunities and prioritization of locations to increase the equitable distribution of publicly available EV chargers to residents of multi-family homes and residents living on low- and moderate-incomes, as well as consideration for optimizing daytime charging.	
TR-4g	Work with MCE and PG&E to incentivize residential electric vehicle charger installations and panel upgrades through on-bill financing. Promote the incentives through multi-lingual outreach material on the City's website and at community events.	
TR-4h	Work with MCE to promote and provide technical assistance for their Residential EV Rate Plan and MCE Sync charging app to help community members charge during off-peak hours and save money on home charging.	
TR-4i	Coordinate with community-based organizations, local agencies, and non-profits such as Charge Up Contra Costa, 511 Contra Cost, and Cool the Earth to conduct zero-emission vehicle (ZEV) education events for residents and targeted events for residents living on low- and moderate- incomes as well as residents living in multi-family buildings that would engage the community to evaluate the barriers to ZEV adoption, promote information on the costs and benefits of owning ZEVs, and detail the steps on how to receive incentives for ZEVs.	
TR-4j	Work with Contra Costa County to create an EV charging etiquette policy that encourages a seamless charging experience, fosters community collaboration, and promotes sustainable practices for the benefit of all electric vehicle users and the environment.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
TR-4k	Develop an equitable charging fee structure that provides accessibility for all users, regardless of socio-economic background, fostering inclusivity and promoting widespread adoption of electric vehicles.	
TR-4l	Develop outreach and education materials and distribute them to local businesses, property owners, and developers on the financial (e.g., new funding streams), environmental, and health, and safety benefits of ZEVs. Provide information on available funding opportunities and the City's streamlined permitting process.	
TR-4m	Collaborate with neighboring jurisdictions and the Contra Costa Transportation Authority to develop a zero-emission vehicle car share network.	
TR-4n	Coordinate with car share companies and community-groups to develop an affordable, zero-emission vehicle car share program to serve affordable housing and/or multifamily developments with a priority to target residents living on low- and moderate-incomes.	
TR-4o	Based on the prioritized list of locations developed through actions TR-4d and TR-4e, install at least 270 new publicly accessible Level II and DC Fast chargers by 2030 and 935 by 2045, through public-private partnerships and on City-owned properties.	
Measure TR-5. Increase commercial zero-emission vehicle (ZEV) use and adoption to 25% by 2030 and 100% by 2045.		
TR-5a	Work with the Bay Area Air Quality Management District, Pacific Gas & Electric, and or similar entities to identify and provide funding for electric vehicles and charging infrastructure for disadvantaged or vulnerable business owners.	2030: 2,303 2045: 8,186
TR-5b	Create a summary of commercial vehicle fleets in Pinole and identify employers to work with to accelerate ZEV adoption through targeted education.	
TR-5c	Encourage commercial vehicle fleet operators to accelerate electrification by providing them educational material on the benefits of zero emission vehicles (e.g., fuel cost savings through networked charging and current availability of zero emission vehicles ahead of State mandates), educating them on the City's streamlined permitting process, and compiling and distributing information on potential funding opportunities.	
TR-5d	Implement local tax breaks to incentivize commercial fleet electrification.	
TR-5e	Investigate opportunities to help fund additional EV charging infrastructure by leveraging public/private partnerships and ensuring the City is charging for EV infrastructure use at City-owned facilities.	
Measure TR-6. Electrify or otherwise decarbonize 8% of off-road equipment operations by 2030 and 100% by 2045.		
TR-6a	Create a phased ordinance by 2026 to ban the local operation of gasoline and diesel-powered off-road equipment by type (e.g., lawn and garden, construction), including banning local operation of gasoline and diesel-powered small off-road equipment (SORE) by 2028. Update the ordinance based on a regular review of relevant state regulations, regional rules, and available technology.	2030: 1,245 2045: 10,721
TR-6b	Establish a communication and outreach program to raise awareness of the ordinance, educate community members on the benefits of and funding opportunities for offroad decarbonization, and collect data on offroad fleet and decarbonization trends in the community (e.g., through outreach sampling and surveying).	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
TR-6c	As part of Action TR-6b's program, investigate off-road equipment fleets in the City to identify fleets with the highest decarbonization potential, fleets owned by small and minority businesses that will need targeted support and incentives to decarbonize or electrify, and fleets that do not currently have zero-emission alternatives. Utilize these findings to develop the phased off-road ordinances.	
TR-6d	As part of Action TR-6b's program, develop a multi-lingual Off-road Equipment Replacement Outreach Campaign that provides information to contractors, residents, and fleet operators in the City, with a target towards those identified in Action TR-6c. Information should include equivalent alternatives to fossil-fueled off-road equipment, public health, and safety benefits of alternative equipment technology, and funding opportunities available (i.e., Clean Off-Road Equipment Voucher Incentive Program [CORE]).	
TR-6e	Partner with surrounding jurisdictions and the Bay Area Air Quality Management District (BAAQMD) to develop a rebate and incentive program for upgrading off-road equipment and switching to electric or biofuels. Develop the program with a focus on procedural equity and prioritize funding distribution to disadvantaged and vulnerable communities.	
Strategy SW: Solid Waste		
Measure SW.1. By 2025, reduce organics to landfill by 75% to meet or exceed SB 1383 organic waste diversion requirements through composting and edible food recovery.		
SW-1a	Through MOUs with the City's waste haulers, establish requirements by 2024 for waste haulers to perform annual performance assessments to determine compliance with SB 1383 requirements. If the performance assessments show the hauler is not on target, meet with the hauler and RecycleMore staff to establish prioritized actions for the hauler and/or RecycleMore to complete. Additionally, utilize the assessments to identify trends in contamination and integrate lessons learned into the educational program as part of Action SW-1e.	2030: 2,934 2045: 3,570
SW-1b	Partner with RecycleMore, Sustainable Contra Costa, or similar entities to complete community based social marketing (CBSM) targeted outreach and education campaign by 2025 to high organic generation commercial accounts to educate and train commercial generators' management and staff about best practices in food waste reduction and surplus food donation. As part of this effort, develop successful case studies for Pinole food facilities to provide best practices, cost savings and other methods to energize food facility managers and staff to fully participate in the organics diversion and edible food recovery programs.	
SW-1c	In concert with Economic Development programs, establish a downtown Pinole outreach campaign and recognition program by 2025 to celebrate restaurants/food facilities with the highest diversion and edible food recovery success. Create a space on the City's CAAP website to highlight the campaign and leaders in the community, as well as provide a plaque or alternative community recognition that emphasizes the successful initiatives.	
SW-1d	Establish a program by 2024 to distribute kitchen food pails at community events (e.g., Farmers Markets, California Coastal Cleanup Day, Pinole's Dumpster Day, Earth Walk), distribute food pails at grocery stores in lower-resourced areas, and directly connect with property owners of low/moderate income rental housing to distribute food pails directly to housing units. Through the program, track how many pails are distributed quarterly.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
SW-1e	Establish and maintain an ongoing education program informing the community about compostable materials and upcoming at-home composting workshops, including regularly updated guidelines on composting, especially paper, distributed bi-annually and made available at the City permit counter, grocery stores, as well as at farmers' markets, California Coastal Cleanup Day, Pinole's Dumpster Day, Earth Walk and other community events.	
SW-1f	Transform Pinole's "Dumpster Day" into "Resource Recovery Day," in both name and concept, by introducing a community swap meet where residents exchange/recycle household goods in preference to conventional commerce and waste. At the event, the City will provide education about organics diversion (including the concept of closing the loop for organics material and edible food recovery) and the "Buy Nothing" movement, and feature special compost giveaway events (e.g., free kitchen food pails).	
SW-1g	Work with local grocery stores and retail food markets, the Contra Costa and Solano Food Bank Rescue Program, RecycleMore, and community groups to understand the criteria for acceptable food for recovery and establish a more robust food rescue and distribution program to divert additional edible food to food insecure residents.	
SW-1h	Identify and support school organizations in the City (e.g., leadership, sustainability, and environmental groups or clubs) start "Go Organics" programs to initiate, educate, and implement robust organics collection programs on campus in collaboration with the City's waste hauler and RecycleMore.	
SW-1i	Develop presentations for all schools in Pinole to: ▪ Educate students, staff, and teachers on how to implement an efficient, yet robust organics collection program ▪ Educate students, staff, and teachers on the benefits of diverting organics and reducing GHG emissions ▪ Engage school leadership on the benefits of establishing a 'closed loop partnership' regarding organics. This could include adding organics end products such as mulch and compost delivered from the City's waste hauler nearby composting facility to school gardens and landscaping, thereby eliminating need for pesticides and herbicides, and increasing water retention in school landscaping.	
SW-1j	Continue to partner with the City's waste hauler to include quarterly multi-lingual inserts in residential and commercial billing to highlight important programs and initiatives, including the single-use plastic ban and the no-cost organics pails available to residents and the composting programs in Action ID SW-1h, as well as new programs as they are created.	
SW-1k	Develop a comprehensive outreach program to educate Homeowner Associations, neighborhood associations, and communities on social media platforms such as NextDoor on the City's organic waste diversion requirements and available programs and resources to increase diversion.	
SW-1l	Implement a comprehensive organics collection and edible food recovery program for low income and fixed income people to ensure access to edible surplus food recipients such as food banks and other food recovery organizations.	
SW-1m	Fund the comprehensive organics collection and edible food recovery program using CalRecycle's SB 1383 grant funding cycle.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
SW-1n	Partner with local waste management providers, food recovery organizations, and West Contra Costa Unified School District, private schools in Pinole, or similar entities, to analyze existing food waste generation, disposal practices, and potential sources of edible surplus food.	
SW-1o	Install compost bins throughout the City where there are landfill and recycling bins to collect organics generated. Incorporate the hauling requirements into the waste hauler's contract to confirm proper management and disposal.	
Measure SW-2. Reduce landfilled inorganic waste 35% by 2030 and 90% by 2045.		
SW-2a	Adopt a Zero Waste Policy and Zero Waste Strategic Plan to guide and detail methods to meet the reduction target of 35% by 2030 and 90% by 2045. As a part of the Zero Waste Strategic Plan, adopt a Sustainable Foodware Ordinance by 2024 to phase in the reduction, and subsequent elimination of, single-use plastic foodware by food facilities.	2030: N/A 2045: N/A
SW-2b	Partner with an entity such as Terracycle to create a recycling program at City-owned and operated buildings and other community-based locations to collect hard to recycle products, such as snack pouches.	
SW-2c	Partner with local businesses, nonprofits, and community groups or organizations to establish pop-up repair cafes for commonly broken and easily repaired items. Additionally, engage local home improvement businesses and partner with the Pinole Library to promote reuse by increasing accessibility to shared tools through a tool lending program. In addition to providing available resources, work with experts in various fields to provide quick reference guidance documents or record short videos that residents can refer to when borrowing specific equipment to learn the most effective ways of using the tools available.	
SW-2d	Continue the City's single-use plastic education efforts and integrate the efforts into a citywide education program, 'Pinole's Path to Zero Waste,' to expand outreach and resources about zero waste goals and focus education on specific benefits to the City (e.g., reduction of single-use plastic pollution flowing into Pinole Creek and San Pablo Bay, community savings from reduce and reuse efforts).	
SW-2e	Partner with community-based organizations such as ReThink Disposables and RecycleMore to engage Bayfront Chamber of Commerce members and other Pinole businesses to educate the business community about the benefits of reusables and inform them about the new Sustainable Foodware Ordinance.	
SW-2f	Work with compostable distributors to achieve competitive pricing for compostable foodware to increase compliance with the Sustainable Foodware Ordinance.	
SW-2g	Sponsor businesses to host refill pop-ups at community events (e.g., Farmers Market) where community members can purchase common household products and food in bulk using their own containers and create a network of local businesses that can provide the pop-up local, bulk products with zero-waste packaging.	
SW-2h	Create a Hazardous Waste Material Reuse Program that offers usable household hazardous waste collected at the West Contra Costa County Drive-Through to the community free of charge through a Material ReUse Store. Establish a schedule and location(s) to operate the Material ReUse Store alongside the household hazardous waste collection schedule and promote the store on the City's website and on the City's social media platforms.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
SW-2i	Partner with public schools to reduce single-use foodware, convert necessary single-use plastic foodware to compostable/reusable foodware, and educate students on closing the loop (i.e., Loop organics).	
SW-2j	Secure financial grants and assistance from Rethink Disposables, CalRecycle's City/County Payment Program (CCPP), and others, to support businesses in developing pilot programs for reusable and returnable foodware and drop-off stations, purchasing and installing dishwashers, and overall gaining compliance with the Sustainable Foodware Ordinance. Highlight and support use of new grant funds available for small and minority-owned businesses to participate. Additionally, Seek grant funding to support pop-up repair cafes and a tool lending program.	
Measure SW-3. Meet CalGreen's current 65% construction and demolition (C&D) materials diversion requirements on all covered projects.		
SW-3a	Include in, or amend, the franchise agreement with the City's waste hauler to require C&D diversion requirements with performance disincentives for non-compliance.	2030: N/A 2045: N/A
SW-3b	Partner with RecycleMore and the City's waste hauler to complete an assessment of projects that were not compliant with the 65% diversion requirement. Determine an Action Plan to ensure similar future projects meet the 65% requirement. Complete ongoing review of projects collaboratively with RecycleMore to assess projects that are non-compliant and methods to ensure 65% diversion requirements are met.	
SW-3c	Fully engage and inform permit applicants of the 65% requirements at the very beginning of the planning, building, and inspection process and collaborate with Recycle More to integrate C&D diversion practices into the City's permit process.	
SW-3d	Create and distribute a Contractors Guide to educate contractors on the requirements to meet the program conditions that include pre-permit documentation weight tags, post-permit documentation, and consequences for not meeting minimum diversion requirements.	
SW-3e	Update C&D information on the City's website to include a more complete comprehensive list of documents, such as: - Pre-permit requirements - Green Halo system requirements - Locations for C&D materials processing/diversion - Weight tag requirements - Post project requirements and signature - Details regarding consequences for not meeting requirements.	
SW-3f	Partner with the City's waste hauler, RecycleMore and other C&D organizations to educate on best practices for meeting CalGreen 65% requirements as part of Program 9 in the Housing Element.	
SW-3g	Use financial grants and assistance from CalRecycle to fund and provide tools for low- and fixed-income projects to meet requirements.	
SW-3h	Continue to offer online-waste tracking options for the community through the Green Halo compliance system, or a similar system, which allows for receipts to be verified online, streamlining the processes substantially.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
SW-4. Analyze opportunities to enhance the City's Wastewater Treatment Plant to divert organic waste from the landfill and increase organics recovery.		
SW-4a	Complete a feasibility study to identify local partners, analyze the potential waste volume, and assess facility upgrades needed to complete a pilot Organics to Energy Project at the WWTP and the potential cost and GHG emission reduction impacts of such a project.	2030: N/A 2045: N/A
SW-4b	Conduct case study assessments of other organics to energy projects at WWTPs to educate City decision makers, the public, and other interested parties on the feasibility of the pilot project and opportunities to enhance the WWTP for organic waste diversion.	
SW-4c	Partner with an organics-to-energy company to help assess the feasibility of a pilot project for the City and impacted communities.	
SW-4d	Pursue funding opportunities (e.g., CalRecycle) and financing alternatives to address capital costs for the pilot project.	
SW-5. Establish new programs to meet the City's SB 1383 annual procurement target (i.e., 1,073 tons of compost in 2030 and 1,292 tons of compost in 2045) by 2030.		
SW-5a	Establish a program to procure and provide compost for: ▪ The City's parks, recreation areas, schools' landscaping, and school gardens ▪ Garden community organizations such as the Pinole Garden Club ▪ Residential and commercial landscapers	2030: 425 2045: 513
SW-5b	Amend or otherwise ensure that the Franchise Agreement for the City's waste hauler will provide organic waste products at reduced cost.	
SW-5c	Establish a new program to deliver compost to local schools and community organizations. Expand free compost giveaways to residents, local urban farmers, and other organizations. Track the success of the program based on tons of compost given away and promote the program on the City's CAAP website and through the City's social media channels.	
SW-5d	Complete a feasibility study in collaboration with RecycleMore to identify cost-effective end uses for organic waste products and methods to distribute the products.	
SW-5e	Using established education materials from RecycleMore and other organizations, provide outreach and education to the City's garden community organizations such as the Pinole Garden Club, resident groups, and commercial landscapers in Pinole on the benefits of using organic end products such as compost and mulch.	
SW-5f	Partner with Republic Services, or others who own large composting operations in close proximity to the City to provide organic end product to the community at a cost-effective rate.	
SW-5g	Use the SB 1383 fee to pay for a portion of organic end use products. Use financial grants and assistance from CalRecycle to fund the purchase of organic end product. Focus effort on lower income projects to participate in program.	
SW-5h	Establish an online mapping location hosted on a City website to identify existing community gardens and make a list of potential underused park space for expansion, setting internal key performance indicators for number of new garden spaces.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Strategy W: Water		
Measure W-1. Reduce per capita potable water consumption 10% by 2030 and 25% by 2045, from 2017 levels.		
W-1a	Continue to implement and enforce Pinole Municipal Code Chapter 15.54 (Water Efficient Landscaping) to encourage use of efficient irrigation systems, greywater usage, onsite storm water capture, and limit the portion of landscapes that can be covered in turf.	2030: N/A 2045: N/A
W-1b	Adopt a Water Conservation and Water Shortage Contingency Program Ordinance to establish drought thresholds that trigger varying water use reduction strategies. The Ordinance will focus primarily on domestic water use, health and sanitation, and fire protection.	
W-1c	Perform a study to understand the feasibility and potential potable water savings of adopting a Dual Drainage Plumbing Ordinance. The feasibility study will help the City determine the size threshold for future development projects subject to the Ordinance.	
W-1d	Upon completion of the Feasibility Study in Action W-1c, adopt an appropriate Dual Drainage Plumbing Ordinance.	
W-1e	Continue to comply with SB 1087 and Municipal Code Chapter 17.32 (Affordable Housing Requirements) requirements to provide priority water and sewer service allocations to affordable housing developments.	
W-1f	Continue to partner with East Bay Municipal Utility District's to provide water conserving fixtures/fittings and rebates for appliances to residents throughout Pinole, with a focus on disadvantaged and vulnerable communities to reduce utility bill burdens. Provide specific updates to the community as new programs are released, such as featuring a new indoor plumbing program to help Customer Assistance Program participants find and fix indoor leaks.	
W-1g	Implement a comprehensive, coordinated educational initiative focused on property owners, landlords, property management firms, homeowners' associations, and occupants to reduce water usage in homes and businesses. This campaign will incorporate the water conservation messaging of the East Bay Municipal Utility District (EBMUD), utilizing various communication channels such as publications, websites, community events, workshops, and bill inserts. It will also provide details on available incentives for water-saving appliances, fittings, fixtures, and efficient landscaping irrigation systems, including those offered by EBMUD. Additionally, the campaign will focus on reaching disadvantaged and vulnerable communities to alleviate the burden of utility bills.	
W-1h	Partner with EBMUD, the Contra Costa Master Gardeners and/or Pinole Garden Club to develop community programs to encourage water-wise landscaping and watering practices and to provide a hands-on learning experience such as sheet mulching lawn conversions for members of the community. Include promotion of EBMUD Lawn Conversion rebates.	
W-1i	Continue to partner with Rising Sun to provide Green House Calls to residents to provide high-efficiency fixtures/fittings and leak detection tests.	
W-1j	Work with EBMUD to provide existing commercial entities that have decorative or non-functional turf onsite with the education and resources necessary to transition to regenerative landscapes with a goal of replacing all existing commercial decorative or non-functional turf by 2030.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Measure W-2. Increase the community's use, supply, and access to recycled water.		
W-2a	Continue to work with EBMUD to complete a feasibility study to identify opportunities to increase supply of recycled water to the City. The feasibility study will: - Analyze opportunities to expand purple piping infrastructure - Identify opportunities and technologies to increase recycled water supply - Evaluate potential impacts to cost of service - Investigate ways to maintain or decrease costs of service through the projects - Identify customers that would benefit from receiving recycled water within City of Pinole and adjacent to the City, in Hercules or other surrounding jurisdictions, as applicable	2030: N/A 2045: N/A
W-2b	Pursue funding opportunities at the state and federal level, such as the Clean Water State Revolving Fund and the US Bureau of Reclamation's WaterSMART grants, to fund recycled water infrastructure and to increase the equitable distribution of recycled water in the City.	
W-2c	Investigate working with EBMUD to promote the installation of greywater equipment in homes and businesses through a multi-lingual Laundry-to-Landscape outreach campaign. The campaign shall include: - Educational information on the environmental and financial benefits of greywater systems - Information on how to install and use the systems, including information on EMBUD greywater rebates - Distribution of educational materials at the City's permitting counter - Supplemental event(s) hosted with EBMUD or industry expert to educate community members on the installation and use of the systems, including an existing residential greywater system demonstration. - Direct outreach to multi-family property owners.	
W-2d	Create and implement a phased outreach campaign to educate the community on the benefits of recycled water as well as dispelling misconceptions to and increase community use.	
W-2e	Upon completion of the feasibility study to identify opportunities to increase supply of recycled water to the City, work with EBMUD to develop a Recycled Water Infrastructure Enhancement Plan that outlines the potential for system expansion, identifies opportunities, as applicable, to integrate recycled water sources into non-potable water networks for irrigation, and the promotion of educational campaigns that raise awareness on what recycled water is and how it is used.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Strategy CS: Carbon Sequestration		
Measure CS-1. Increase carbon sequestration and prepare the urban forest for climate change, extreme heat, drought, and wildfire by adopting policies developed through the Community Urban Forest Plan.		
CS-1a	Develop and adopt a Community Urban Forest Plan by 2026 to identify and prioritize tree planting areas in the City. The Plan will: ▪ Inventory the existing urban forest as a baseline and identify areas in Pinole that have below average canopy coverage (such as census block groups 60133640021, 60133640023, and 60133922004) and high urban heat island effects. ▪ Design a tree planting program focused on eliminating significant difference in canopy coverage between census blocks by 2040. ▪ Identify a phased timeframe for program implementation. ▪ Establish a management plan for existing trees that will focus on promoting street tree health, enhancing resilience, increasing the environmental benefits and co-benefits from trees, and engaging the community in urban forest management. ▪ Establish a tracking system to assess progress towards annual goals and annual benchmarks.	2030: N/A 2045: N/A
CS-1b	Collaborate with community-based organizations with connections to disadvantaged and vulnerable communities in the development of the Urban Forest Inventory and Management Plan and share the plan on the City's website.	
CS-1c	Continue protecting existing trees on private property through the provisions of PMC Chapter 17.96 (Tree Removal) and amend the Municipal Code to require as a condition of approval when a Tree Removal Permit is issued either planting on-site replacement trees or paying an in-lieu fee equal to at the value of the protected tree.	
CS-1d	Prioritize tree implementation in areas with populations most at risk to extreme heat impacts (older adults, children, outdoor workers, individuals with disabilities, transit dependent individuals, and individuals with chronic health conditions) pursuant to the Urban Forest Inventory and Management Plan.	
CS-1e	Review, enhance, update, and regularly maintain the City's existing "Tree" webpage with relevant information, such as best practices for watering and fertilizing trees, guidelines for pruning and maintenance, information on local tree species, and resources for reporting tree damage or disease. Additionally, provide information on the benefits of a healthy tree canopy, including improved air and water quality, reduced urban heat island effects, and increased property values.	
CS-1f	Amend the Municipal Code to include street tree requirements for all zoning districts, increase shade tree requirements for new developments, and include increased permeable surface requirements for new development or substantial redevelopment.	
CS-1g	Continue to pursue and obtain grant funding for tree planting and urban forest management. Identify and apply for applicable federal (e.g., USDA) and state (e.g., California ReLeaf, Affordable Housing and Sustainable Communities Program (AHSC), Cal Fire's Urban and Community Forestry Program, and the California Natural Resources Agency's Urban Greening Program) available grants for tree planting and urban greening projects.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CS-1h	Develop a City incentive program for new tree plantings on private properties with a focus on members of disadvantaged and vulnerable communities and in areas where there is below average tree equity or canopy coverage, pursuant to the Urban Forest Inventory and Management Plan.	
CS-1i	Partner with a local nursery to host regular tree planting events and volunteer opportunities to engage community members in the effort to maintain and expand the local tree canopy.	
CS-1j	Work with a community non-profit organization to develop an adopt a tree program increase the urban tree canopy in marginalized communities	
CS-1k	Establish a Tree Trust or Tree Endowment where the interest on the principal can be used for purchasing and planting trees in prioritized areas pursuant to the Urban Forest Inventory and Management Plan, paying for tree maintenance in disadvantaged and vulnerable communities in the City, or supporting staff resources for the Urban Forest Management Program.	
Measure CS-2. Increase nature-based and technological carbon sequestration and capture opportunities in Pinole.		
CS-2a	Seek funding to conduct a study to quantify the carbon stock in existing Pinole blue carbon ecosystems (e.g., eelgrass in San Pablo Bay) and quantify the carbon sequestration potential of blue carbon restoration and expansion.	2030: N/A 2045: N/A
CS-2b	Partner with concrete producers to research opportunities for technological carbon sequestration in Pinole including potential funding mechanisms (e.g., Verra's Methodology for CO ₂ Utilization in Concrete Production).	
CS-2c	Based on the studies, develop a plan to increase carbon sequestration in Pinole. The plan shall include a quantitative carbon sequestration target to achieve by 2045 and a process for regular monitoring of carbon stocks.	
CS-2d	Create an educational campaign that informs members of the community about the benefits and methods associated with carbon sequestration and capture that avoids jargon and clearly explains the opportunities and benefits in the City. Confirm that the educational materials are provided in a multi-lingual, culturally considerate manner and distributed specifically to disadvantaged community members.	
Adaptation		
Strategy CAR: Community Adaptation and Resilience		
Measure CAR-1. Establish a reliable resilience center in the City to provide relief from extreme weather events, including extreme heat, flooding, and smoke from wildfires.		
CAR-1a	Conduct an assessment on the effectiveness of current City resilience center operations. Conduct a study regarding the feasibility of additional community locations (e.g., Pinole Youth Center and Pinole Library) that could serve as resilience centers by evaluating current amenities and resources available. As part of the studies, verify that the needs of vulnerable populations are met during climate hazard events and host focus groups with selected community-based organizations and other interested parties to identify needs for their service population.	N/A
CAR-1b	Identify and apply for funding opportunities that support development of a resilience center, and/or staff positions to maintain the center, such as the Office of Planning and Research Regional Resilience Grant Program.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CAR-1c	Utilizing the City's "Energy Conservation, Generation, and Storage Assessment" conducted in 2024, establish an upgrade and maintenance cycle, including replacement of filters with at least a MERV 11 rating on a quarterly basis for all existing HVAC systems in City owned buildings.	
CAR-1d	Work with WestCAT to establish a list of vulnerable community members (e.g., older adults, who may not be able to access a vehicle or public transportation during a heat wave), as well as a program to transport them to established resilience centers.	
CAR-1e	Partner with local public or private entities to establish resilience centers at privately owned facilities in the City.	
CAR-1f	Provide essential resources such as health programs, food, refrigeration, charging stations, basic medical supplies, and other emergency supplies at all City resilience centers, as well as educational materials on resources and climate adaptation and preparedness. Audit and refresh supplies on a biannual basis, including information on any new or updated programs or resilience center locations.	
Measure CAR-2. Provide streamlined communication to the public on climate adaptation preparedness, resilience, and evacuation.		
CAR-2a	Review and update the City's Emergency Information webpage ²¹ to reflect ways to prepare for events that may be likely to increase due to climate change, including wildfires, floods, extreme precipitation, extreme heat, poor air quality, and drought, as well as heat-related illness, exacerbate mental stress, and respiratory diseases	N/A
CAR-2b	Assess current City capacity to shelter displaced residents including facilities, infrastructure, services, and community programs during an extreme weather event.	
CAR-2c	Partner with community-based organizations to establish a working group to develop designated temporary housing options for wildfire displaced residents to live in for up to two years after their home is destroyed or severely damaged.	
CAR-2d	Require that all emergency preparedness and evacuation communications are provided in plain language and translated into Spanish, Tagalog, and Cantonese to support non or limited English speakers. Increase participation in emergency notification systems including the Community Warning System and PG&E Community Wildfire Safety Program through social media campaigns and physical flyer distribution.	
CAR-2e	Provide administrative support and dedicate staff time for grant writing and funding tracking for climate adaptation and resilience projects, including opportunities to increase and enhance communication such as preparation of interactive websites and information sharing resources.	
CAR-2f	Identify critical facilities in need of reliable sources of sustained electrical power during events of extreme climate. Assess power loads at each critical facility, determine costs and technology options for battery storage, and make any additional recommendations to the City Council prior to advancing construction.	

²¹ <https://www.ci.pinole.ca.us/cms/One.aspx?portalId=10947056&pageId=14640371#emergency>

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CAR-2g	Utilize Pinole Community Television (PCTV) to provide consistent information to community members about adaptation preparedness by providing multi-lingual information that is accessible for people including seniors, individuals with disabilities, children, and caregivers.	
CAR-2h	Create evacuation procedures for vulnerable populations in partnership with community-based organizations and facilities that serve identified populations. Host and/or participate in in-person engagement and incorporate games/activities to educate the community on preparedness.	
CAR-2i	Require that the City's resilience centers have adequate backup power sources and battery storage to mitigate service disruptions and provide redundancy in the event of a power outage.	
Strategy FL: Flood Control		
Measure FL-1. Improve the quality of and reduce the quantity of stormwater runoff through Implementation of the Pinole Green Infrastructure Plan.		
FL-1a	Prepare a feasibility study to investigate potential infrastructure improvements to relocate critical City infrastructure, such as the Senior Center, Pinole Police Department, and Tiny Tots, from the 100-year flood zone. The feasibility study would include: 1. Identifying potential alternative locations for the City's critical infrastructure that's located in the 100-year flood zone. 2. Preliminary design and construction of new buildings or facilities. 3. Analysis of costs associated with relocating facilities as well as the potential costs of doing nothing. 4. Outreach to community members and other interested parties to confirm that the relocation aligns with the community's needs.	N/A
FL-1b	Continue participation in the Contra Costa County Multi-jurisdictional Hazard Mitigation Plan update; identify flood mitigation actions eligible for grant funding through FEMA hazard mitigation assistance programs.	
FL-1c	Encourage landlords to consider how to prepare their properties for flooding by providing retrofit informational resources and educate them on prioritizing low-impact stormwater best practices.	
FL-1d	Create educational campaigns that connect with vulnerable populations to increase awareness and knowledge of how to mitigate and weather flooding.	
FL-1e	Identify and apply for grant opportunities to fund stormwater related projects from sources such as the State Water Resources Control Board, California Natural Resources Agency, the Coastal Conservancy, California Water Foundation, as well as the United States Environmental Protection Agency and the United States Department of Agriculture.	
FL-1f	Review existing best practice and conduct studies of combined riverine/ shoreline flooding and increased severity of rainfall events on watershed flooding.	
FL-1g	Complete the Storm Drainage Master Plan as identified in the Capital Improvement Plan to thoroughly investigate deficiencies in the existing storm drain system and prioritize infrastructure improvements.	
FL-1h	Implement stormwater and drainage projects identified in the City Capital Improvement Plan, to mitigate localized flooding incidents.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
FL-1i	Conduct post-flood inspections for residents and business owners upon request and provide post-disaster home repair and technical assistance for vulnerable communities.	
Strategy SLR: Sea Level Rise		
Measure SLR-1 Create, restore, and protect natural coastal ecosystems.		
SLR-1a	Conduct a shoreline stabilization study to determine the most effective methods for protecting Pinole's coastal communities and infrastructure from erosion and sea level rise, and to identify opportunities for restoring natural shoreline habitats that can serve as a buffer against storm surges and other impacts of climate change. The study would involve the following: 1. Assessing the physical characteristics of the shoreline 2. Evaluating the potential risks and benefits of different stabilization techniques 3. Engaging with local community members and other interested parties to ensure that the chosen strategies align with community needs and values 4. Prioritizing options that enhance and maximize shoreline resources and access including considering innovative nature-based solution approaches	N/A
SLR-1b	In collaboration with Contra Costa County and state agencies, develop a sea level rise resilience and adaptation strategy with shoreline restoration projects using innovative nature-based solutions and green engineering that would enhance public access, shoreline habitat (e.g., re-establishing native dune habitats, wetlands, and lagoons) and increase shoreline recreational opportunities.	
SLR-1c	Partner with the San Francisco Bay Conservation and Development Commission (BCDC), and/or similar entities, regarding regional approaches, strategies, and mitigation actions to address sea level rise. Implement a Shoreline Management Plan, and/or a Shoreline Monitoring Program that would identify erosional hotspots and timely response.	
SLR-1d	Establish annual budgets for projects within and benefiting vulnerable populations (2016, Assembly Bill 1550), including seniors, individuals with disabilities, children, low-income communities, and communities in low-lying areas.	
SLR-1e	Research external funding opportunities, including grants to support shoreline resilience, shoreline restoration projects, or beach nourishment (e.g., Living Shoreline and Nature-based solution projects). Examples of grantee agencies are California Coastal Conservancy, California Coastal Commission, California Ocean Protection Council, NOAA, California Division of Boating and Waterways.	
SLR-1f	Identify replacement opportunities or otherwise plan for how to replace recreational areas and accessways that will be lost due to inundation or damage associated with sea level rise. It might be done through the designation and zonation of lands into a Local Coastal Program or providing additional incentives to encourage creation of new recreation areas or opportunities. Additionally, plan for future shoreline recreational space and parkland by protecting open space adjacent to shoreline habitats, allowing the beach and habitats to migrate into these spaces.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
SLR-1g	Partner with West Contra Costa Unified School District, private schools in Pinole, East Bay Parks, East Bay Municipal Utility District, Friends of Pinole Creek Watershed, 350 Contra Costa, or similar entities to create educational opportunities for the community around the Pinole Creek Watershed. These programs would focus on educating youth in Pinole on the importance of natural shoreline ecosystems, their role in climate resilience, biodiversity, and local, native species. The programs would also include information on how people can actively get involved in adapting to climate change in their homes and neighborhoods and provide hands-on volunteer opportunities for the community to participate.	
SLR-1h	Increase the City's near and long-term capacity building to be able to develop and implement thoughtful shoreline resilience projects by creating a position for and hiring a shoreline resilience expert. The specific title may vary depending on the individual's background and the focus of their work within the broader context of climate change and sea level rise.	
Strategy EH: Extreme Heat		
Measure EH-1. Reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect.		
EH-1a	Partner with West Contra Costa School District and the private schools in the City to map out each campus in Pinole to understand the current infrastructure and then develop a plan to reduce the heat islands in Pinole's schools and adjacent areas, including on walking routes by plant trees or increasing shade structures as appropriate.	N/A
EH-1b	Establish a tree removal replacement policy where trees that are removed are replaced with shade trees that are adapted to the area.	
EH-1c	In collaboration with Contra Costa Health Services, establish local early heat warning system that provides public health alerts in Spanish, Tagalog, and Cantonese.	
EH-1d	Complete an assessment that evaluates new cool pavement technology, cost/benefits, and challenges and opportunities. Upon completion of the study, conduct a pilot of cool pavement application at a centralized area in Pinole that is most impacted by extreme heat to demonstrate success of the program.	
EH-1e	Partner with WestCAT to audit existing bus stops in the City of Pinole with information detailing the current structures around the transit stops. Create a prioritization list of stops with low shading scores. Identify opportunities to add, replace, or upgrade existing transit stop shelters to provide increased shade for the transit riders and work with WestCAT to implement the identified opportunities.	
EH-1f	Identify trees, grasses, and shrubs with greatest cooling benefits and maximum biodiversity potential and plant them in prioritized open spaces.	
EH-1g	Identify grant funding opportunities and engage with local nurseries (e.g., Oaktown, Watershed Nursery, and Native Here) and tree planting programs to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted by residents living in rental/multi-family homes.	
EH-1h	Amend the Building Code to require cool roofs for all new construction.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
EH-1i	Partner with MCE and emergency management services to establish backup power and energy grid shutdown protocols that protect the most vulnerable populations (e.g., seniors, individuals with chronic health conditions, children, individuals with disabilities).	
EH-1j	Identify opportunities to apply compost as mulch at City open spaces to improve water-holding capacity and filtration to combat extreme heat.	
EH-1k	Identify a location in the City to establish a “Community Corner” redevelopment project as a model design project to reduce urban temperatures. Incorporate trees, grasses, and shrubs with the greatest cooling benefits into the project, utilize compost in the project’s landscaping, and incorporate cool pavement technology, cool roofs, and shade structures where applicable. Further consider incorporating a rain garden and resilience center resources into the redevelopment project and publicize all resilient design elements through signage on the property and community tours.	
EH-1l	Support development of community-serving microgrids and prioritize areas with high social vulnerability.	
Measure EH-2. Map out and create a mural or set of murals using reflective paint to reduce interior heat in areas of Pinole that are most impacted by the urban heat island effect by 2026.		
EH-2a	Partner with NASA, or a similar organization to create a digital map of the City showing neighborhoods where it is the hottest and identify a location or locations to pilot an urban heat mural project.	N/A
EH-2b	Post the map on the City’s website and host community feedback sessions to update the analysis included in the map based on real lived experiences. Additionally, post mural design concepts that are created as part of Action EH-2c to foster a sense of ownership over the project.	
EH-2c	Create a partnership with Contra Costa College, Pinole Artisans, West Contra Costa Unified School District, private schools, and/or similar interested parties and community-based organizations to design and paint mural(s) that inspire the community while reducing indoor heat using reflective paint.	
EH-2d	Install indoor and outdoor temperature sensors in the identified locations prior to completing the mural and continue to track data after the murals are installed to measure indoor changes in temperature to quantify the benefits of the project.	
EH-2e	Identify and apply for grants to fund the completion of the mural and/or work with cool paint manufacturers to supply a small amount of paint at no cost for a pilot project where their name would be included on a plaque with volunteer artists who partner with the City to donate their time and expertise to create a unique project.	
EH-2f	Host a community unveiling ceremony where the artists and project partners are invited to participate in a meet and greet and celebrate the community in an unveiling celebration that can also be used to provide the community with information on the status of the Climate Action and Adaptation Plan implementation and resources including relevant community incentives and rebates.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
Strategy WF: Wildfire		
Measure WF-1. Enforce defensible space and home hardening standards to mitigate structure ignitions from wind blow embers and direct flame impingement in fire hazard severity zones and protect the community from wildfires.		
WF-1a	Partner with Housing Authority Contra Costa to conduct a study that estimates potential housing displacement impacts associated with wildfire events.	N/A
WF-1b	Conduct a feasibility study and if recommended, amend the Pinole Building Code Title 15 (Building and Construction) to require best-practice Ignition Resistant Construction methods for new construction and substantial redevelopment in the wildfire hazard zone.	
WF-1c	Develop a subsidy program to improve air quality in the homes of low-income residents or vulnerable community members to mitigate impacts from wildfire smoke.	
WF-1d	Partner with West Contra Costa Fire Safe Council to help secure grant funding for mitigation activities that promote fire safe retrofits of existing structures that meet ignition-resistant building codes.	
WF-1e	Conduct a built asset vulnerability assessment to identify which City-owned facilities and infrastructure have the highest risk to wildfire impacts, identify opportunities to mitigate risk and implement changes.	
WF-1f	Evaluate and help identify and apply for funding for infrastructure improvements at Pinole Fire Station 74 to mitigate against wildfire hazards (fire breaks, fire resistant building materials, etc.).	
WF-1g	Actively engage in collaborative efforts to reduce wildfire risks, implementing effective mitigation strategies, and fostering a culture of fire safety through education and community involvement to achieve Firewise ²² recognition.	
WF-1h	Prepare, adopt, and fully implement a Vegetation Management Plan for high-fire risk areas.	
WF-1i	Continue to conduct proactive vegetation/weed abatement enforcement by removing vegetation and/or brush in areas adjacent to wildfire hazard zones, including both public and private property. Establish a comprehensive defensible space zone and fire breaks within the VHFHSZ, and a regular maintenance schedule. A FEMA approved HMP can establish eligibility for grant funding to complete fuel modification projects.	
WF-1j	Locate future critical facilities outside of the wildfire hazard zone.	
WF-1k	Continue to coordinate with PG&E through Rule 20A Program to underground utility lines to mitigate wildfire risk.	
WF-1l	Conduct on-going workshops on defensible space, vegetation management, and home-hardening techniques based upon most up to date CAL FIRE management guidelines and policies for landowners in fire hazard severity zones.	

²² Firewise USA® recognition program is administered by the National Fire Protection Association (NFPA) and provides a collaborative framework to help neighbors in a geographic area get organized, find direction, and take action to increase the ignition resistance of their homes and community and to reduce wildfire risks at the local level. The Firewise USA program is a part of California's efforts to ensure communities are prepared against wildfire, and CAL FIRE Office of the State Fire Marshal's new Community Wildfire Preparedness & Mitigation Division works to assist local communities in receiving this designation.

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
WF-1m	Foster a community partnership that can successfully apply for and receive funding from programs such as the CAL FIRE Defensible Space Assistance Grant program and upcoming opportunities that become available.	
Municipal		
Strategy CIO: Strategy CIO: City Infrastructure and Operations		
Measure CIO-1. Upgrade all City accounts to MCE's Deep Green option by 2025 and electrify or otherwise decarbonize all municipal buildings and facilities by 2035.		
CIO-1a	Adopt an electrification ordinance in 2024 requiring all new municipal construction to be fully electric after calendar year 2024 without any natural gas connections.	N/A
CIO-1b	Complete an analysis to identify the electrical capacity and utility infrastructure upgrades needed to electrify the recreational pool heating system. Pursue replacement funding through PG&E on-bill financing and California Energy Commission (CEC) 1% Loans.	
CIO-1c	By 2025, adopt a Resolution requiring the implementation of a building and facility electrification plan to electrify or otherwise decarbonize all municipal buildings by 2035.	
CIO-1d	Develop a plan to electrify or otherwise decarbonize all municipal buildings and facilities by 2035 which will include: - An inventory of existing fossil fuel-powered buildings and facility equipment, available electric or zero/low-carbon alternatives for replacing each, and relevant costs and benefits of replacing each (e.g., lifespan, equipment costs, operational quality). - A prioritized schedule for completion based on potential to reduce natural gas and propane usage. - Prioritize upgrades that benefit vulnerable communities first, such as the Senior Center, Youth Center, and Tiny Tots facilities.	
CIO-1e	Expand efforts to obtain funding for municipal building and facility decarbonization through grants, incentives, or financing provided by entities such as: - DOE Block Grants - Leases: Capital lease, Operating Lease, Tax-Exempt Lease purchase (4-5%) - Loans and Grants: 1% CEC Loan, Dept. of Energy Grants, Federal Grants (IIJA, IRA) - On-Bill Financing - Energy as a Service (EaaS) - Energy Savings Performance Contract (ESPC, guaranteed energy savings help pay for the project) from Energy Service Companies (ESCOs) - Grant Anticipation Notes or other Short-Term Notes/Loans	
CIO-1f	Upgrade all municipal electricity accounts to MCE Deep Green by 2025.	
CIO-1g	Plan, fund, and conduct an electrification pilot project at a municipal facility (e.g., the Library). Promote the demonstrated benefits of the fully electric building (e.g., cost-savings, GHG emission reductions) and publicize the planning, design, installation, and post-operation of the project to make the steps to electrification transparent to the community.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CIO-1h	Partner with regional organizations such as the Building Decarbonization Coalition to train City staff, community members and volunteers on the benefits and technical requirements of electrification, help them implement the building and facility electrification plan and empower them to be advocates for electrification across the community.	
Measure CIO-2. Electrify or otherwise decarbonize 30% of the municipal vehicle fleet by 2026 and 100% by 2040.		
CIO-2a	Expand and update the City's fleet vehicle replacement schedule to transition 30% of the municipal vehicle fleet to ZEVs by 2026 and 100% by 2040. Review the replacement schedule and ZEV transition goals every 2 years and update them as needed based on updates to state regulation and ZEV market availability.	N/A
CIO-2b	Complete a Municipal Electric Vehicle Infrastructure Plan to analyze the City's charging needs through 2026 and 2040. The plan shall include: ▪ A prioritized list of City-owned properties/locations to install new Level II and DC Fast chargers ▪ An assessment of future electricity demand and potentially energy-constrained locations ▪ A pathway to coordinate with PG&E on installing microgrids or back-up power at City-owned properties to support the ZEVs	
CIO-2c	Secure funding from state programs (such as the California Air Resources Board's Clean Vehicle Rebate Project and the Truck and Bus Voucher Incentive Program) and federal sources to increase procurement of EV or ZEV cars, trucks, and other vehicles and installation of EV/ZEV charging/fueling infrastructure at municipal facilities. Additionally, explore opportunities for Low Carbon Fuel Standard credit generation from use of low carbon fuels/electricity for fleet vehicles.	
CIO-2d	Dedicate staff time to implementing, tracking, and updating the City fleet vehicle replacement plan bi-annually.	
CIO-2e	Partner with an entity such as Contra Costa Transportation Authority, to train City staff on the use and charging of electric and zero-emission vehicles and educate them on the benefits of EVs/ZEVs.	
CIO-2f	Consider highlighting the City's EV/ZEV fleet at community events such as Earth Month.	
CIO-2g	Establish electric vehicle charging infrastructure at and around all City-owned facilities. Apply the profit from community charging towards installing electric vehicle infrastructure in vulnerable communities. Additionally, develop a thoughtful pricing plan that is reviewed and updated annually, or more frequently as appropriate.	
Measure CIO-3. Electrify or otherwise decarbonize all municipal off-road equipment by 2035, where feasible.		
CIO-3a	Complete an inventory of all municipal off-road equipment and determine which equipment types are possible to decarbonize based on existing technologies. Complete a cost analysis and schedule for decarbonizing.	N/A
CIO-3b	Adopt an emissions-free equipment purchasing policy by 2025 for light-duty vehicles and small off-road equipment and vehicles to require purchase and replacement of such categories be electric or emissions-free. Regularly update the policy to include more types of equipment and vehicles as electric and emission-free options become available. Use this to promote all-electric equipment in the community, providing information on the City website outlining available incentives as well as the health benefits, for residents and businesses.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CIO-3c	Dedicate staff time to implementing and tracking the success of the emissions-free purchasing policy established as part of CIO-3b.	
CIO-3d	Dedicate staff time and pursue funding opportunities to electrify and otherwise decarbonize municipal off-road equipment through programs such as: - CORE Incentives - Bay Area Air Quality Management District (BAAQMD) incentives including the Carl Moyer Program	
CIO-3e	Partner with the East Bay Regional Park District to co-lead a multi-lingual educational program for staff and City contractors detailing the benefits of using decarbonized off-road equipment, with an emphasis on improved worker health and details on comparable equipment productivity. Information from the educational program should be summarized into an infographic format and posted at parks, City-owned and operated buildings, and shared in the City's newsletter to highlight the emissions and overall health benefits in a way that is easily understood.	
CIO-3f	By 2030, begin procuring biofuels (e.g., biodiesel and biogas) to operate municipally owned off-road equipment with no existing opportunities for electrification. Re-evaluate electrification opportunities regularly to ensure biofuels are not being used for equipment that could otherwise be electrified.	
Measure CIO-4. Reduce employee VMT 20% by 2035, from 2019 levels by developing and implementing a municipal Transportation Demand Management (TDM) Plan by 2028.		
CIO-4a	With employee input, develop a municipal Transportation Demand Management (TDM) Plan by 2028 to encourage and incentivize City employees to reduce their VMT in single-occupancy and fossil-fuel-powered vehicles. Update the plan every 2-3 years based on survey results (e.g., Action CIO-4d) and newly available public transit and bike routes in the community.	N/A
CIO-4b	Create an incentive program to reward City employees for biking, ridesharing, and using public transit to commute to work. The program shall provide free public transit passes and free access to electric bicycle programs (where available) to all municipal employees and may include cash incentives or additional paid time-off for employees who bike, rideshare, and use public transit to commute to work.	
CIO-4c	Investigate the opportunity to create zero-interest loan program to help employees purchase ZEVs for commute.	
CIO-4d	Develop a remote work policy that encourages municipal office employees to work from home and includes alternative work schedules where feasible.	
CIO-4e	Explore options for installing showers in existing City-owned facilities and bike lockers along City-owned streets, where appropriate, to encourage City employees to bike to work and demonstrate the City's commitment to sustainability and community bicycle safety.	
CIO-4f	Partner with an entity such as the WestCAT or the Bay Area Air Quality Management District (BAAQMD) to expand employee use of carbon-free and low carbon transportation by providing education programs on the benefits of commute options including public transportation, EV/ZEV options, and vanpools. Additionally, partner with 511 Contra Costa to help employees find a carpool match.	
CIO-4g	Promote and encourage employee participation in regional and national bike-to-work days/months.	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CIO-4h	Develop funding sources to support incentives for City employees to commute to work via EV/ZEV options such as free or discounted employee charging at work.	
CIO-4i	Publish the municipal TDM Plan on the City's website and distribute to local businesses to provide the community an example of comprehensive TDM plans that focused on GHG emission reductions and equity.	
CIO-4j	Conduct a survey for City staff commute data annually to monitor emissions, identify potential gaps in planning, and better understand how to elicit employee transportation behavior change. Include space for employee feedback and identification of barriers to commuting without a personal vehicle.	
CIO-4k	Dedicate staff time to develop, implement, and update the municipal TDM Plan and conduct the annual survey.	
Measure CIO-5. Reduce waste generation by 15% by 2025, from 2019 levels and landfill zero waste by 2035.		
CIO-5a	Conduct an indoor and outdoor water audit at all municipal buildings and schedule develop a schedule for water efficiency improvements.	N/A
CIO-5b	Adopt a Resolution and assign funding to retrofit or replace all inefficient shower heads, faucets, washing machines, and toilets with low-flow fixtures/water-efficient appliances in existing City-owned, managed, or operated facilities, such as, but not limited to, the Pinole Swim Center, Pinole Senior Center, Pinole Youth Center, and Public Service Facilities by 2030.	
CIO-5c	Update the municipal purchasing policy to require WaterSense labeled fixtures and appliances, where feasible. This includes continuing to install waterless units such as urinals and sensor activated sinks.	
CIO-5d	Require all non-functional lawns (i.e., grass that is ornamental and not used for recreational purposes) on City-owned property to be removed by 2035 and replaced with native and drought-tolerant landscaping and/or multi-use landscaping (e.g., pollinator-friendly landscapes, edible landscapes).	
CIO-5e	Identify, track, and actively pursue funding opportunities from entities such as the California Department of Water Resources and the California Environmental Protection Agency.	
CIO-5f	Partner with the Pinole Community Garden Club, Contra Costa County Master Gardeners, or Bringing Back the Natives to educate City employees and the community on water-wise gardening practices, native plants, and growing food, with a focus on the most vulnerable communities.	
CIO-5g	Develop and implement a plan to update City-owned properties with improved green stormwater infrastructure (e.g., stormwater systems that direct water towards vegetation, permeable surfaces).	
CIO-5h	Install submetering at City owned and operated buildings and facilities to track and monitor water use, including creating a succinct way to internally track specific use and complete repairs or prepare targeted education.	
CIO-5i	Install rain barrels at the Library to water the native garden as a demonstration project to educate the community about the benefits of collecting rainwater and available incentives. Based on the project's success, consider installing rain barrels at all City facilities for use in landscaping.	
Measure CIO-6. Reduce municipal water consumption 10% by 2030, from 2019 levels.		
CIO-6a	Require implementation of the Single Use Plastic Ordinance at all City departments, events, and contracts.	N/A

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CIO-6b	Provide reusable mugs and foodware items to all new and existing employees to use in an effort to encourage the use of reusable alternatives to single-use items. Provide information on the benefits of reusing resources.	
CIO-6c	Complete an audit on current bin infrastructure and bin signage in each municipal facility and at City events. Establish a clear plan to install/distribute adequate compost and recycling bins throughout all facilities and to all events, and improve signage so that accepted landfill, recyclable, and compostable materials are clearly identified for each bin.	
CIO-6d	Partner with an entity such as Republic Services to provide annual training to City employees on current waste management practices, any modifications to the practices, and proper disposal methods. Empower them to educate the community on the benefits and proper methods of recycling and composting and use this as an opportunity to promote the City's existing programs, such as the free mulch program, shredding program, household hazardous waste collection, as well as expand programs as appropriate.	
CIO-6e	Work with CalRecycle and similar entities to identify and secure grants that fund waste diversion and educational programs.	
CIO-6f	Create a shared resource area within each City-owned facility dedicated to lightly used office supplies such as staplers, tape dispensers, pens, and pads of paper, facilitating the reuse of items among staff members and promoting efficiency and reducing waste.	
CIO-6g	Partner with local jurisdictions including surrounding cities and the county to create an inter-office or inter-jurisdiction surplus program where City offices can provide items (e.g., pieces of furniture) for reuse for free to other offices within the City or other jurisdictions.	
CIO-6h	Create a buy-nothing group for City staff to share resources and items that they may no longer be interested in or have a use for at their homes.	
CIO-6i	Perform a waste audit every two years to track waste sources, gaps in signage and education, and opportunities to strengthen the purchasing policy (e.g., based on problem-some materials continuing to the landfill or the contaminating recycling and composting streams).	
Measure CIO-7. Retrofit existing infrastructure owned and operated by the City, such as the Pinole-Hercules Water Pollution Control Plant, located in the areas at risk of sea level rise.		
CIO-7a	Complete a feasibility study to evaluate various options for infrastructure improvements of Pinole-Hercules Water Pollution Control Plant to mitigate against sea level rise and flood hazards. Develop a long-term management plan to address impacts of sea level rise, which incorporates any potential maintenance, relocation, or retrofits and structural changes to accommodate changes in sea level.	N/A
CIO-7b	Collaborate with the San Francisco Bay Regional Water Quality Control Board to increase the Pinole-Hercules Water Pollution Control Plant's resilience to sea level rise and stronger storms. For example, implement a trigger-based Coastal Hazard Monitoring Program, which would allow to implement improvements or relocate in a timely manner, and conduct feasibility studies from technical experts, retrofitting, relocating, or eliminating outfalls deemed "at risk."	

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO ₂ e) ¹
CIO-7c	Provide alternate routes and ensure redundancy of critical transportation routes, as possible, to allow for continued access and movement to and along the coast in instances in which sections of roadways may become temporarily impassible because of shoreline hazards. Additionally, inform City staff, residents, and visitors about alternate routes to shoreline areas.	
CIO-7d	Host working groups with community-based organizations, experts in the field, and interested parties to identify and prioritize vulnerable communities, involve them in decision-making, use community benefits agreements, prioritize underserved communities, and consider the financial impact on residents.	
CIO-7e	Identify and apply for a grant funding source to fund facility upgrades, relocation, or additional analysis through entities such as the San Francisco Bay Conservation and Development Commission, California Coastal Commission, National Oceanic and Atmospheric Administration (NOAA), or Federal Emergency Management Agency (FEMA).	
CIO-7f	Conduct a detailed and City-specific groundwater emergence threat assessment, factoring in local geomorphology and groundwater data, for use in future planning and analysis.	
CIO-7g	Incorporate policy guidance and model ordinance language in Citywide plans, policies, and regulations to prioritize strategies that reduce potential impacts due to sea level rise and shoreline hazards and increase the resilience of the City's shoreline areas.	
Strategy CG: City Governance		
Measure CG-1. Build staffing capacity to effectively implement the CAAP Mitigation Measures and update the CAAP triennially.		
CG-1a	Create a new full-time staff position to oversee CAAP implementation, monitoring, and reporting; and cross-department collaboration (i.e., Climate Coordinator work in Action CG-1).	N/A
CG-1b	Identify a Climate Coordinator from each of the City's main departments and divisions. The Climate Coordinators will meet for quarterly sustainability peer-to-peer information sharing sessions to discuss challenges, brainstorm solutions, and track progress towards reaching the City's CAAP key performance indicators. This team will serve as the key organizers for cross-departmental collaboration needed to implement climate goals, as well as community contacts and key researchers for emerging technologies and best practices in climate action.	
CG-1c	Conduct an annual staff survey to determine the following: - Existing staff interest in leading climate initiatives to identify internal champions. - Staff capacity to implement CAAP actions, monitor progress, and report updates; and associated capacity gaps to fill.	
CG-1d	Include a description of Pinole's climate goals and values in job postings, improving talent acquisition and potentially boosting retention and worker morale.	
CG-1e	Identify and apply for climate staffing assistance through fellowship/internship programs including the Climate Corps Fellowship, California Pacific University, and CivicSpark to increase internal staff capacity for CAAP implementation and bring in innovative ideas.	
CG-1f	Earmark funding for CAAP updates.	

Climate Action and Adaptation Plan and CEQA GHG Emissions Thresholds

Move ID #	Strategies and Respective Supporting Measures and Actions	Anticipated GHG Emissions Reduction by 2030 (MT of CO₂e)¹
Measure CG-2. Establish reporting procedures to implement the CAAP measures and transparently communicate progress to the community.		
CG-2a	Join the Institute for Local Government's Beacon Program to support transparent CAAP reporting through access to technical assistance, regional networking and education opportunities, and opportunities to recognize Pinole's climate action achievements.	N/A
CG-2b	Conduct a communitywide GHG inventory every two years and a municipal GHG inventory every five years.	
CG-2c	Report communitywide GHG emissions and progress on Mitigation Measures annually through public reporting tools (e.g., CAPDash) and utilize social media to post updates and results so the community can easily stay up to date.	
CG-2d	Regularly update Pinole's CAAP webpage, Sustainability webpages (e.g., Community Choice Energy, EV Charging Stations, Single Use Plastic Reduction), and applicable Public Works webpages (e.g., Water, Garbage and Recycling, Trees) to provide up-to-date information on ordinance, program, and policies as they are updated through CAAP implementation.	
CG-2e	Explore and track the success of different ways to communicate climate progress transparently to the public (e.g., a dashboard, semi-regular social media posts, City webpages, Pinole TV). Track the number of clicks made on specific links to identify the most successful mechanisms for engagement.	
CG-2f	Translate key climate outreach materials into non-English languages. Explore partnerships through nonprofits and other organizations that can assist in translation of key materials.	
CG-2g	Communicate Pinole's climate and green economic development commitments through City branding and communications (beyond dedicated webpages and resources) and utilize existing City meetings and events to emphasize the importance of climate action and bring it into regular City and community discussions.	
CG-2h	Earmark annual funding for the CAAP update in the budget to demonstrate commitment to implementation and monitoring and to provide a consistent conduit of funding.	
Note: MT of CO ₂ e = metric tons of carbon dioxide equivalent		
Source: Compiled by Rincon based on information contained in the Draft Pinole Climate Action and Adaptation Plan.		

The measures and actions shown above in Table 2, combined with existing State legislation and City initiatives, would enable Pinole to meet its GHG emissions reduction target pathway to reduce GHG emissions 40 percent below 1990 levels by 2030. Table 3 summarizes the communitywide GHG emissions forecasts under the BAU and ABAU scenarios, as well as with implementation of the Pinole CAAP, beginning from 2025 through 2045.

Table 3 Pinole 2030 GHG Emissions Forecasts (MT of CO₂e)

GHG Emissions Pathways	2025	2030	2035	2040	2045
BAU Forecast	79,501	84,515	88,764	93,183	97,772
Adjusted Forecast	69,558	68,902	67,403	68,262	69,901
Forecast with CAAP	59,697	47,273	33,147	17,810	1,155

Source: Compiled from the Pinole Climate Action and Adaptation Plan

Figure 4 depicts the 2030 and 2045 GHG emissions targets for Pinole, including anticipated emissions once the measure and actions listed in Table 2 are implemented. Figure 4 also illustrates the forecasted BAU and ABAU emissions, and the target pathway to achieve carbon neutrality by 2045.

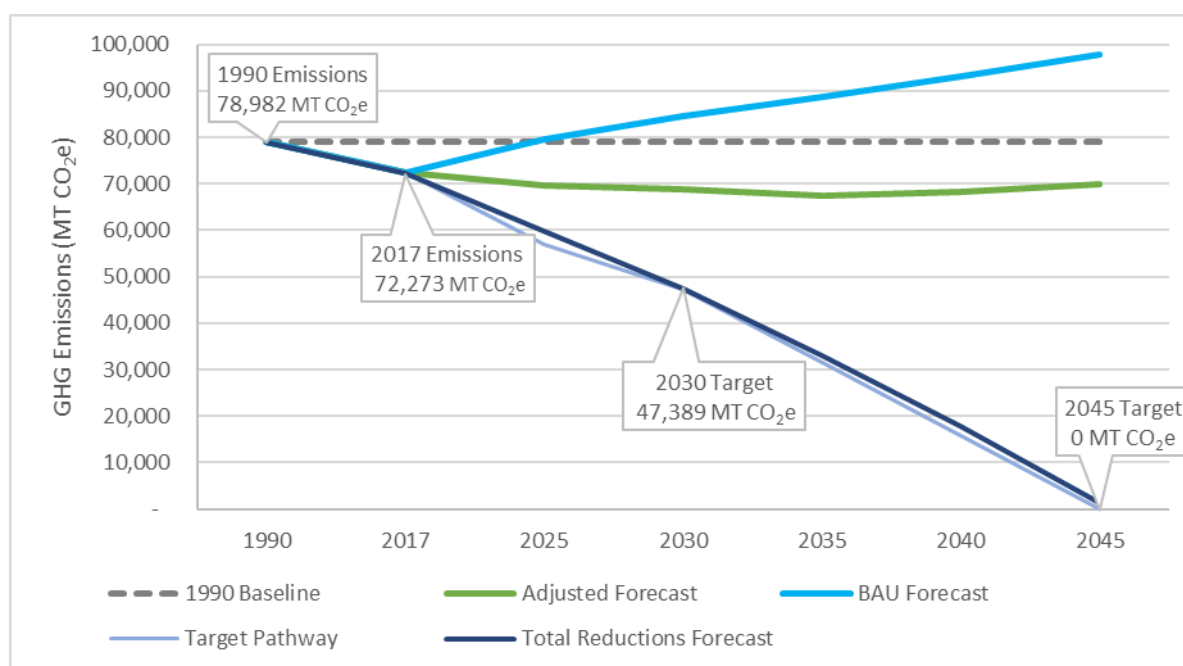
Figure 4 Pinole GHG Emissions Projections and Targets

Table 4 shows the Pinole climate action target emissions and the emissions reductions expected from implementing the measures and actions shown in Table 2. Table 4 also shows that Pinole would meet its 2030 GHG reduction target and make substantial progress towards the 2045 goal of carbon neutrality.

Table 4 Targets Versus GHG Reductions

Target/Forecast	2030 GHG Emissions (MT of CO ₂ e)	2045 GHG Emissions (MT of CO ₂ e)
Adjusted Forecast	68,902	69,901
Pinole Targets	47,389	0
GHG Reductions from Full Implementation of CAAP Measures	21,628	68,746
GHG Emissions after Measure Reductions (Adjusted Forecast – GHG Emissions Reductions)	47,273	1,155
Target Anticipated to be Met?	Yes	Substantial progress demonstrated
MT of CO ₂ e = metric tons of carbon dioxide equivalent Source: Compiled from the Pinole Draft CAAP and the GHG Forecast Report		

The CAAP would provide substantial progress toward meeting the City’s carbon neutrality goal by 2045. However, full implementation of the Pinole CAAP would leave a gap of approximately 1,155 MT of CO₂e that would still need to be addressed to achieve carbon neutrality. As such, the Pinole CAAP acknowledges that additional actions beyond those identified in the plan will be necessary to achieve carbon neutrality and, therefore, provides a mechanism for adopting CAAP updates every five years. This allows for certainty in the updated schedule, confirms that the carbon neutrality work is directly tied to the City’s financial decision making and prioritization process and allows for constant integration of learning, best practices, and new measures and technologies to further the City toward meeting its goal of carbon neutrality.

Implementation of the Pinole CAAP measures and actions identified in Table 2 could result in physical changes that could potentially have an impact on the environment. While individual projects resulting from these measures have not been identified for the purposes of this document, the types of actions that could result from realization of the measures and actions are taken into account in considering potential environmental impacts that could occur through implementation of the CAAP. For example, the use of carbon-free electricity may require the installation of new infrastructure to accommodate use and transmission of alternative and renewable fuels. Similarly, increasing the use of EVs would require the installation of EV charging stations and supporting infrastructure. Additionally, Pinole’s CAAP implementation may require the installation of new bicycle or pedestrian facilities. These types of activities would introduce physical changes, such as the temporary presence and operation of construction vehicles and equipment during installation of required facilities, and the long-term presence of new facilities such as bike and pedestrian facilities, solar arrays, and EV charging stations, which could alter pedestrian and vehicular traffic patterns. Future plans or projects requiring discretionary approval would be subject to environmental review under CEQA, and individual impact analyses may identify required plan- or project-specific mitigation measures where applicable.

Pinole CEQA GHG Emissions Thresholds

In 2007, SB 97 acknowledged that climate change is an environmental issue that requires analysis in CEQA documents, and in 2010 the California Natural Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines gave lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. Specifically, Section 15183.5(b)(1)A-G of Title 14 of the California Code of Regulations was amended to state that a

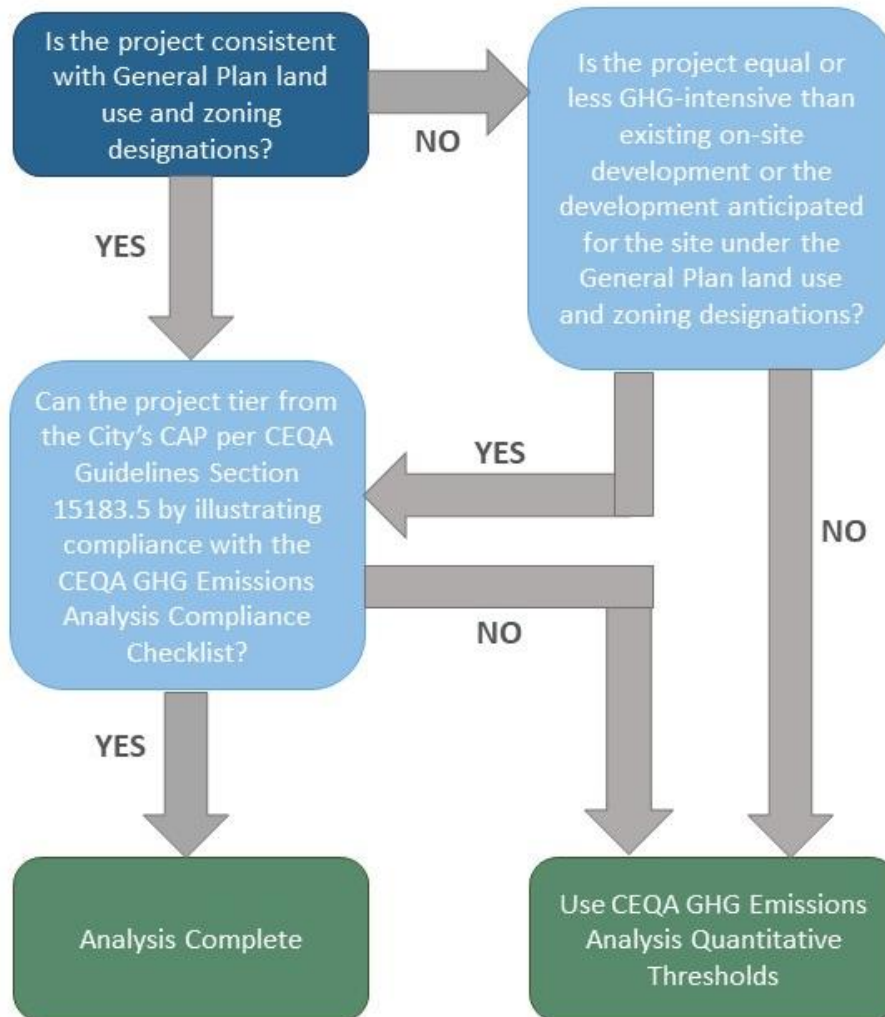
qualified GHG Reduction Plan, or a Climate Action Plan, may be used for tiering and streamlining the analysis of GHG emissions in subsequent CEQA project evaluation, provided that the GHG Reduction Plan or Climate Action Plan does the following:

- Quantifies GHG emissions both existing and projected over a specific period of time, resulting from activities within a defined geographical area.
- Establishes a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable.
- Identifies and analyzes the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specifies measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establishes a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
- Be adopted in a public process following environmental review.

Therefore, the City of Pinole proposes to also adopt quantitative efficiency thresholds for use in evaluating whether a plan or project's GHG emissions would result in a potentially significant environmental impact under CEQA for plans or projects with pre-2030 buildout or initial operation years. The CEQA GHG emissions thresholds would be applied to plans or projects that cannot tier from the environmental analysis for the Pinole Climate Action and Adaptation Plan (as contained in this Initial Study- Negative Declaration [IS-ND]) due to one of the following circumstances, which are illustrated in Figure 5:

- The plan or project would not be consistent with the Pinole General Plan land use and zoning designations for the project site and would result in greater GHG emissions than existing on-site development; or
- The plan or project would not be consistent with the CEQA GHG Emissions Analysis Compliance Checklist.

Figure 5 Determining CEQA GHG Emissions Analysis Methodology



These thresholds are set at the level of GHG emissions that new development would need to achieve to be consistent with the Pinole CAAP's communitywide emissions reduction target of 47,389 MT of CO₂e by 2030. The efficiency thresholds, listed below, are expressed in terms of MT of CO₂e per service person²³ and are applicable to plans or projects with pre-2030 buildout or initial operational years:

- 0.89 MT of CO₂e per resident
- 1.53 MT of CO₂e per employee
- 1.10 MT of CO₂e per service person²⁴

Efficiency thresholds for beyond 2030 would be established later in conjunction with subsequent CAAP amendments.

²³ The service population is equal to the residential population plus half the number of jobs.

²⁴ Pinole, City of. 2023. Draft CEQA GHG Thresholds.

Plans or projects that do not tier from the Pinole CAAP IS-ND that would generate GHG emissions in excess of these thresholds would result in a potentially significant impact on the environment related to GHG emissions and climate change. Mitigation measures would be required to reduce potentially significant impacts resulting from such plans or projects. Plans or projects that are unable to reduce GHG emissions below these thresholds through implementation of identified mitigation measures would result in a significant and unavoidable environmental impact. The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have direct construction or operational impacts.

Cumulative Projects Scenario

For purposes of CEQA cumulative impacts analysis of the Pinole CAAP and CEQA GHG Emissions Thresholds, the cumulative projects scenario is the population, employment, and households' forecasts identified in the supporting documentation for the City, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050. The cumulative projects scenario is shown in Table 6.

Table 5 Cumulative Projects Scenario

Demographic s/ Sector	2017	2025	2030	2035	2040	2045
Population ¹	19,663	27,718	32,110	24,592	26,168	27,845
Employment ²	7,970	8,963	9,645	10,379	11,168	12,018
Households ²	6,901	7,431	7,783	8,151	8,536	8,940
Service Population ³	27,633	36,681	41,755	34,971	37,336	39,863

1. Demographic metrics were calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050.

3 Service population is calculated as the combined total number of employees and residents in the City.

Source: Rincon Consultants, Inc. City of Pinole Greenhouse Gas Emissions Forecasts and Provisional Target Memorandum. Updated January 2024.

Required Approvals

City of Pinole

Required approvals include:

- Adoption of the Pinole CAAP and CEQA GHG Emissions Thresholds IS-ND
- Adoption of the Pinole CAAP
- Adoption of the Pinole CEQA GHG Emissions Thresholds

Although individual plans or projects may be implemented later under the umbrella of the CAAP, each individual plan or project would be subject to separate environmental review under CEQA.

Other Public Agencies

The City of Pinole has sole approval authority over the CAAP as well as the CEQA GHG Emissions Thresholds. There are no other public agencies whose approval is required.

Environmental Factors Potentially Affected

This project²⁵ would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

Determination

Based on 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 to 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.

²⁵ Note that the CAAP is a plan; however, this language and the significance criteria questions language throughout this IS-ND are taken directly from CEQA Guidelines Appendix G, which refers to a “project” generally but is applicable to either a project or plan.

- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” 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 potential 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

Date

Lead Agency Representative Printed Name

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

a. *Would the project have a substantial adverse effect on a scenic vista?*

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

According to the Pinole General Plan and California Scenic Highway System,²⁶ there are no scenic roadways or highways in the City of Pinole. However, the General Plan notes that the City has several important environmental visual resources, and the Community Character Element discusses built visual (scenic) resources in Pinole.²⁷ As stated in the General Plan Natural Resources and Open

²⁶ California Department of Transportation (CalTrans). <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> Accessed February 2024

²⁷ Pinole, City of. 2010. General Plan, Introduction. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/City_of_Pinole_General_Plan_12.2010-Chapter1.pdf (accessed January 2024)

Space Element, the City's San Pablo Bay shoreline, creeks (particularly Pinole Creek), ridgelines, and other areas, as well as the historic qualities of Old Town, are focal points recognizable from many locations in the City. As stated further in the Community Character Element, Old Town Pinole, along San Pablo Avenue, contains a variety of architectural styles that mirror the community's historical development and development pattern.

General Plan Goal OS6, which includes Policies OS.6.1, Scenic Resources, and OS.6.2, View Protection, as well as Policy OS.3.14, Open Space Preservation and Management, aim to protect scenic resources that help define and distinguish Pinole as a unique and desirable community and provide linkages between recreational areas and open space. This includes preserving significant knolls, stands of trees, rock outcroppings, and ridgelines within the City through scenic easements, where feasible, and ridgeline preservation measures. Additionally, Policy CC2.2 included in the Community Character Element, aims to preserve natural resources within the built environment, including trees, marshes, creeks, and hillsides. Policy OS.2.1 similarly aims to protect native vegetation, by protecting, preserving, and creating conditions that will promote the preservation of significant trees and other vegetation, particularly native to California and the region.

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in impacts related to scenic vistas and scenic highways. As a policy document, the CAAP would not result in impacts related to scenic vistas and scenic highways. However, implementation of some CAAP measures may promote infrastructure development and other physical changes through policies and programs. CAAP Measure BE-5 would promote installation of small-scale solar PV systems. CAAP Measure TR-1 would improve bicycle and pedestrian facilities throughout the City and Measures TR-4, TR-5, and CIO-2 encourage the installation of EV charging stations and supporting infrastructure. Additionally, CAAP Measure CS-1 would facilitate the expansion of the urban forest within Pinole. CAAP projects would generally be limited to the existing developed areas of the City and would be small-scale in nature. Additionally, expansion of the urban forest could have a positive effect on scenic vistas, adding new tree cover and enhancing existing natural landscapes.

The CAAP would promote infrastructure development and redevelopment that is complimentary to existing development and land uses. Though the implementation of the CAAP may result in future development, CAAP-related projects and actions, including those identified above, would be required to adhere to City development zoning and regulations, including the City's applicable Design Guidelines, which establish criteria for the aesthetic qualities of development in Pinole in order to preserve and enhance the desired character of existing neighborhoods.²⁸ Compliance with the City's Design Guidelines would confirm that potential future infrastructure development and redevelopment related to the CAAP would be carefully integrated with the existing character of Pinole, minimizing potential aesthetic impacts. In addition, CAAP projects and actions would be reviewed for consistency with the Pinole General Plan policies related to scenic resources prior to approval. As such, the CAAP would not result in adverse impacts related to scenic vistas or State scenic highways within the City. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in ***less-than-significant impacts*** related to scenic vistas and scenic highways.

- c. *Would the project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are*

²⁸ Pinole, City of. 2018. Design Review. https://www.ci.pinole.ca.us/city_government/planning/design_review (accessed January 2024).

experienced from a 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?

Pinole is a primarily urbanized area with the following applicable visual character/quality policies in the Pinole General Plan Land Use and Community Character, Natural Resources, and Community Health and Quality of Life Elements. In 2023, Pinole updated the City's General Plan Housing Element²⁹ pursuant to State law, which requires an update to the Housing Element of the General Plan every eight years. The City is currently drafting an Updated Health and Safety Element and creating a new Environmental Justice Element.

Community Character Element

- **Policy CC.1.1.** All new development and redevelopment shall adhere to the basic principles of high-quality urban design and architecture including, but not limited to, human-scaled design, pedestrian orientation, and interconnectivity of street layout, siting buildings to highlight important intersections, entryways, focal points and landmarks.
- **Policy CC.1.2.** Require all new development to incorporate high-quality site design, architecture and planning to enhance the overall quality of the built environment in Pinole and create a visually interesting and aesthetically pleasing town environment.
- **Policy CC.1.3** To enhance a sense of arrival and create a strong appealing image that promotes community identity, the City shall develop community entry features at key gateways or city entries along Interstate 80. Entryways shall incorporate landscaping, trees, structural architectural elements, signage and public art.
- **Policy CC.1.5** Encourage project compatibility, interdependence and support with neighboring uses, especially between commercial and mixed-use centers and the surrounding residential neighborhoods. Uses should relate to one another with pedestrian connections, transit options, shared parking, landscaping, public spaces, and the orientation and design of buildings
- **Policy CC.2.1** Provide visual and physical connections between the natural environment and the built environment through careful site design, building placement, architectural features that allow views of Pinole's unique environment such as ridgelines or the San Pablo Bay shoreline, public access to open space such as via the Bay Trail, and the use of native vegetation in the urban environment such as for landscape buffers for sidewalk areas and street trees.

Land Use and Economic Development Element

- **Policy LU.1.3** Establish and implement a continuing program of civic beautification, gateway or entryway enhancement, tree planting, maintenance of homes and streets, and other measures which will promote an aesthetically desirable environment and attractive neighborhood areas.
- **Policy LU.3.3** Require design review of commercial and industrial projects to ensure compatibility with adjacent or nearby land uses, including intensity, access, internal circulation, visual characteristics, noise, odors, fire hazards, vibrations, smoke, discharge of wastes and nighttime lighting.
- **Policy LU.5.1** Designate any undeveloped ridgelines and hillsides as Low Density Residential, Rural, or Open Space.

²⁹ Pinole, City of. General Plan Housing Element 2023-2031. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/Housing%20Element/2023-2031%20Housing%20Element%20-%20Certified.pdf (accessed January 2024)

- POLICY LU.6.3 Provide waterfront parks, pedestrian pathways and recreation areas that are safe, accessible, and attractive for public use.

Natural Resources and Open Space Element

- **Policy OS.1.3** Hillsides, Ridgelines, and View Corridors. Retain and protect sensitive hillside and ridgeline habitat, tree groves, and view corridors as shown on Figure 10.4.
- **Policy OS.2.4** Riparian Areas and Creek Setbacks. Lands adjacent to riparian areas shall be protected as public or private permanent open space through dedication or easements. Riparian vegetation outside the setback should also be protected. Riparian areas within the City include but are not limited to: (1) Pinole Creek (2) Catty Creek (3) Duncan Canyon/Cole Creek; (4) Shady Draw; (5) Faria Creek and (6) Roble Creek and shall be protected from further degradation and enhanced during review of adjacent proposed development.
- **Policy OS.3.3** Cluster Development. Encourage cluster development and other creative site planning techniques to preserve open space, trails and visual, habitat, recreation and archaeological resources.
- **Policy OS.3.5** Buffers for Sensitive Resources. When activities close to open space resources within or outside the urban area could harm these resources, the City will require buffers between the activities and the resources. The City will actively encourage individuals, organizations and other agencies to follow this policy. Buffers associated with new development shall be on the site of the development, rather than on neighboring land containing the open space resource. Buffers provide distance in the form of setbacks, within which certain features or activities are not allowed or conditionally allowed. Buffers shall also use techniques such as planting and wildlife-compatible fencing. Buffers shall be adequate for the most sensitive species in the protected area, as determined by a qualified professional and shall complement the protected area's habitat values.
- **Policy OS.3.6** Minimize Environmental Impacts. Encourage development patterns which minimize impacts on the City's biological, visual, and cultural resources, and integrate development with open space areas.
- **Policy OS.3.7** Preserve Natural Features. Retain sensitive habitat areas in their natural state, where possible, and protect from inappropriate development and landscaping. New development shall incorporate natural features present on the site such as a creek, steep topography or natural vegetation, where feasible, unless appropriate mitigation measures can be incorporated.

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in impacts related to aesthetics. The CAAP would promote sustainable infrastructure development and redevelopment through policies and programs. Implementation of some CAAP measures related to renewable energy, transportation, GHG sequestration, and extreme heat may result in physical changes that could impact scenic resources. Specifically, CAAP Measure BE-5 would promote installation of local community-scale solar photovoltaic (PV) systems at existing municipal facilities and in new or majorly renovated multi-family and commercial developments. Likewise, implementation of Measure BE-5 would also include installation of a co-located community solar and storage facility to benefit affordable housing sites. Measure TR-1 would improve bicycle and pedestrian facilities throughout the City by creating a safe and connected active transportation network linked to Pinole Creek, and Measures TR-4, TR-5, and CIO-2 support the

installation of EV charging stations and supporting infrastructure. CAAP Measure CS-1 would facilitate the expansion of the urban forest within Pinole. Additionally, Measure EH-1 aims to reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect.

Implementation of small-scale solar panels, introduction of EV charging infrastructure, expanding Pinole's urban forest, and installing green/cool roofs and cool pavement may slightly change the scenic character. However, future CAAP-related projects would be located and designed to be complimentary to existing land uses and would be required to adhere to the City development zoning and regulations that seek to preserve the character of Pinole and minimize environmental impacts. In addition, CAAP projects and actions would be reviewed for consistency with the Pinole General Plan policies highlighted above and other applicable regulatory policies, such as the Zoning Ordinance and applicable Specific Plans and design guidelines, prior to approval. Therefore, the CAAP and CEQA GHG Emissions Thresholds would not conflict with applicable zoning and other regulations governing scenic quality and would result in a ***less-than-significant impact***.

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in impacts related to light and glare. The CAAP would promote sustainable infrastructure development and redevelopment that is complimentary to existing land uses in the City. As a policy document, the CAAP would not directly result in impacts related to light and glare. However, implementation of CAAP Measure BE-5 encourages the installation of solar panels and battery storage systems at new or majorly renovated multi-family and commercial buildings. Solar panels have the potential to result in new sources of glare within Pinole if not thoughtfully designed and located. The design and location of proposed solar infrastructure would be complimentary to existing development in Pinole, such as the addition of small-scale rooftop solar panels, to reduce potential glare impacts within the City. Furthermore, CAAP projects would be reviewed for consistency with the CCR Title 24 lighting standards (CCR Title 24 Part 6), the City's Municipal Code (Chapter 17, Article 46 Lighting), applicable Specific Plans (e.g., the Three Corridors Specific Plan), and design guidelines, which includes a review of exterior lighting.^{30,31} In addition, CAAP projects or actions would be reviewed for consistency with the Pinole General Plan and other applicable regulatory land use actions prior to approval. Compliance with these regulations would minimize environmental impacts related to light and glare by complying with standard conditions of approval requiring the shielding of exterior lighting and limiting spillover lighting. Thus, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to light and glare.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). Cumulative impacts related to scenic resources, visual character, and increased light and glare

³⁰ California Energy Commission (CEC). 2022. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. https://www.energy.ca.gov/sites/default/files/2022-12/CEC-400-2022-010_CMF.pdf (accessed January 2024).

³¹ Pinole, City of. Municipal Code. https://codelibrary.amlegal.com/codes/pinole/latest/pinole_ca/0-0-0-10163 (accessed January 2024).

would generally be site-specific, and cumulative projects are not anticipated to contribute to cumulative aesthetic impacts with adherence to Pinole General Plan policies, the municipal code, and applicable Specific Plans and design guidelines. As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Because of the developed nature of Pinole, future infrastructure projects under the CAAP, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would not adversely impact the visual character of the community. In addition, future development in the City would be required to comply with the City's Design Review process and be reviewed against applicable Pinole General Plan policies and City's design standards for design quality and compatibility with adjacent land uses. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to aesthetics.

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- e.1. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

Pinole is characterized primarily by suburban development. The California Farmland Mapping and Monitoring Program classifies Pinole as Urban and Built-Up Land, Grazing Land, and Other Land. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance in Pinole.³²

³² California Department of Conservation. 2022. California Important Farmland Finder. <https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed January 2024).

Likewise, there are no parcels of non-Prime Farmland in Pinole that are enrolled in Williamson Act contracts.³³

The CAAP measures focus on building electrification, active transportation, zero emission vehicles, public transit, water conservation, solid waste diversion, urban greenspace and trees, as well as community adaptation and resilience, flood control, sea level rise, extreme heat, and wildfire. CAAP measures would not involve projects or policies that would result in impacts related to conversion or loss of Farmland. Additionally, the CEQA GHG Emissions Thresholds do not propose development or changes to land use and zoning that could result in the loss of farmland or conflict with existing agricultural zoning. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to degradation of agricultural resources or conversion of agricultural land to non-agriculture uses, nor would there be a conflict with existing zoning or Pinole General Plan land use designations.

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e.2. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?*

Pinole contains several open space and preserved areas that include the Pinole Creek and Watershed, the shoreline along San Pablo Bay, ridgelines around Pinole, and the addition of a portion of the Bay Trail in Pinole.³⁴ Additionally, while Pinole contains riparian forests, it does not contain areas designated for forest land or Timberland Production. The Pinole Municipal Code Chapter includes a variety of sections that establish policies, regulations, and standards to protect trees within the City, including the Chapter 17, Article 96, Tree Removal and Chapter 12, Article 16, Street Trees, Shrubs, and Plants. In addition, the Pinole General Plan contains several goals, policies, and actions such as those mentioned above under response to criteria a, b, and e1, as well as Policy SE.7.2, which aims to support the expansion of tree planting and landscape practices that encourage the use of trees, plants, and vegetation. The CAAP aligns with the Pinole General Plan by including measures and actions such as CAAP Measure CS-1, which establishes a goal to increase carbon sequestration and prepare the urban forest for climate change, extreme heat, drought, and wildfire by adopting policies developed through the Tree Master Plan. As such, the CAAP would increase the planting of trees within the City and be consistent with the City's regulations. The CAAP does not include actions that would result in the loss of forest land or the conversion of forest land to non-forest use, nor would it conflict with or cause the rezoning of forest, timber land, or Timberland Production areas. Likewise, the CEQA GHG Emissions Thresholds would provide guidance during CEQA review and do not propose development or changes to land use and zoning that could result in the loss of forestland or conflict with existing zoning for forest uses. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to degradation of forestry

³³ California Department of Conservation. 2022. California Williamson Act Enrollment Finder. <https://gis.conservancy.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312> (accessed December 2023).

³⁴ Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

resources or conversion of forest land to non-forest uses, nor would there be a conflict with existing zoning or General Plan land use designations.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. As the City's population, employment, and housing grows and development intensifies in the future, CAAP Measure CS-1 would increase carbon sequestration and prepare the urban forest for climate change, extreme heat, drought, and wildfire by adopting policies developed through the Tree Master Plan. Additionally, Measure EH-1 aims to reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect. As discussed above, the CAAP would not include any measures or actions that would significantly impact agricultural or forest resources. In addition, the CAAP would not involve land use or zoning changes that could result in cumulative impacts related to conversion or loss of farmland or forest land. Therefore, implementation of CAAP would result in ***no cumulative impact*** related to agricultural and forestry resources.

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The federal Clean Air Act (CAA) governs air quality in the United States and is administered by the United States Environmental Protection Agency (U.S. EPA) at the federal level. Air quality in California is also governed by regulations under the California CAA, which is administered by CARB at the State level. At the regional and local levels, local air districts typically administer the federal and California CAA. As part of implementing the federal and California CAA, the U.S. EPA and CARB have established ambient air quality standards for major pollutants at thresholds intended to protect public health. Pinole is located within the San Francisco Bay Area Air Basin (the Air Basin), which includes the nine Bay Area counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma. The Air Basin is under the jurisdiction of BAAQMD. As the local air quality management agency, BAAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Air Basin is classified as being in “attainment” or “nonattainment.” Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. BAAQMD is in non-attainment for the State and federal ozone standards, the State and federal PM_{2.5} (particulate matter up to 2.5 microns in size) standards, and the State PM₁₀ (particulate matter up to 10 microns in size) standards and is required to prepare a plan for improvement.³⁵ The sources, health effects, and typical controls associated with criteria pollutants are described in Appendix A.

³⁵ Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status> (accessed December 2023).

The Bay Area 2017 Clean Air Plan provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the Clean Air Plan is to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with State air quality planning requirements as codified in the California Health and Safety Code. Although steady progress has been made toward reducing ozone levels in the Bay Area, the region continues to be designated as non-attainment for both the one-hour and eight-hour State ozone standards as noted previously. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, State law requires the Clean Air Plan to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins.³⁶

The Federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of Air Quality Management Plans (AQMP) and adopted rules and regulations by each local Air Pollution Control District (APCD) and AQMD, which are submitted for approval to CARB and the U.S. EPA.³⁷ The goal of an AQMP is to reduce pollutant concentrations below the NAAQS through the implementation of air pollutant emissions controls.

The CAAP would not involve land use or zoning changes but would rather promote sustainable infrastructure development and redevelopment. Likewise, the CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. CAAP measures and actions focus on electrification of buildings and sustainable development, increasing local renewable energy infrastructure, improving active transportation, zero emission vehicle and public transit infrastructure, and increasing urban trees. Implementation of CAAP measures, such as those aimed at reducing VMT, electrifying vehicles, and reducing natural gas use through building electrification, would have co-benefits to air quality within the Air Basin. These measures would help BAAQMD meet applicable air quality plan goals and would generally reduce air pollutant concentrations. Although the purpose and intended effect of the CAAP is to reduce GHG emissions generated in Pinole to help reduce the effects of climate change, many of its measures would also reduce criteria pollutant emissions. CAAP Measures BE-1, BE-2, and BE-3 involve increased energy efficiency and building electrification as part of residential, non-residential, and municipal land uses. In addition, CAAP Measures TR-1, TR-2, and TR-3 seek to reduce VMT in the City by improving active transportation and public transit facilities, while Measures TR-4, TR-5, and T-6 would encourage the adoption of zero emission vehicles (ZEV) and low-emissions off-road vehicles and equipment by enhancing EV infrastructure. These energy- and transportation-related measures would reduce air pollutant emissions as well as GHG emissions. Therefore, the CAAP and CEQA GHG Emissions Thresholds would be consistent with the 2017 Clean Air Plan and would have **no impact** related to a conflict with or obstruction of the applicable air quality plan.

³⁶ BAAQMD. 2017. Final Clean Air Plan: Spare the Air Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan. <https://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans> (accessed December 2023).

³⁷ California Air Resources Board (CARB). 2022. 2022 State Strategy for the State Implementation Plan. https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf (accessed December 2023).

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to an increase of criteria pollutants. Likewise, the CAAP would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment. As a policy document, the CAAP would not result in impacts related to criteria pollutants. However, implementation of the following CAAP measures may promote construction activities that would temporarily generate criteria pollutants during the construction phase.

CAAP Measures BE-2 and BE-2 promote electrification of existing buildings, Measure TR-1 would improve bicycle and pedestrian facilities throughout the City, and Measures TR-4, TR-5, and CIO-2 would expand EV charging stations and supporting infrastructure. CAAP Measure W-1 would incentivize water efficiency retrofits for existing buildings and landscaped areas. Additionally, CAAP Measure CS-1 would facilitate the expansion of the urban forest within Pinole. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to reactive organic gases that would be released during the drying phase upon application of architectural coatings. However, implementation of CAAP actions would not include large-scale construction within Pinole and would involve temporary and short-term criteria pollutant emissions. As such, the CAAP would result in low-level criteria pollutant emissions and negligible impacts to air quality. Through the standard review process for new development or Capital Improvement projects, CAAP projects or actions would also be reviewed for consistency with BAAQMD air quality regulations and other applicable local, State, and federal regulations. Thus, the construction associated with implementation of the CAAP would result in a less-than-significant impact related to net increase of criteria pollutants.

With respect to operational emissions, many of the CAAP actions would have the secondary benefit of reducing criteria pollutant emissions, such as measures that would increase building energy efficiency, promote EVs, reduce on-road and off-road fuel use, and reduce VMT. Implementation of the CAAP would be beneficial by helping Pinole meet applicable air quality plan goals. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to criteria pollutant emissions.

- c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to exposure of sensitive receptors to substantial pollutant concentrations. Implementation of the CAAP measures, as described under *Response 3b*, promote infrastructure development and redevelopment that may result in temporary construction activities. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to reactive organic gases that would be released during the drying phase upon application of architectural coatings. However, implementation of CAAP measures and actions would not include large-scale construction, and construction-related

emissions would be temporary. As such, implementation of the CAAP could result in low-level toxic air contaminant emissions associated with construction.

While the CAAP could result in construction-related impacts related to toxic air contaminants and exposure to sensitive receptors, CAAP projects or actions would be reviewed for consistency with BAAQMD air quality regulations and other applicable local, State, and federal regulations through the standard development review process once project details and locations are known to confirm compliance. Thus, construction associated with implementation of the CAAP are not expected to result in substantial emissions of toxic air contaminants and exposure to sensitive receptors. No operational toxic air contaminant emissions are anticipated with implementation of the CAAP measures and actions. Therefore, the CAAP and CEQA GHG Emissions Thresholds would have a **less-than-significant impact** related to exposure of sensitive receptors to toxic air contaminants.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The CARB 2005 *Air Quality Land Use Handbook: A Community Health Perspective* identifies land uses associated with odor complaints which include: sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations.³⁸ The CEQA GHG Emissions Thresholds would provide guidance during CEQA review and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have construction or operational impacts related to odors. The CAAP includes Measure SW-5 that seeks to establish new programs to meet the City's SB 1383 annual procurement target by increasing the application of compost on appropriate lands, such as natural areas and parks. As such, the CAAP could result in minor odors related to compost application. However, the location of future compost application would be selected to be complimentary to existing development in the City and would be reviewed for site specific potential odor impacts to ensure that projects implemented in accordance with the CAAP would not adversely affect a substantial number of people. Therefore, the CAAP would not facilitate development that could create adverse odors, and there would be **less-than-significant impacts** related to odors exposure.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, could result in air pollutant emissions that exceed applicable BAAQMD thresholds or be inconsistent with the 2017 Clean Air Plan. However, implementation of the CAAP and CEQA GHG Emissions Thresholds would have a less-than-significant contribution related to potential cumulative air quality impacts within the Air Basin and on sensitive receptors within Pinole, given that the CAAP and CEQA GHG Emissions Thresholds would result in community-wide reduction of GHG emissions, energy use, single-

³⁸ California Air Resources Control Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Available: <https://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf> (accessed December 2023).

occupancy vehicle travel, and associated air pollutant emissions. As such, implementation of the CAAP and CEQA GHG Emissions Thresholds would not result in adverse impacts related to contribution of criteria pollutants to the Air Basin and exposure of sensitive receptors to toxic air contaminants and could result in co-benefits to air quality within the Air Basin for the reasons outlined in *Response 3a*, above. Therefore, implementation of the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant cumulative impact*** related to air quality.

4 Biological Resources

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

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

Pinole is a primarily urbanized community with parks, recreational, and open spaces incorporated throughout the City. However, the ridgelines in Pinole and the San Pablo Bay area adjacent to the Pinole shoreline contain grasslands, saline emergent wetlands, coastal oak woodlands, coastal scrub, estuarine (tidal flats), open water, perennial creeks, and riparian forests which could provide habitat for special-status species.³⁹ In addition, migratory and nesting birds protected by Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFGF) and the Migratory Bird Treaty Act (MBTA) may utilize trees, landscaping, and structures throughout Pinole for nesting habitat. The General Plan Natural Resources and Open Space Element incorporates policies to protect biological resources, such as plants, trees, wildlife habitats, shoreline, and the species that utilize these habitats.

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have construction or operational impacts related to special status species and their habitats. The CAAP would not involve land use or zoning changes and would instead promote sustainable infrastructure development and redevelopment. The CAAP measures would not conflict with the policies of the Pinole General Plan related to wildlife but would rather be consistent with and promote those policies. CAAP measures and actions would generally apply to the urbanized areas of the City, with little application to parks, open space areas, or the undeveloped portions of the City where sensitive habitat and related species may be present. In addition, CAAP Measure CS-1 facilitates the increase of carbon sequestration and preparation of the urban forest for climate change, extreme heat, drought, and wildfire by adopting policies developed through the Tree Master Plan. Likewise, Measure EH-1 aims to reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect. Development of new or enhanced existing natural areas throughout Pinole could serve as additional habitat for special status species and migratory and nesting birds. As such, the CAAP would not have a substantial adverse effect on candidate, threatened, or endangered wildlife species either directly through individual take or indirectly through species habitat modification.

As a policy document, the CAAP would not directly result in impacts related to wildlife species of special status. However, implementation of some CAAP actions may promote infrastructure development within the urbanized portions of the City and could result in impacts to species through construction activities. CAAP Measures BE-2 and BE-3 would promote electrification of existing buildings; Measure TR-1 would improve bicycle and pedestrian facilities throughout the City; and Measures T-4, T-5, and CIO-2 would expand EV charging stations and supporting infrastructure. CAAP Measure W-1 would incentivize water efficiency retrofits to existing buildings and landscaped areas. These actions have the potential to disturb nesting habitat for birds and raptors protected under Sections 3503, 3503.5, and 3513 of the CFGF and under the MBTA. However, construction activities for future CAAP projects would be required to comply with the provisions of the MBTA and CFGF Sections 3503, 3503.5, and 3513 to avoid impacts to protected

³⁹ Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

birds and would be reviewed for consistency with City, State, and federal policies related to protected species. As such, the CAAP and CEQA GHG Emissions Thresholds would not have a substantial adverse effect on special-status wildlife species. Therefore, the CAAP would result in a **less-than-significant impact** related to special-status wildlife species.

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

As stated in *Response 4a*, Pinole contains wetlands and riparian habitat. Figure 1.1 in the City's General Plan details the habitat throughout Pinole, which includes the following breakdown of land types:⁴⁰

- Annual Grassland – 719 acres
- Saline Emergent Wetlands (e.g., Salt Marsh) 10 acres
- Coastal Oak Woodland – 499 acres
- Coastal Scrub – 10 acres
- Estuarine (e.g., Tidal Flats) – 58 acres
- Open Water – 4,097 acres
- Perennial Creek – 32 acres
- Riparian Forest – 41 acres
- Urban – 1,965 acres

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have construction or operational impacts related to riparian, wetland, or other sensitive habitats. The CAAP would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment within urbanized areas of the City. The CAAP measures would generally apply to the urbanized areas of the City, with little application to parks, open space areas, or other locations where riparian and wetland habitat is located. Additionally, CAAP Measure CS-1 would facilitate the expansion of the urban forest within Pinole, while Measure EH-1 aims to reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect. The Pinole Municipal Code Chapter includes a variety of sections that establish policies, regulations, and standards to protect trees within the City, including the Chapter 17, Article 96, Tree Removal and Chapter 12, Article 16, Street Trees, Shrubs, and Plants. In addition, the Pinole General Plan contains several goals, policies, and actions such as those mentioned above under response to criteria a, as well as Policy SE.7.2, which aims to support the expansion of tree planting and landscape practices that encourage the use of trees, plants, and vegetation. Future CAAP-related projects would be required to adhere to City development regulations, Pinole General Plan policies, and the PMC. In addition, the location, and details of

⁴⁰ Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

future CAAP projects would be reviewed for consistency with applicable local, regional, and State regulations related to sensitive habitat prior to approval. As such, the CAAP would not have a substantial adverse effect on riparian habitat or a sensitive natural community, such as wetlands. Therefore, the CAAP and CEQA GHG Emissions Thresholds would have a **less-than-significant impact** related to sensitive natural plant communities.

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have construction or operational impacts related to interference with species movement or wildlife nurseries. The CAAP would not involve land use or zoning changes but would instead promote sustainable infrastructure development and redevelopment within urbanized portions of the City. As a policy document, the CAAP would not result in direct impacts related to interference with species movement or use of wildlife nursery sites. Future CAAP projects would be required to adhere to City development regulations, the Pinole General Plan, and the PMC, including Chapter 17, Article 96, Tree Removal and Chapter 12, Article 16, Street Trees, Shrubs, and Plants. In addition, the Pinole General Plan contains several goals, policies, and actions such as those mentioned above under response to criteria a, b, and c. In addition, Measure CS-1 would facilitate the expansion of the urban forest within Pinole. Additionally, Measure EH-1 aims to reduce the impacts of extreme heat in Pinole by installing green/cool roofs and cool pavement, as well as planting vegetation and trees to reduce urban temperatures and the urban heat island effect. Furthermore, the CAAP actions would generally apply to the urbanized areas of Pinole with little application to parks, open spaces, or other locations where wildlife corridors or native wildlife nursery sites may be present. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a **less-than-significant impact** related to interference with species movement or wildlife nursery use.

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

As mentioned above, Pinole is a primarily urbanized community with parks, recreational, and open spaces incorporated throughout the City. The General Plan Natural Resources and Open Space Element incorporates policies to protect biological resources, such as plants, trees, wildlife habitats, shoreline, and the species that utilize these habitats. In addition, the PMC includes local policies and ordinances to protect trees. The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The CAAP would not involve land use or zoning changes but would promote sustainable infrastructure development and redevelopment within the urbanized portion of the City. The purpose and intended effect of the CAAP is to reduce GHG emissions generated in the City to help reduce the effects of climate change and increase the City's ability to adapt to the changing climate. Implementation of proposed CAAP actions would be beneficial by helping Pinole meet applicable local policies and ordinances for protecting biological resources, including the PMC Chapter 17, Article 96, Tree Removal and Chapter 12, Article 16, Street Trees, Shrubs, and Plants. Specifically, CAAP Measure CS-1 provides for the planting of new and maintenance of existing trees. As such, the CAAP would not conflict with or

obstruct implementation of the applicable policies for preserving biological resources and would not affect the City's ability to attain goals and policies that protect biological resources. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to consistency with local biological resources protection policies.

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?*

No portion of Pinole is currently subject to a Habitat Conservation Plan or Natural Community Conservation Plan.⁴¹ Therefore, the CAAP and CEQA GHG Emissions Thresholds would have **no impact** related to consistency with an adopted habitat or natural community conservation plan.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, could result in impacts to biological resources during infrastructure and building construction. However, as described in *Responses 4a* through *4f*, above, infrastructure development or redevelopment resulting from implementation of the CAAP would be required to comply with applicable Pinole General Plan policies and State and federal regulatory requirements regarding avoidance of special wildlife species and habitat. In addition, the CAAP would not result in new building construction and contains actions that prioritize the preservation of trees and improvements to existing habitat. Therefore, implementation of the CAAP would result in a **less-than-significant cumulative impact** related to biological resources.

⁴¹ California Department of Fish and Wildlife (CDFW). 2019. Natural Community Conservation Plans. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline> (accessed January 2024).

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The Pinole General Plan Community Character Element notes that Pinole has a variety of cultural and historic resources, including Native American sites, historic period sites and buildings, artifacts, and memorabilia, associated with locally historic events. While only a few sites and buildings in the City meet the criteria for designation as a State Historic Resource or a State Historic Landmark, many others have historic value to the community. These structures include the Bank of Pinole, Bernardo Fernandez House, the Downer Home, and Pinole Waterfront at the base of Tennent Avenue. The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to historical resources. The CAAP would not involve land use or zoning changes but would promote infrastructure development and redevelopment that would be complimentary to existing development. CAAP projects would be required to comply with Pinole General Plan Community Character and Land Use and Economic Development Element goals and policies related to the preservation of historic resources, including Goal CC.1 which aims to maintain Pinole's unique qualities and sense of place to preserve the established historic and small-town character of the City as well as Goal LU.3, which aims to preserve historic resources and ensure high-quality site planning and design. CAAP projects would be reviewed for compliance with applicable local, regional, and State regulations regarding cultural resources and the Pinole General Plan Community Character and Land Use and Economic Development Elements to avoid adverse impacts related to historic resources. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to historical resources.

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in impacts related to archaeological resources. There is a possibility for archaeological sites not previously recorded to be present in areas where CAAP projects could occur. CAAP Measures BE-5, TR-1, TR-4, TR-5, EH-1, and CIO-2 would result in small-scale construction that may expose previously undiscovered archaeological resources during ground disturbing activities. The CAAP projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. In addition, CAAP projects and actions would be reviewed for consistency with applicable local, regional, and State archeological regulations prior to final siting and construction. As such, archeological resources would be protected prior to and/or upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to archaeological resources.

c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have impacts related to human remains. There is a possibility of encountering unknown buried human remains throughout the City where future CAAP projects could occur. CAAP Measures BE-5, TR-1, TR-4, TR-5, EH-1, and CIO-2 would result in small-scale construction that may expose unknown human burial sites during ground disturbing activities. CAAP projects and actions would be required to comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98 regulations related to burial findings, including notification, assessment, and treatment of burial sites. Therefore, the CAAP would result in a ***less-than-significant impact*** related to human remains.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would include infrastructure that could have an impact on cultural resources during construction. Additionally, there is a possibility of encountering buried archaeological deposits and human remains throughout the City. Impacts to historic and archaeological resources and human remains are generally site-specific. Accordingly, potential impacts associated with cumulative developments would be addressed on a case-by-case basis. In addition, future projects in the City, including those associated with implementation of the CAAP, would be required to comply with the City's policies and programs that require the identification and protection of sites and structures of architectural, historical, archaeological, and cultural significance in order to avoid impacts related to cultural resources. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to cultural resources.

6 Energy

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

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

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.⁴² California consumed 287,826 gigawatt-hours (GWh) of electricity in 2022 and 11,710 million therms of natural gas in 2022.^{43,44} The single largest end-use sector for energy consumption in California is transportation (41.2 percent), followed by industrial (23.6 percent), residential (18.2 percent) and commercial (17.1 percent).⁴⁵ The City of Pinole has demonstrated its commitment to energy efficiency and renewable energy through many efforts, as described in the **Error! Reference source not found.** section above. The City completed a communitywide GHG emissions inventory for 2017, which is summarized in **Error! Reference source not found.** Transportation (specifically passenger on-road and commercial on-road) and building energy use (specifically residential and commercial/industrial natural gas use) were responsible for the most GHG emissions within Pinole in 2017. Residential, non-residential, and other electricity use in Pinole totaled 83,718,338 kWh in 2017. Residential and non-residential natural gas use in Pinole totaled 3,670,203 therms in 2017.⁴⁶ Passenger and commercial vehicles in Pinole accounted for 59,505,776 VMT in 2017. The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to wasteful consumption of energy resources. The CAAP is a policy

⁴² United States Energy Information Administration (USEIA). 2023. California - Profile Overview. April 20, 2023. <https://www.eia.gov/state/?sid=CA> (accessed December 2023).

⁴³ California Energy Commission (CEC). 2023. Electricity Consumption by County. <http://www.ecdms.energy.ca.gov/elecbycounty.aspx> (accessed December 2023).

⁴⁴ California Energy Commission (CEC). 2023. Gas Consumption by County. <http://www.ecdms.energy.ca.gov/gasbycounty.aspx> (accessed December 2023).

⁴⁵ United States Energy Information Administration (USEIA). 2023. California - Profile Overview. April 20, 2023. <https://www.eia.gov/state/?sid=CA> (accessed December 2023).

⁴⁶ Pinole, City of. 2024. Draft Climate Action Plan Appendix C.

document containing climate action measures to reduce communitywide GHG emissions. The CAAP would encourage energy efficiency in the City's existing building stock through new policies and educational campaigns as well as new requirements for proposed new and existing buildings through CAAP Measures BE-1, BE-2, and BE-3. The CAAP would also promote increased renewable energy production within the City through Measure BE-5. Additionally, the CAAP attempts to reduce transportation-related energy consumption by increasing active transportation and public transit use and reducing VMT through Measures TR-1, TR-2, and TR-3.

Implementation of some CAAP measures would require small-scale construction. However, energy use for the construction of such projects would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of CCR Title 13 Sections 2449 and 2485, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as the 2022 CALGreen, future infrastructure projects would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct CAAP-related projects. Upon completion of construction for any CAAP-related infrastructure development and redevelopment, non-renewable energy use would be reduced by increasing renewable energy production and storage and reducing VMT and energy use within the City.

The purpose and intended effect of the CAAP is to reduce GHG emissions generated within Pinole to minimize the effects of climate change, including those emissions generated by energy demand and supply. The CAAP would not result in the use of non-renewable resources in a wasteful or inefficient manner; rather, it would assist in reducing use of non-renewable energy resources and increasing the production of local renewable energy. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in ***no impact*** related to the wasteful, inefficient, or unnecessary consumption of energy.

b. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Relevant plans and policies that aim to increase energy efficiency and the production of renewable energy include SB 1020, the 2022 CALGreen (Title 24 Part 11), and the 2022 California Building Energy Efficiency Standards (Title 24 Part 6). SB 1020 supports the reduction of GHG emissions from the electricity sector by accelerating the State's RPS Program and requires electricity providers to increase procurement from eligible renewable energy resources to 90 percent of total retail sales by 2035, 95 percent by 2040, and 100 percent by 2045. CALGreen (Title 24 Part 11) institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. In addition, the California Building Energy Efficiency Standards (Title 24 Part 6) establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. CCR Title 24 (Parts 6 and 11) is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC.

Pinole is part of the Marin Clean Energy (MCE) community choice aggregate, which provides electricity primarily from clean, renewable sources. Pinole would continue to reduce its use of

nonrenewable energy resources as the electricity generated by renewable resources provided by MCE continues to increase to comply with State requirements through SB 1020. The CAAP includes measures and actions to reduce electricity use and increase production of renewable energy, as discussed further below, and would, therefore, align with the overall intent of SB 1020.

In addition, construction and operation associated with infrastructure projects stemming from the CAAP would be designed to comply with the energy source standards of the CALGreen and the California Building Energy Efficiency Standards. Future CAAP projects would be required to demonstrate compliance with the CALGreen and the California Building Energy Efficiency by implementing sustainability and energy efficiency measures such as high-efficiency lighting and HVAC systems, low-flow water fixtures, dual-paned windows, and water efficient landscaping and irrigation systems. Compliance with these regulations would minimize potential conflicts with adopted energy conservation plans.

The CEQA GHG Emissions Thresholds provide guidance during CEQA review and do not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in conflicts with renewable energy plans. As discussed under *Response 6a*, above, Measures BE-1, BE-2, and BE-3 seek to decrease natural gas and energy consumption in new and existing buildings by requiring electrification, while Measure BE-5 encourages the production and use of local renewable energy. These actions are consistent with the goals and policies established by SB 1020, CALGreen, and the California Building Energy Efficiency Standards. Thus, the CAAP and CEQA GHG Emissions Thresholds would not conflict with adopted renewable energy or energy conservation plans and there would be ***no impact***.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of the CAAP would result in reduced use of non-renewable energy resources across the community, in particular, with requirements for retrofitted and new buildings and new infrastructure. Implementation of the CAAP would also increase the production of renewable energy within the City by incentivizing the inclusion of small-scale solar projects in new or majorly renovated multi-family and commercial developments and on existing municipal facilities. Additionally, the CAAP includes measures to increase the use of active transportation (TR-1) and public transit (TR-2) and reduce VMT within the City, which would reduce transportation fuel use. As the City's population grows and development intensifies in the future, actions contained within the CAAP would ensure that planned new development is constructed to strict energy efficiency standards and that VMT is reduced. As the CAAP would result in decreased non-renewable energy use within the City and would align with existing plans and policies related to renewable energy and energy efficiency, implementation of the CAAP would result in ***no cumulative impact*** related to energy.

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
Strong seismic ground shaking?	☐	☐	☐	☒
Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

- a. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
 - ii. *Strong seismic ground shaking?*
 - iii. *Seismic-related ground failure, including liquefaction?*
 - iv. *Landslides?*

As outlined in the General Plan, Pinole is located approximately 1.5–3.9 miles northeast of the Hayward fault and the Rodgers Creek/Healdsburg fault zone underneath San Pablo Bay and is also located about 18 to 20 miles northeast of the San Andreas fault zone. The Green Valley-Concord fault trend is located approximately 12 miles east of Pinole. Given its proximity to Pinole, the Hayward fault poses the greatest seismic threat to the City. Ground movement, soil liquefaction, and landslides in susceptible areas can be expected to result in damage during a seismic event. The City's 1995 General Plan identifies the primary geologic and geotechnical concerns in Pinole as slope stability, earthquake ground shaking, and fault ground rupture. Although Pinole is at risk of earthquake-induced ground shaking and associated hazards, the CAAP is a policy document containing measures and supporting actions to reduce GHG emissions. The CAAP does not propose habitable development or policies that could result in exposure of people to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides. Likewise, the CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to seismic- and landslide-related hazards.

- b. *Would the project result in substantial soil erosion or the loss of topsoil?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to substantial loss of topsoil. The CAAP would not involve land use or zoning changes but would promote sustainable infrastructure development and redevelopment. As a policy document, the CAAP would not directly require ground-disturbing activities. However, implementation of several CAAP measures, such as CAAP Measures BE-5, TR-1, TR-2, TR-4, TR-5, CIO-2, EH-1, and CS-1 may result in small-scale construction activities that could cause soil erosion or the loss of topsoil during construction.

CAAP projects and actions would be reviewed for consistency with Pinole General Plan and PMC and other local and State erosion and grading regulations prior to final siting and construction. The potential for CAAP project construction activities involving soil disturbance to result in increased erosion and sediment transport by stormwater to surface waters would be minimized through compliance with PMC Chapter 15, Article 36, which includes erosion and sediment control standards, and/or the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provided by the Regional Water Quality Control Board. These regulations require

best management practices (BMPs) such as the covering of graded slopes and stockpiled materials, storm drain protection, and use of fiber rolls and silt fences to reduce erosion and topsoil loss from stormwater runoff. Compliance with these regulations would ensure that BMPs are implemented during construction and that soil erosion and the loss of topsoil are minimized. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a **less-than-significant impact** related to soil erosion and loss of topsoil.

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Figure 9.1 in the Health and Safety Element of the General Plan shows the liquefaction susceptibility, which includes a very high, moderate, and low ranking. The figure also shows landslide distributions in the City. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to project location on an unstable geologic unit or soil. The CAAP is a policy document containing programs that are consistent with the Pinole General Plan. Some of the proposed policies in the CAAP would support small-scale construction projects, such as EV charging stations. However, CAAP projects and actions would be reviewed for consistency with local and state geotechnical regulations prior to final siting and construction. New structures would be required to comply with the CBC, including measures to address unstable soil conditions. Therefore, the CAAP would result in a **less-than-significant impact** related to risks associated with location on unstable geologic unit or soil or on expansive soils.

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The CAAP and CEQA GHG Emissions Thresholds would not involve the development of habitable structures and, thus, no use of septic tanks or alternative wastewater disposal systems. Therefore, **no impact** would occur related to soil capability support of alternative wastewater disposal systems.

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to paleontological resources. The CAAP would not involve land use or zoning changes that would encourage new development but would instead promote sustainable development and redevelopment. As a policy document, the CAAP would not directly result in impacts related to paleontological resources or unique geologic features. CAAP policies that would involve construction activities, such as the policies related to building energy-efficiency, renewable energy production, and EV charging infrastructure, would involve work within existing, previously graded, and disturbed areas where the likelihood of encountering intact and previously undiscovered paleontological resources would be minimal. Nonetheless, there is a possibility that these small-scale construction projects may expose

paleontological resources during ground disturbing activities. To reduce such risks, CAAP projects and actions would be reviewed for consistency with geotechnical and paleontological regulations prior to final siting and construction. In addition, the CAAP projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to paleontological resources and unique geologic features.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, could expose additional people and property to the seismic and geologic hazards that are present in the region. The magnitude of geologic hazards for individual projects, including those associated with implementation of the CAAP, would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Specific geologic hazards associated with individual project sites would be limited to those sites without affecting other areas. Similarly, potential impacts to paleontological resources associated with each individual site would be limited to that site without affecting other areas, and impacts related to these resources would be minimized on a case-by-case basis. Compliance with existing regulations, including CBC requirements, City-issued permit requirements, and the General Plan, would minimize potential cumulative seismic and geologic impacts. Seismic and geologic hazards and paleontological resources impacts would be addressed on a case-by-case basis and would not result in cumulative impacts. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to geology and soils.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases?	☐	☐	☐	☒

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The greenhouse effect is a natural occurrence that helps regulate the temperature of the Earth. The majority of radiation from the sun hits Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth because it warms the planet by approximately 60 degrees Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 270 years ago) have been adding to the natural greenhouse effect by resulting in increased gases in the atmosphere that trap heat and contribute to an average increase in Earth's temperature. Global warming is the observed increase in the average temperature of the Earth's surface, and climate change is the resultant change in wind patterns, precipitation, and storms over an extended period.

GHGs produced by human activities include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorinated compound, and sulfur hexafluoride.⁴⁷ Combustion of fossil fuels (gasoline, natural gas, and coal), deforestation, and decomposition of waste release carbon into the atmosphere that had been locked underground and stored in oil, gas, and other hydrocarbon deposits or in the biomass of surface vegetation. Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by over 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition.

Changes to the land surface also indirectly affect the atmosphere by changing the way in which Earth absorbs gases from the atmosphere. Potential impacts in California due to climate change include sea level rise, more extreme-heat days and high-ozone days, larger and more frequent

⁴⁷ The CAAP only considers emissions of CO₂, CH₄, and N₂O, because these are the GHGs most relevant to local government policymaking. These gases comprise a large majority of GHG emissions at the community level. The remaining gases are emitted primarily in private sector manufacturing and electricity transmission and are the subject of regulation at the State level. Therefore, these gases were omitted from the CAP.

forest fires, and more frequent and severe drought years.⁴⁸ Although GHG emissions do not typically cause direct health impacts at a local level, GHG emissions can result in indirect health impacts by contributing to climate change, which can have public health implications. The primary public health impacts of climate change include the following:⁴⁹

- Increased incidences of hospitalization and deaths due to increased incidences of extreme heat events;
- Increased incidences of health impacts related to ground-level ozone pollution due to increased average temperatures that facilitate ozone formation;
- Increased incidences of respiratory illnesses from wildfire smoke due to increased incidences of wildfires;
- Increased vector-borne diseases due to the growing extent of warm climates; and
- Increased stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement.

Pinole has completed a communitywide GHG emissions inventory for 2017, which is summarized in **Error! Reference source not found..** The combined energy sector (natural gas and electricity) was the second largest contributor to Pinole's GHG emissions, following the transportation (on- and off-road) sector. Figure 4 summarizes the communitywide GHG emissions forecast under three scenarios: 1) BAU, 2) BAU projections with state measures, and 3) the City of Pinole target reduction path along with State measures. Pinole is committed to an emissions reduction target of 40 percent below 1990 levels by 2030 (SB 32 target year) and reaching carbon neutrality by 2045 (AB 1279 target year). This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and CEQA Guidelines § 15183.5 for a qualified GHG emissions reduction strategy as well as to be achievable by City-supported measures identified in the CAAP. The CAAP includes a BAU and adjusted forecast of GHG emissions that will enable the City to estimate the amount of emissions reductions needed to meet its goal. The measures included in the CAAP combined with statewide legislation and initiatives and regional transportation programs will enable the City to meet its emissions reduction by 2030 (SB 32 target year). Table 4 shows the contribution of the statewide initiatives along with the measures and actions. The City needs to achieve a target of 47,389 MT CO₂e of GHG emissions by 2030 to meet its goal. The estimated GHG reductions accounted for in the CAAP would total 21,628 MT CO₂e by 2030, which would bring the total emissions to 47,273 MT CO₂e.

The CAAP includes measures intended to reduce communitywide GHG emissions. Implementation of the CAAP would result in the reduction of communitywide and per capita operational GHG emissions, while only generating temporary GHG emissions during construction of infrastructure such as EV charging stations and building energy and water efficiency upgrades. Additionally, the CAAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning and, thus, would not result in construction or operational impacts related to GHG emissions. The CEQA GHG Emissions Thresholds would establish GHG emissions targets and analysis methodologies consistent with the goals established by the CAAP that are enforced during CEQA review with the intention of

⁴⁸ CARB and California Environmental Protection Agency (CalEPA). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.386.4605&rep=rep1&type=pdf> (accessed December 2023).

⁴⁹ California Natural Resources Agency. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. <http://www.climateassessment.ca.gov/state/> (accessed December 2023).

reducing GHG emissions associated with construction and operation of future projects and plans in Pinole. These benefits include reduction in building energy consumption, vehicle miles traveled (and thus air pollution), and solid waste generation. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to generation of GHG emissions.

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The CARB 2022 Climate Change Scoping Plan outlines a pathway to achieving the 2045 goal codified by AB 1279. The CAAP and CEQA GHG Emissions Thresholds are policy-level documents that establish measures and actions to reduce GHG emissions within Pinole to comply with State regulations. As discussed under *Response 8a* above, the CAAP includes measures that would reduce GHG emissions from forecasted BAU levels to approximately 0.89 MT of CO₂e per resident, 1.53 MT of CO₂e per employee, and 1.10 MT of CO₂e per service person by 2030. The purpose of the CAAP is to meet Pinole's proportionate fair share of the statewide GHG emissions reduction target set by SB 32 and work toward the state's longer-term target of carbon neutrality identified by the 2022 Scoping Plan and codified by AB 1279.

The CAAP would not conflict with any applicable GHG reduction plans, including the CARB 2022 Climate Change Scoping Plan. The CAAP identifies how Pinole would achieve consistency with the statewide GHG emissions reduction goals. The CAAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability initiatives. These benefits include reduction in building energy consumption, VMT (and thus air pollution), and solid waste generation. Likewise, the CEQA GHG Emissions Thresholds would establish GHG emissions targets and analysis methodologies consistent with the CAAP and would be enforced during CEQA review with the intention of reducing GHG emissions associated with construction and operation of future projects and plans in Pinole. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***no impact*** related to consistency with applicable GHG emissions reduction plans, policies, and regulations.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Analyses of GHG emissions and climate change are cumulative in nature, as they affect the accumulation of GHG emissions in the atmosphere. Cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth and that exceed the proposed CEQA GHG Emissions Thresholds would have a significant impact related to GHG emissions and climate change, both individually and cumulatively. The CAAP creates a GHG emissions reduction strategy (consistent with Section 15183.5 of the CEQA Guidelines) for Pinole. The CAAP also includes a series of actions that are intended to reduce per capita GHG emissions by 40 percent below 1990 levels) by 2030, which provides substantial progress toward Pinole meeting State goals. The City's GHG targets were developed relative to the 2017 Community GHG emissions by back-casting to 1990. This back-cast utilized the change in statewide GHG emissions between 2017 and 1990 as a proxy for change in Pinole during the same period. As such, the CAAP would result in the reduction of GHG emissions rather than generating GHG emissions. Some GHG emissions would occur during future construction of CAAP-related infrastructure projects; however, these emissions would be

temporary and minor in nature. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to GHG emissions.

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

- b. *Would the project 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?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to hazardous materials. The CAAP is a policy document containing measures and actions to reduce GHG emissions. The CAAP does not involve identified site-specific development and, for the most part, it would not facilitate new development that would involve the routine use of hazardous materials. Implementation of some of the CAAP actions, such as energy and water efficiency retrofits and installation of EV charging stations, would require construction activities. Construction would involve the temporary use of hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, these types of materials are not considered acutely hazardous, and storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, the U.S. EPA, and the Occupational Safety & Health Administration. In addition, standard construction BMPs for the use and handling of such materials would avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials during construction of projects would comply with all local, State, and federal regulations regarding the handling of potentially hazardous materials, including Title 49 of the Code of Federal Regulations and Title 22, Division 4.5 of the CCR. Risk of spills would cease after construction is completed. Therefore, construction activities related to CAAP actions would not be anticipated to create upset and accident conditions involving the release of hazardous materials, and operation of the majority of CAAP actions would not involve the routine transport, use, or disposal of hazardous materials during operation.

CAAP Measure BE-5 emphasizes increasing local renewable energy production and storage within the City by encouraging new and majorly renovated multi-family and commercial developments to include small-scale solar systems and battery storage in their design. Lithium-ion batteries, the typical battery technology used in battery storage systems, may pose a risk of upset and accidental release of hazardous chemicals contained within the batteries (e.g., in the event of a fire). Lithium-ion technology is a common battery storage medium and is considered one of the safest and most efficient methods of energy storage on the market. During normal operation, lithium-ion batteries do not represent a risk to off-site receptors, and safety standards applicable to energy storage facilities and safety certification tests established by independent bodies, such as Underwriters Laboratories, National Fire Protection Association, and International Electrotechnical Commission would prevent any reasonable possibility of a substantial adverse effect on the environment related to the lithium-ion batteries. However, in the unlikely event of a fire, there is a risk of the accidental release of hazardous materials associated with renewable energy systems. Any future proposed renewable energy systems would, therefore, be carefully reviewed for appropriate locations, safety measures, and consistency with the Pinole General Plan, PMC, and applicable local, State, and federal regulations. Thus, establishment of such production and storage facilities would be subject to site specific review and approval by the Pinole Fire Department, Hazardous Materials Division, and Building Division and would be required to comply with all applicable safety standards. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to creating a significant hazard through the routine transport, use, or disposal of hazardous materials and reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to handling hazardous materials in the vicinity of schools. The CAAP is a policy document containing measures to reduce GHG emissions. The CAAP does not include site-specific proposals and development. Implementing some CAAP actions may require future development or improvements, such as EV charging stations and building improvements related to energy efficiency. However, CAAP projects and actions would be reviewed to establish the appropriate location of projects in relation to existing development in the City and would be reviewed for consistency with the Pinole General Plan, PMC, and applicable local, State, and federal regulations. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to handling of hazardous materials in proximity to schools.

- d. *Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to project site location on a site included on a hazardous material site list. The CAAP is a policy document containing measures and supporting actions to reduce GHG emissions and increase community resilience. The CAAP does not include site-specific proposals and development, but CAAP measures could result in projects that could be located on listed hazardous materials sites. However, CAAP projects and actions would be reviewed for consistency with the Pinole General Plan, PMC, and would be required to comply with applicable local, State, and federal regulations related to hazardous materials sites. Therefore, the CAAP would result in a ***less-than-significant impact*** related to location on a listed hazardous materials site.

- e. *For a project located in 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?*

There are no airports within the City of Pinole. The closest airports to Pinole are Oakland International Airport, which is 27 miles away, and San Francisco International Airport, which is 34 miles away. Buchanan Field is a local airport that does not currently support commercial airline service and is in Concord, approximately 15 miles east of Pinole. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to airport hazards. Furthermore, the CAAP is a policy document that would not increase airport activity or result in additional habitable development or commercial development that could increase potential exposure of residents and employees to aircraft-related hazards. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***no impact*** related to risks associated with location proximate to a public airport.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The CAAP and CEQA GHG Emissions Thresholds are policy documents intended to reduce GHG emissions. The proposed CAAP and CEQA GHG Emissions Thresholds do not involve site-specific development, nor would they facilitate new development that would interfere with adopted emergency plans. Implementation of some CAAP measures may involve construction within the local right-of-way. Construction activities have the potential to require lane closures and may impact traffic and vehicle speeds on the affected roadways; however, these impacts would be temporary and access to roadways would be maintained throughout project construction. Furthermore, future projects involving work in the public right-of-way would be required to coordinate with the City through the encroachment permit review and permitting process to confirm appropriate construction staging and adequate vehicular and pedestrian access on adjacent roadways and that emergency evacuation routes would not be substantially impacted. In addition, CAAP Measure BE-5 would expand renewable energy and battery storage of local community-scale renewable energy. Action CAR-3c also aims to establish a partnership between the City and Police and Fire Departments to collaboratively identify hazards, analyze risk, coordinate emergency response, and complete public outreach efforts, to develop a comprehensive and effective LHMP that enhances community resilience and minimizes the impact of potential disasters by 2028. This would improve the City's ability to respond to emergency events. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to impairment or interference with implementation of an emergency response or evacuation plan.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

According to the Pinole General Plan Health and Safety Element, wildfire poses a high risk to the Sbrante Ridge boundary of the City from Duncan Canyon south through the slopes above Pinole Valley Park.⁵⁰ The CAAP and CEQA GHG Emissions Thresholds do not propose specific development or new residential or commercial land uses that could be subject to wildland fire, nor would they result other physical changes to the environment that could increase the risk of a wildland fire. Furthermore, CAAP Measure WF-1 aims to enforce defensible space and home hardening standards to mitigate structure ignitions and protect the community from wildfires. In addition, the CAAP does not propose specific development or new residential or commercial land uses that could be exposed to wildland fire. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to risks associated with exposure to wildland fires.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Hazards and hazardous materials impacts are typically site-specific in nature. Future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, are not anticipated to contribute to

⁵⁰ Pinole, City of. 2010. Pinole General Plan Health and Safety Element. 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/City_of_Pinole_General_Plan_12.2010-Chapter9.pdf (accessed December 2023)

cumulative hazards and hazardous materials impacts with adherence to applicable General Plan policies and federal, State, and local regulatory requirements. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to hazards and hazardous materials.

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒
(i) Result in substantial 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 off-site;	☐	☐	☐	☒
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
(iv) Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to water quality standards. The CAAP is a policy document containing actions intended to reduce GHG emissions within Pinole. CAAP Measures BE-2 and BE-3 promote electrification of existing buildings, Measure TR-1 would improve bicycle and pedestrian facilities throughout the City, and Measures TR-4, TR-5, and CIO-2 would expand EV charging stations and supporting infrastructure. CAAP Measure W-1 would incentivize water efficiency retrofits to existing buildings and landscaped areas. These actions may result in small scale construction activities in the future that could result in temporary water quality impacts due to soil erosion and ground disturbance, as further discussed under *Response 10c* in Section 7, *Geology and Soils*.

However, CAAP projects and actions would be reviewed for consistency with local and State regulations, including the NPDES permitting program that requires implementation of Stormwater Pollution Prevention Plans (SWPPPs), as applicable, and the PMC Chapter 15, Article 36, Section 240 that includes erosion and sediment control standards. Additionally, PMC Chapter 15, Article 36, Section 190 requires that an Erosion and Sediment Control Plan be prepared by a registered civil engineer, unless specific conditions, as outlined in the code, are met. These regulations require BMPs to reduce water quality impacts from construction activities. Compliance with the PMC and/or NPDES permitting program would ensure that BMPs are implemented during construction to minimize potential impacts to surface and groundwater quality. As such, the CAAP's related infrastructure and retrofit projects would not result in new or different wastewater discharge that would violate water quality standards, waste discharge requirements, or otherwise degrade surface or groundwater quality. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **less-than-significant impacts** related to surface or groundwater water quality in Pinole.

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

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to groundwater supplies. The CAAP is a policy document containing measures intended to reduce GHG emissions and increase adaptive capacity. Additionally, water in the City comes from EBMUD, which utilizes surface water, and no groundwater is used (EBMUD 2024). Nonetheless, CAAP Measure W-1 seeks to decrease community water use by 10 percent from 2017 levels in 2030. Reduced water use within the City would aid in maintaining groundwater supplies. CAAP Measure CS-1 would facilitate the expansion of the urban forest and greenspaces and development of new and enhanced natural areas within Pinole. Increased greenspace and natural areas would increase pervious surfaces in Pinole for improved groundwater recharge. Implementation of other CAAP measures, such as improved EV charging infrastructure and building energy efficiency retrofits, would not substantially degrade groundwater quality or recharge or result in increased groundwater demand. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to impedance of sustainable groundwater management.

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- *Result in substantial erosion or siltation on- or off-site?*
 - *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
 - *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?*
 - *Impede or redirect flood flows?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to alterations in drainage patterns and impervious surfaces. Implementation of several CAAP measures may promote infrastructure development and small-scale construction activities within Pinole. CAAP Measures BE-2 and BE-3 promote electrification of existing buildings, Measure TR-1 would improve bicycle and pedestrian facilities throughout the City, and Measures T-4, T-5, and CIO-2 would expand EV charging stations and supporting infrastructure, CAAP Measure W-1 would incentivize water efficiency retrofits to existing buildings and landscaped areas. Implementation of these CAAP actions would primarily occur within previously developed areas and would not result in substantial alterations to Pinole's existing drainage patterns and amount of impervious surface. Construction of CAAP projects could result in erosion as discussed in Section 7, *Geology and Soils*. However, impacts to drainage and water quality during construction would be minimized through the implementation of BMPs as required by PMC Chapter 15, Article 36, which includes erosion and sediment control standards and/or NPDES Construction General Permit program. In addition, CAAP projects would be developed in accordance with the City's General Plan, which includes goals and policies for the protection and preservation of ridgelines, creek corridors, trees, open space areas, and the bayfront.⁵¹ Furthermore, CAAP Measure CS-1 would increase permeable surfaces in Pinole, which would improve drainage and water quality. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a **no impact** related to the alteration of existing drainage patterns.

- d. *Would the project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

According to the General Plan, Pinole is not located within designated seiche or landslide hazard zone.⁵² The Federal Emergency Management Agency (FEMA) National Flood Hazard Map has identified areas in Pinole that are subject to flooding, which are almost entirely located at the San Pablo Bay shoreline and along Pinole Creek- the two surface water features in the City. Therefore, areas of Pinole are at risk of flooding. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to flooding and the risk of the release of pollutants. As described under *Response 10c*, CAAP projects

⁵¹ Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

⁵² Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

would not impede or redirect flood flows, and as discussed under *Responses 9a and b* in Section 9, *Hazards and Hazardous Materials*, CAAP projects would generally not involve the regular use or storage of hazardous materials with the exception of renewable energy systems that include the storage of lithium-ion batteries. Future CAAP projects, such as renewable energy systems, would be reviewed for compliance with the applicable local and State regulations related to flooding and hazardous materials use and storage, including CBC standards for construction. Furthermore, any projects associated with implementation of the CAAP located in flood-prone areas must comply with HMC Chapter 15, Article 5, which provides requirements to mitigate potential flood risks, including general construction standards. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to flooding and inundation resulting in release of pollutants.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to obstruction of a water quality control plan or sustainable groundwater management plan. The CAAP measures would not include activities that would result in the extraction of groundwater. Rather, the CAAP encourages reduced water consumption and expanded pervious surfaces within Pinole, which would aid in groundwater conservation and recharge and reduced surface water runoff and related water quality issues. The CAAP would not interfere with or obstruct implementation of water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in ***no impact*** related to consistency with a water quality control plan or sustainable groundwater management plan.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in any development or land use changes that could result in cumulative impacts related to hydrology and water quality. Future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, are not anticipated to contribute to cumulative hydrology and water quality impacts with adherence to applicable General Plan policies and local, State, and federal regulatory requirements. Implementation of the CAAP would not contribute to an increase in growth and development in Pinole but could result in small-scale infrastructure development and building retrofit projects, including new EV charging infrastructure and energy and water efficiency upgrades. As such, implementation of the CAAP and other cumulative projects could have incremental impacts related to hydrology and water quality, such as erosion and sedimentation due to construction activities. However, the CAAP's contribution to such impacts would be minor and temporary, and the CAAP would have the long-term effect of reducing water use and improving sustainable stormwater management. Therefore, implementation of the CAAP would result in a ***less-than-significant cumulative impact*** related to hydrology and water quality.

11 Land Use and Planning

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

a. Would the project physically divide an established community?

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to division of an established community. The CAAP is a policy document containing measures that are consistent with the Pinole General Plan and does not include actions or specific development projects that would divide an established community. CAAP Measures TR-1, TR-2, and TR-3 facilitate the installation of active transportation infrastructure and amenities, improved public transit connectivity, and enhanced safety for pedestrians and bicyclists. Such actions would help to increase connectivity within Pinole. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to division of an established community.

b. Would the project 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?

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning and, thus, would not result in a construction or operational conflict with land use plans and policies. Rather, the CEQA GHG Emissions Thresholds would establish GHG emissions targets and analysis methodologies consistent with the goals established by the CAAP that are enforced during CEQA review with the intention of reducing GHG emissions associated with construction and operation of future projects and plans in the City.

The CAAP is a policy document containing measures that are consistent with Pinole's General Plan and that are designed to reduce adverse environmental impacts associated with climate change. Nonetheless, implementing the CAAP could require some modification of existing policies, including developing and implementing new programs, and projects, or modifying existing ones. For example, CAAP Measures BE-1, BE-2, and BE-3 would establish new building ordinances or updates to the existing municipal code to require building electrification in residential developments and decarbonization of commercial developments. To implement these measures, the PMC, Pinole General Plan, and other applicable City documents may need to be amended to reflect new or

modified requirements. However, where modifications of existing policies are needed, the CAAP measures would result in greater avoidance or reduction of environmental effects. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in ***no impact*** related to consistency with current land use plans or policies.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). The CAAP and CEQA GHG Emissions Thresholds are policy documents containing measures that are consistent with the Pinole General Plan. Nonetheless, implementation of the CAAP and CEQA GHG Emissions Thresholds, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would require some modification of existing land use policies, including amending the General Plan and developing and implementing new programs, and projects, or modifying existing ones. The proposed policy changes in the CAAP are consistent with the intent of the goals and policies established within the General Plan and PMC and would not cumulatively contribute to population growth or the loss of housing. Cumulative projects, including the CAAP, would be required to adhere to City development regulations and General Plan policies to retain land use character and minimize environmental impacts. Future CAAP projects and actions would be reviewed for consistency with the General Plan and other applicable regulatory land use actions prior to approval. Therefore, implementation of the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant cumulative impact*** related to land use.

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No mineral resources are identified in the City of Pinole General Plan.⁵³ Likewise, the CAAP and CEQA GHG Emissions Thresholds would not facilitate additional urban growth or infrastructure development projects within the City that could result in the loss of availability of known mineral resources. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to mineral resources.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Therefore, CAAP-related projects and the CEQA GHG Emissions Thresholds, in combination with other cumulative projects that occur to accommodate Pinole’s anticipated population, employment, and housing growth, are not anticipated to contribute to cumulative impacts to mineral resources. Thus, implementation of the CAAP and CEQA GHG Emissions Thresholds would result in **no cumulative impact** related to mineral resources.

⁵³ Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsms5-hosted.civicle.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).

13 Noise

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

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance, while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor

and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA.

The Health and Safety Element of the Pinole General Plan aims to identify the major sources of noise in the City and ensure that comfortable and safe noise levels are retained throughout the community. Noise in Pinole is primarily generated by vehicular and rail. Noise generated by vehicular traffic in Pinole is greatest along I 80 and San Pablo Avenue. Two rail lines traverse the City, Burlington Northern Santa Fe, and the Union Pacific. There are no significant sources of aircraft or industrial noise in the City of Pinole. The ambient noise environment in Pinole is defined primarily by traffic on I 80, which runs northeast to southwest through the City. As stated in the General Plan, at locations removed from I 80 and the railroads, the ambient noise environment tends to be defined by local traffic and typical neighborhood noise sources. No significant noise-producing commercial or industrial activities are identified in the City of Pinole. From a land use planning perspective, there are two goals for controlling fixed-source noise: to prevent the introduction of new noise-producing uses in noise-sensitive areas and to prevent encroachment of noise-sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in proximity to noise-producing facilities include mitigation measures to ensure compliance with those noise performance standards.

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to excessive noise levels. The CAAP is a policy document containing programs that are consistent with the City's General Plan. Some of the CAAP measures would support small-scale construction projects that could result in temporary noise. CAAP Measures BE-2 and BE-3 promote electrification of existing buildings, Measure T-1 would improve bicycle and pedestrian facilities throughout the City, Measures T-4, T-5, and CIO-2 would expand EV charging stations and supporting infrastructure, and CAAP Measure W-1 would incentivize water efficiency retrofits to existing buildings and landscaped areas. However, CAAP projects would be reviewed for consistency with the General Plan and PMC, and construction activities would be required to comply with the provisions of the PMC Section 8.35.030. Therefore, the CAAP would not result in significant construction noise related impacts.

The CAAP does not include future projects that would result in substantial operational noise. Rather, the CAAP encompasses a suite of GHG-reduction opportunities that affect the transportation sector and its associated noise. For example, CAAP Measures TR-4, TR-5, TR-6, CIO-2, and CIO-3 encourage adoption of EVs and electric off-road equipment, which are quieter than gas-powered alternatives. Additionally, Measures TR-1 and TR-2 aim to facilitate improvements to bicycle and public transit circulation to increase active transportation and transit ridership and decrease VMT. These measures would reduce VMT and traffic-related noise in Pinole. Therefore, the CAAP and CEQA GHG Emissions Thresholds would not generate excessive operational noise levels and would result in a ***less-than-significant impact*** related to noise exposure.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as

groundbourne noise.⁵⁴ Although groundbourne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern of vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or Root Mean Square (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings.⁵⁵ Vibration significance ranges from approximately 50 vibration decibels (VdB), which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings. The general human response to different levels of groundborne vibration velocity levels is described in Table 6.⁵⁶

Table 6 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.
VdB = vibration decibels	
Source: Federal Transit Administration 2018	

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to groundborne vibration. The CAAP is a policy document containing programs that are consistent with the City's General Plan. Some of the CAAP actions would support small-scale construction projects, such as EV charging station construction and building energy and water efficiency retrofits that may result in a temporary, minor increase in groundborne vibration. However, CAAP projects would be reviewed for consistency with the General Plan and PMC, and construction activities would be required to comply with applicable local, State, and federal regulations to ensure that temporary construction impacts related to groundborne vibration would be minimized. Furthermore, CAAP projects would not include operational sources of groundborne vibration. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a **less-than-significant impact** related to groundborne vibration.

- 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?*

⁵⁴ California Department of Transportation. 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf> (accessed December 2023).

⁵⁵ Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook00.cfm (accessed December 2023).

⁵⁶ Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (accessed December 2023).

There are no airports located within the City of Pinole. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to airport noise. Furthermore, the CAAP is a policy document that would not increase airport activity or result in additional habitable development or commercial development that could increase potential exposure of residents and employees to airport noise. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to aviation-related noise exposure.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. The CAAP is a policy document containing programs that are consistent with the General Plan, including the Health and Safety Element. Nonetheless, CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would support construction projects, such as EV charging station construction that may result in a temporary increase in groundborne vibration or noise levels. However, cumulative projects, including future CAAP projects, would be subject to review by the City for compliance with the General Plan and PMC and would be required to comply with applicable State and federal regulations governing construction noise and vibration. Additionally, the CAAP encompasses a suite of GHG-reduction opportunities that would decrease traffic and traffic-related noise. As such, implementation of the CAAP would not generate permanent, excessive groundborne vibration or noise levels. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant cumulative impact*** related to noise.

14 Population and Housing

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

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- b. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to substantial unplanned population growth or the displacement of existing people or housing. The CAAP does not include measures, policies, or programs that would result in new housing or jobs or that would displace existing residents or housing. In addition, the CAAP does not propose new infrastructure, such as roadways or utilities, which could indirectly lead to new population growth or development. Therefore, the CAAP would not directly increase the population, indirectly induce additional unplanned population growth, or displace people or housing. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to population and housing.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, are not anticipated to displace people or housing nor induce substantial unplanned population growth within Pinole. Specifically, the CAAP would not contribute to person or housing displacement in Pinole nor result in population growth beyond that already assumed and planned for in the General

Plan. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no cumulative impact** related to population and housing.

15 Public Services

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

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

- *Fire protection?*
- *Police protection?*
- *Schools?*
- *Parks?*
- *Other public facilities?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to public services. The CAAP is a policy document containing programs that are consistent with the City's General Plan. Implementation of the CAAP and its proposed measures and actions would not result in increases in population or new employment opportunities that could induce population growth, as further discussed in Section 14, *Population and Housing*. As such, the CAAP would not require the construction of new or physically altered governmental facilities to serve an additional population,

the construction of which could cause significant environmental impacts. CAAP Measure WF-1 would help enforce defensible space and home hardening standards to mitigate structure ignitions from wind blow embers, thereby reducing the burden on local public services related to such natural disasters. Furthermore, future CAAP-related projects would be reviewed for consistency with the General Plan and other applicable local and State regulations related to public services. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in ***no impact*** related to public services in terms of need for the construction of new or altered governmental facilities.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of future CAAP-related projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would not result in increases in population or induce additional population growth beyond that assumed under the General Plan. Therefore, implementation of the CAAP would not result in substantial cumulative need to expand public services facilities. Rather, the CAAP includes measures to improve community resilience and reduce the potential impacts of climate change in the City, thereby reducing the burden on local public services related to climate change-induced disasters. Therefore, the CAAP would result in a ***no cumulative impact*** related to public services.

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

- 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?*
- b. *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

According to the General Plan, Pinole has approximately 358 acres of land that are occupied by thirteen parks, including one regional park, four community parks, and five neighborhood parks. The City also has six school sites with park areas totaling an additional 16.5 acres, as summarized in the Community Services and Facilities Element. Additionally, the Growth Management Element includes an action to establish 3.0 acres of neighborhood or regional parks, or 5.0 acres of dedicated open space per 1,000 residents. Multiple General Plan Elements include goals and actions aimed to protect open space and recreational resources, including the Land Use and Economic Development, Community Services and Facilities, and Natural Resources and Open Space Elements. The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to parks or recreational facilities. The CAAP is a policy document containing programs that are consistent with the General Plan, including the recreation and open space policies established in the Land Use and Economic Development, Community Services and Facilities, and Natural Resources and Open Space Elements. CAAP MeasureTR-1 includes an action that aims to connect open spaces currently disconnected from active transportation routes. Additionally, Measure SLR-2 includes an action that aims to identify replacement opportunities or otherwise plan for how to replace recreational areas and accessways that will be lost due to inundation or damage associated with sea level rise. Furthermore, as described in Section 14, *Population and Housing*, the CAAP would not result in substantial population growth or direct land use changes. As such, implementation of the CAAP would not result in a substantial physical deterioration of parks or other recreational facilities or result in the need to expand recreational facilities. Therefore, the CAAP and CEQA GHG Emissions Thresholds

would result in ***no impact*** related to the need for construction of new or altered recreational facilities.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of CAAP projects, in combination with other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth, would not result in increases in population or induce additional population growth beyond that assumed under the General Plan. Therefore, implementation of the CAAP would not result in increased demand for parks or substantial cumulative physical deterioration of parks or other recreational facilities or result in the cumulative need to expand recreational facilities. In addition, the CAAP includes measures to increase greenspace, natural areas, and parks within the community, which aligns with the General Plan recreation goals. Therefore, implementation of the CAAP would result in ***no cumulative impact*** related to recreation.

17 Transportation

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

a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The General Plan Circulation Element includes the following goals:

- **Goal CE.1:** Reduce vehicle miles traveled and encourage the use of public transit.
- **Goal CE.2:** Achieve a coordinated regional and local transportation system that minimizes traffic congestion and efficiently serves users.
- **Goal CE.3:** Provide timely input and effective means (as appropriate) of programming street and highway improvements to maintain the objective peak hour level of service without detrimentally impacting community character or commercial activity.
- **Goal CE.4:** Establish programs to support sidewalk, trail and street enhancements, where feasible.
- **Goal CE.5:** Provide adequate parking and loading facilities while encouraging alternative means of transportation.
- **Goal CE.6:** Reduce the amount of peak hour automobile congestion on city streets, as appropriate.
- **Goal CE.7:** Support bicycle use as a mode of transportation by enhancing infrastructure to accommodate bicycles and riders.
- **Goal CE.8:** Provide a safe network of well-maintained pedestrian walkways throughout Pinole that encourages walking as a form of non-motorized transportation.

Additionally, the City is preparing an Active Transportation Plan ([ATP] Walk & Roll Pinole 2024) to establish a vision for improving walking and bicycling within Pinole for people of all ages and abilities. When complete, it is anticipated that the City's ATP will provide recommendations that seek to increase safety, accessibility, and comfort for pedestrians and bicyclists; enhance connectivity between existing transportation networks and key destinations; and help the City address regional goals to reduce VMT.⁵⁷

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts that would conflict with a program, plan, ordinance, or policy addressing the transportation circulation system. The CAAP is a policy document containing measures and policies that are consistent with the General Plan Circulation Element. CAAP Measure TR-1 aims to create a safe and connected active transportation network linked to Pinole Creek to increase active transportation mode share, and Measure T-2 would implement public and shared transit improvements and programs to achieve an increase public transit mode share. Additionally, CAAP Measure TR-3 aims to develop programs and policies to discourage driving single passenger vehicles and to support the active transportation and public transit mode share goals of Measures TR-1 and TR-2. These CAAP measures would advance active transportation and public transit within Pinole and decrease VMT and associated air pollutants and GHG emissions. These CAAP measures would be consistent with the General Plan Circulation Element goals related to improving multi-modal facilities, reducing VMT and single-occupancy vehicles, encouraging active transportation, and reducing vehicle congestion within Pinole.

Furthermore, the CAAP would seek to reduce VMT within the City, consistent with CEQA Guidelines section 15064.3, subdivision (b). Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to consistency with plans addressing the transportation circulation system and CEQA Guidelines section 15064.3, subdivision (b).

- c. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- d. *Would the project result in inadequate emergency access?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to risk associated with transportation design, incompatible use, or emergency access. The CAAP is a policy document containing measures that are consistent with the General Plan and would not facilitate development beyond that allowed under the General Plan. Implementation of some CAAP measures may involve construction within the local right-of-way. Construction activities have the potential to require lane closures and may impact traffic and vehicle speeds on the affected roadways; however, these impacts would be temporary and access to roadways would generally be maintained throughout project construction. Furthermore, future projects involving work in the public right-of-way would be required to coordinate with the City through the encroachment permit process to ensure appropriate construction staging and adequate vehicular and pedestrian access on adjacent roadways. Coordination with the City would ensure that significant impacts to the circulation system design, including safety impacts and emergency access, would not occur. As such, construction of future CAAP-related projects would not create transportation design hazards or result in inadequate

⁵⁷ Pinole, City of. 2024. Walk & Roll Pinole 2024: A Plan for People of All Ages and Abilities. https://ghd.mysocialpinpoint.com/pinole_atp (Accessed February 2024)

emergency access. Furthermore, the CAAP would facilitate increased active transportation and public transit use and decreased VMT within Pinole, which in turn would reduce potential transportation hazards and congestion conditions that can hinder emergency response. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to transportation hazards and emergency access.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth could result in increases in VMT or changes affecting traffic design safety and emergency access. However, the CAAP is a policy document containing programs that are consistent with the General Plan and other applicable transportation policies and does not propose new development that would increase VMT, result in design hazard, or affect emergency access. Rather, the CAAP measures and actions would promote alternative modes of transportation and reduction of VMT throughout Pinole, consistent with goals contained in the Circulation Element. Therefore, the CAAP would result in a ***less-than-significant cumulative impact*** related to transportation.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
--	--------------------------------------	--	-------------------------------------	--------------

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

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe?	☐	☐	☒	☐

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is 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 § 5020.1 (k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is a 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 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe?*

On January 26, 2024, 14 Native American Heritage Commission (NAHC)-identified local Native American tribal representatives from 12 Native American Tribal groups were formally notified that the City initiated environmental review of the CAAP and CEQA GHG Emissions Thresholds and were invited to consult on the plan. On February 1, 2024, the NAHC provided an updated list with six

additional representatives for local Native American Tribal groups, and these additional representatives were formally notified of the project on February 1, 2024. The Native American Tribal groups that were notified for the plan include the following:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Guidiville Indian Rancheria
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- North Valley Yokuts Tribe
- The Ohlone Indian Tribe
- The Confederate Villages of Lisjan
- Tule River Indian Tribe
- Wilton Rancheria
- Wuksache Indian Tribe/Eshom Valley Band

On January 30, 2024, a representative from the Confederate Villages of Lisjan responded requesting a consultation. On April 17, 2024, City staff met with representatives from the Confederate Villages of Lisjan to initiate the consultation. During the meeting, the proposed project was discussed. Additionally, the specific conditions, measures, or protocols that are being considered to address concerns of local tribes as part of the proposed project, and areas where Tribes can work with the City to implement the CAAP were discussed. No mitigation measures were requested, and no tribal cultural resources were identified that could be impacted by the plan. Therefore AB 52 compliance requirements have been met.

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to tribal cultural resources. The CAAP would not involve land use or zoning changes that would increase development within the City but would instead promote sustainable infrastructure development within the urbanized area of the City. As a policy document, the CAAP would also not directly entail ground disturbing activities; however, implementation of various CAAP actions related to existing building energy, active transportation facilities, EV charging infrastructure, and tree planting may include minor construction activities in the future.

Implementation of these CAAP actions could impact unknown tribal cultural resources during construction that involves below-grade activities in previously undisturbed soils. However, the CAAP projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. In addition, CAAP projects and actions would be reviewed for consistency with applicable local, regional, and state tribal cultural and archaeological regulations prior to final siting and construction and would be required to implement BMPs in accordance with the Community Character Element of the General Plan, which requires a cultural resources study to be complete for all applicable discretionary projects by a professional archaeologist or architectural historian that meets the Secretary of the Interior's Professional Qualifications Standards in archaeology (Action CC.4.2.4). Additionally, Action CC.4.2.5 states that, "should any cultural resources such as structural features, unusual amounts of bone or shell, artifacts, or architectural remains be encountered

during development activities, work shall be suspended within 50 feet of the discovery and the City of Pinole Community Development Department shall be immediately notified...” As such, tribal cultural resources would be protected prior to and/or upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to tribal cultural resources.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. CAAP projects, in combination with other cumulative projects that occur to accommodate Pinole’s anticipated population, employment, and housing growth, could increase the potential for adverse effects to unknown tribal cultural resources in Pinole. However, impacts to tribal cultural resources are site-specific; accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis as cumulative project details and locations become known. CAAP projects and other cumulative projects would be required to comply with the actions outlined in the Community Conservation Element related to a cultural resource study be complete, and if unanticipated items be found, the City would be contacted immediately, and work would be halted within 50 feet of the discovery. Therefore, the CAP would result in a ***less-than-significant cumulative impact*** related to tribal cultural resources.

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
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?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the wastewater treatment provider 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?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

- a. *Would the project 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?*

The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not have direct construction or operational impacts related to utilities and service systems. The CAAP is a policy document aimed at reducing solid waste production and energy and water consumption, amongst other issues, and the related GHG emissions throughout Pinole and does not include site-specific infrastructure designs or project proposals. Implementing the CAAP would not

result in an increase in population or housing nor would it facilitate growth beyond that anticipated by the General Plan. As such, implementation of the CAAP would not create new demand related to water, wastewater, stormwater drainage, electric power, natural gas power, or telecommunications utilities. However, projects resulting from implementation of the CAAP could include redevelopment and/or restructuring of electricity and natural gas power facilities and infrastructure, as well as new local renewable energy generation and storage and green stormwater infrastructure projects. Potential impacts related to these measures are discussed further below.

Water Supply Facilities/Infrastructure

The City of Pinole receives water from the East Bay Municipal Utility District (EBMUD). The EBMUD supplies water and provides wastewater treatment for a large part of Alameda and Contra Costa counties. According to the EBMUD Urban Water Management Plan (UWMP), the EBMUD water supply system collects, transmits, treats, and distributes water from its primary water source, the Mokelumne River, to its customers in the San Francisco East Bay Area.⁵⁸ The Mokelumne Aqueducts convey the Mokelumne River supply from Pardee Reservoir, located upstream of Camanche Dam, across the Sacramento-San Joaquin River Delta (Delta) to local storage and treatment facilities in the East Bay. After treatment, water is distributed to the incorporated cities and unincorporated communities in Alameda and Contra Costa counties that EBMUD serves. Based on the historical average, approximately 90 percent of the raw water entering EBMUD's system originates from the Mokelumne River watershed, and approximately 10 percent originates as runoff from the protected watershed lands in the East Bay Area.

CAAP Measure W-1 seeks to decrease community water use by adopting a Water Conservation and Water Shortage Contingency Program Ordinance to establish drought thresholds that trigger varying water use reduction strategies with a focus on domestic water use, health and sanitation, and fire protection. Additionally, implementation of this measure would include a variety of educational campaigns that focus on water conservation, removing non-functional or decorative turf, and water-wise landscaping and watering practices. Likewise, CAAP Measure W-2 aims to increase the community's use, supply, and access to recycled water. This would be achieved through completion of a feasibility study with EBMUD to identify opportunities for increase supply of recycled water in the City, pursuit of funding for recycled water infrastructure, and development of a Recycled Water Infrastructure Enhancement Plan that outlines the potential for system expansion, identifies opportunities, as applicable, to integrate recycled water sources into non-potable water networks for irrigation, and the promotion of educational campaigns that raise awareness on what recycled water is and how it is used. Additionally, CAAP Measure CS-1 aims to increase carbon sequestration and prepare the urban forest for climate change, extreme heat, drought, and wildfire, which includes an action to amend the municipal code to include street tree requirements for all zoning districts, increase shade tree requirements for new developments, and include increased permeable surface requirements for new development or substantial redevelopment, improving water infiltration and groundwater recharge. Furthermore, the CAAP would not result in new land uses, such as increased residential or commercial development, which would contribute to an increase in water use compared to existing conditions or that would require relocation or construction of new water infrastructure. Therefore, the CAAP and CEQA GHG Emissions Thresholds would have **no impact** related to the need for construction or expansion of water supply facilities and infrastructure.

⁵⁸ EBMUD. Urban Water Management Plan 2020. June 2021. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan> (accessed January 2024).

Wastewater Treatment Facilities/Infrastructure

The City of Pinole has a sewer collection system serving most of the City of Pinole, however, some areas in the southwest portion of the City are served by West County Wastewater District. The City of Pinole owns and operates the Pinole-Hercules Water Pollution Control Plant that provides secondary treatment of domestic, commercial, and industrial wastewater, serving a population of about 40,000, with an average daily flow of 3.5 million gallons.⁵⁹ The wastewater collection system includes approximately 49 miles of City-owned gravity sanitary sewers, 565 manholes, two lift stations, less than a mile of pressure force mains, and about 5,340 laterals.⁶⁰

The CAAP would not result in new land uses that would generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. The amount of wastewater treated at the Water Pollution Control Plant would not change compared to existing conditions with implementation of the CAAP. The CAAP would not require relocation or construction of new wastewater treatment infrastructure. However, CAAP Measure SW-4 aims to analyze the opportunities to enhance the City's Wastewater Treatment Plant to divert organic waste from the landfill and increase organics recovery. This analysis would include a feasibility study to identify local partners, analyze the potential volume of waste, and assess facility upgrades needed to complete a pilot project at the WWTP and would not include direct construction or expansion of wastewater treatment facilities. Therefore, **no impact** related to construction or expansion of wastewater treatment facilities and infrastructure would occur.

Stormwater Drainage Facilities/Infrastructure

The City maintains a system of storm drains, gutters, and ditches to convey stormwater generated during rain events. As discussed in Section 10, *Hydrology and Water Quality*, implementation of CAAP measures related to building electrification and energy and water efficiency upgrades, renewable energy production and storage, transportation, and urban trees may promote infrastructure development that would involve small-scale construction. Construction of projects implemented in accordance with the CAAP could result in erosion and potential changes to drainage patterns. However, as described in Section 7, *Geology and Soils*, and Section 10, *Hydrology and Water Quality*, CAAP projects would be required to comply with local, State, and federal requirements during construction that would control stormwater runoff, erosion, and potential impacts to the stormwater drainage system. In addition, CAAP Measure CS-1 would support the planting of urban trees and development of new greenspace and natural areas, which would increase permeable surfaces throughout the City, improving water infiltration and stormwater management. Therefore, **no impact** related to construction or expansion of stormwater drainage facilities and infrastructure would occur.

Electric Power Facilities/Infrastructure

Electric power service in the City is provided by MCE using transmission infrastructure operated and maintained by Pacific Gas & Electric (PG&E). CAAP Measures BE-1, BE-2, and BE-3 promote building electrification of new and existing buildings, energy efficiency retrofits of existing buildings, and energy efficient buildings for future development. CAAP Measure BE-5 aims to increase the use of

⁵⁹ Pinole, City of. 2018. Wastewater Treatment Plant.

https://www.ci.pinoles.ca.us/city_government/public_works/wastewater_treatment_plant#:~:text=In%201972%20the%20plant%20was,flow%20of%203.5%20million%20gallons. (Accessed February 2024)

⁶⁰ Pinole, City of. 2018. Wastewater Collection. https://www.ci.pinoles.ca.us/city_government/public_works/wastewater_collection (Accessed February 2024)

renewable energy in the City, while Measure BE-6 supports installation of small-scale renewable energy systems and battery storage to provide greener renewable electricity within the City. In addition, CAAP Measures TR-4 and TR-5 encourage new EV infrastructure throughout the City. These CAAP measures may slightly alter electricity demand within Pinole. However, the CAAP would serve as a pathway to reduce GHG emissions, including emissions related to energy consumption, and other beneficial environmental and sustainability effects. These benefits include a reduction in energy consumption and increase in renewable energy production. Therefore, the CAAP would result in a **less-than-significant impact** related to construction, expansion, or relocation of electric power facilities and infrastructure.

Natural Gas Power Facilities/Infrastructure

PG&E provides natural gas services to the City. The CAAP would not involve new land uses that require new or additional natural gas services that could require the construction of new or expanded natural gas facilities. CAAP Measures BE-1, BE-2, and BE-3 would encourage building electrification in new and existing buildings to reduce natural gas consumption within the City. Implementation of these measures could involve minor alterations to existing natural gas infrastructure as natural gas use is reduced. However, the CAAP would serve as a pathway to reduce GHG emissions, including emissions related to natural gas consumption, and other beneficial environmental and sustainability effects. These benefits include a reduction in natural gas consumption. Therefore, the CAAP would result in a **less-than-significant impact** related to construction, expansion, or relocation of natural gas facilities and infrastructure.

Telecommunications Facilities/Infrastructure

The City is served by existing telecommunications companies such as AT&T and Xfinity. The CAAP would not alter existing telecommunications facilities and infrastructure and would not involve new land uses or development that would require new telecommunications infrastructure. Therefore, the CAAP would result in **no impact** related to the need for construction or expansion of telecommunication facilities and infrastructure.

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Water supply is addressed in the EBMUD UWMP, which is a long-range planning document used to assess current and projected water usage, water supply planning, and conservation and recycling efforts. According to the UWMP, EBMUD has analyzed four different hydrological conditions to determine the reliability of water supplies: normal water year, single dry year, second dry year, and third dry year. The UWMP indicates that water supplies under the average/normal year conditions will be sufficient to meet demand through 2040. In addition, the UWMP includes a Water Shortage Contingency Plan.⁶¹ The CEQA GHG Emissions Thresholds is a guidance document and does not propose development or changes to land use and zoning. Thus, implementation of the CEQA GHG Emissions Thresholds would not result in construction or operational impacts related to water supplies or wastewater. The CAAP is a policy-level document that does not include site-specific

⁶¹ EBMUD. Water Shortage Contingency Plan 2020. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan> (accessed January 2024)

infrastructure designs or project proposals, nor does it grant entitlements for development that would have the potential to increase demand for water supply or wastewater treatment. Rather the CAAP contains measures and actions to reduce water use, such as Measure W-1, which encourages a reduction of water consumption of 10 percent by 2030, that would reduce water demand and wastewater production. Thus, the CAAP would result in **no impact** related to water supply and wastewater treatment.

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?*

Republic Services provides solid waste services within the City. Municipal solid waste generated in Pinole is primarily disposed of at the Keller Canyon Landfill in Bay Point. The Keller Canyon Landfill has a maximum permitted throughput of 3,500 tons per day of solid waste per day and has a remaining capacity of 63,408,410 cubic yards.⁶²

The CAAP focuses on sustainable infrastructure development and does not include land use or other policy changes that would result in increased residential, commercial, or other development that would increase solid waste generation within the City. CAAP Measures SW-1, SW-2, and SW-3 seek to reduce the amount of waste produced within the City by reducing consumption and implementing sustainable waste programs. These CAAP measures align with federal, State, and local regulations aimed at reducing solid waste disposal and increasing organic waste diversion, such as SB 1383. Additionally, because the CAAP is a policy document that would not facilitate growth beyond that anticipated by the 2040 General Plan, it would not generate solid waste in excess of State or local standards. Therefore, the CAAP would result in **no impact** related to solid waste.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Other cumulative projects that occur to accommodate Pinole's anticipated population, employment, and housing growth could result in increases in population and additional use of or need for utilities and service systems. However, implementation of the CAAP and related infrastructure projects would not contribute to increases in population or induce additional population growth that would require additional use of existing City utilities or service systems. Rather, implementation of the CAAP would result in reduced energy and water consumption and solid waste and wastewater production. Therefore, implementation of the CAAP would result in a **less-than-significant cumulative impact** related to utilities and service systems.

⁶² California Department of Resources Recovery and Recycling (CalRecycle). 2023. SWIS Facility/Site Activity Details: Keller Canyon Landfill. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228> (accessed February 2024).

20 Wildfire

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

- d. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

According to the California Department of Forestry and Fire Protection, the portion of the City that has the greatest fire risk is on the periphery of the eastern side and the fire hazard severity zones are located south of Pinole Valley Road in the open space area.^{63,64} Though there are areas in Pinole that are at risk of wildfires, the CAAP and CEQA GHG Emissions Thresholds are policy-level documents that do not propose new residential, commercial, or institutional development that could be at risk from wildfire, nor do they grant entitlements for development that would have the potential to directly cause wildfire. The CAAP actions would generally apply to the urbanized areas of Pinole with little application to parks, open space areas, or other locations where wildland fire risk exists. Additionally, CAAP Measure WF-1 would help to reduce community vulnerability to wildfires by enforcing defensible space and home hardening standards to mitigate structure ignitions from wind blow embers. Specifically, Measure WF-1 includes actions to conduct a feasibility study and if recommended, amend the Pinole Building Code to require best-practice Ignition Resistant Construction methods for new construction and substantial redevelopment in the wildfire hazard zone. Measure WF-1 also includes an action to prepare, adopt, and fully implement a Vegetation Management Plan for high-fire risk areas. Thus, the CAAP and CEQA GHG Emissions Thresholds would result in **no impact** related to wildfire.

Cumulative Impacts

The cumulative projects scenario is the population, employment, and housing forecasts identified in the CAAP, calculated using Pinole-specific values from Plan Bay Area 2040 for 2015 and applying local and regional growth expected between 2015-2050 from Plan Bay Area 2050 (refer to Table 5). As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. The CAAP does not include new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to cause wildfire. Rather, implementation of the CAAP measures would reduce and mitigate the effects of climate change, including wildfire. Therefore, the CAAP would result in **no cumulative impact** related to wildfire.

⁶³ California Department of Forestry and Fire Protection. 2023. State Responsibility Area Fire Hazard Severity Zones. https://osfm.fire.ca.gov/-/media/OSFM%20Website/What%20We%20Do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-Files/fhsz_county_sra_11x17_2022_contracosta_2 (accessed January 2024).

⁶⁴ California Department of Forestry and Fire Protection. 2008. Very High Fire Hazard Severity Zones in LRA. <https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-4/pinole.pdf> (accessed February 2024).

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Does the project:				
a. 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?	☐	☐	☒	☐
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

- 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?*

The intent of the CAAP and CEQA GHG Emissions Thresholds is to reduce GHG emissions from community operations while increasing community resilience to climate change through implementation of measures and actions related to energy use, water consumption, waste reduction, transportation, solid waste, carbon sequestration, community adaptation and resilience, flood control, sea level rise, extreme heat, wildfire, and municipal operations. The CAAP measures and actions are consistent with the General Plan and encourage residents, businesses, and the municipal facilities to reduce energy and water use, fuel use, VMT, and solid waste generation and the associated GHG emissions. The CAAP and CEQA GHG Emissions Thresholds would not facilitate development that would eliminate or threaten wildlife habitats or eliminate important examples of

the major periods of California history or prehistory. Therefore, as discussed in more detail in Section 4, *Biological Resources*, Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources*, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to biological and cultural resources.

- 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)?*

As a guidance document, the CEQA GHG Emissions Thresholds would not result in cumulative impacts. Implementation of the CAAP would result in a cumulatively beneficial reduction of GHG and air pollutant emissions across the City. In addition, as discussed throughout the respective cumulative impacts discussions within this document, the CAAP would not result in significant cumulative impacts. Rather, implementation of the CAAP would be consistent with Pinole’s General Plan policies aimed at reducing GHGs emissions and air pollutants, reducing VMT, reducing energy and water supply demands on utilities, and decreasing solid waste generation. Therefore, the CAAP would result in an overall ***less-than-significant cumulative impact*** related to all CEQA topics addressed within this document.

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, GHG emissions and climate change, hazards and hazardous materials, noise, transportation, and wildfire impacts. As detailed in the preceding sections, the CAAP and CEQA GHG Emissions Thresholds would not result, either directly or indirectly, in substantial adverse effects related to air quality, GHG emissions, hazards, noise, transportation, or wildfire. As discussed in more detail in Section 3, *Air Quality*, Section 13, *Noise*, and Section 17, *Transportation*, the CAAP could cause temporary construction impacts related to transportation, air quality, and noise that could, in turn, affect human beings but would not result in substantial adverse effects. In addition, as discussed throughout this document, the CAAP would serve as a pathway to reduce operational GHG emissions and would result in other positive environmental and sustainability effects. These benefits include reduction in building energy and water consumption, VMT and traffic noise, and solid waste generation, as well as improved air quality and resilience to the effects of climate change and natural disasters. Therefore, the CAAP and CEQA GHG Emissions Thresholds would result in a ***less-than-significant impact*** related to potential for adverse effects on human beings.

References

- Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG-MTC). 2021. Plan Bay Area 2050. <https://www.planbayarea.org/finalplan2050> (accessed November 2023).
- Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-b-thresholds-for-evaluating-significance-of-climate-impacts_final-pdf.pdf?la=en (accessed November 2023).
- _____. 2017. Air Quality Standards and Attainment Status. <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status> (accessed December 2023).
- _____. 2017. Final Clean Air Plan: Spare the Air Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan. <https://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans> (accessed December 2023).
- California Air Resources Board (CARB). 2023. SB 375 Regional Plan Climate Targets. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed November 2023).
- _____. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf> (accessed November 2023).
- _____. 2022. 2022 State Strategy for the State Implementation Plan. https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf (accessed December 2023).
- _____. 2017. California 2017 Climate Change Scoping Plan. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf (accessed November 2023).
- _____. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Available: <https://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf> (accessed December 2023).
- California Air Resources Board and California Environmental Protection Agency (CalEPA). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.386.4605&rep=rep1&type=pdf> (accessed December 2023).
- California Air Resources Board (CARB). 2023. SB 375 Regional Plan Climate Targets. Available: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed November 2023).
-

- _____. 2017. California 2017 Climate Change Scoping Plan.
https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf
 (accessed November 2023).
- _____. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality.
<https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf> (accessed November 2023)
- California Department of Conservation. 2022. California Important Farmland Finder.
<https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed January 2024).
- _____. 2022. California Williamson Act Enrollment Finder.
<https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312> (accessed December 2023).
- California Department of Finance (DOF). 2023. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-203.
<https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/> (accessed January 2024).
- California Department of Fish and Wildlife (CDFW). 2019. Natural Community Conservation Plans.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline> (accessed January 2024).
- California Department of Forestry and Fire Protection. 2023. State Responsibility Area Fire Hazard Severity Zones.
https://osfm.fire.ca.gov/media/s1wfn gas/fhsz_county_sra_11x17_2022_alameda_2.pdf
 (accessed January 2024).
- _____. 2008. Very High Fire Hazard Severity Zones in LRA.
https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf (accessed February 2024).
- California Department of Resources Recovery and Recycling (CalRecycle). 2023. SWIS Facility/Site Activity Details: Keller Canyon Landfill.
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228> (accessed February 2024).
- California Department of Transportation (CalTrans). 2024. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> Accessed February 2024
- _____. 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf> (accessed December 2023).
- California Energy Commission (CEC). 2023. Electricity Consumption by County.
<http://www.ecdms.energy.ca.gov/elecbycounty.aspx> (accessed December 2023).
- _____. 2023. Gas Consumption by County. <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>
 (accessed December 2023).
- _____. 2022. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. https://www.energy.ca.gov/sites/default/files/2022-12/CEC-400-2022-010_CMF.pdf (accessed January 2024).

- California Natural Resources Agency. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. <http://www.climateassessment.ca.gov/state/> (accessed December 2023).
- Contra Costa Transportation Authority. 2017 Countywide Comprehensive Transportation Plan, Volume 1. September 10, 2017. <https://ccta.net/wp-content/uploads/2021/07/2017-CTP-Vol-1.2017.10.05.pdf> (accessed January 2024)
- _____. West County Action Plan. March 2023. https://ccta.net/wp-content/uploads/2023/03/Draft-West-County-Action-Plan_03-13-23.pdf (accessed January 2024)
- _____. Countywide Transportation Plan and Action Plans. 2024. <https://ccta.net/planning/countywide-transportation-plan/> (accessed January 2024)
- Contra Costa County, California. Municipal Climate Action Plan. December 2008. <https://www.contracosta.ca.gov/DocumentCenter/View/2905/Municipal-Climate-Action-Plan-1208-Attachment-A?bidId=> (accessed January 2024)
- _____. Contra Costa County Climate Action Plan. December 15, 2015. <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=> (accessed January 2024)
- _____. Envision Contra Costa 2040. <https://envisioncontracosta2040.org/overview/#cap> (accessed January 2024)
- East Bay Municipal Utility District (EBMUD). Urban Water Management Plan 2020. June 2021. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan> (accessed January 2024).
- _____. Water Shortage Contingency Plan 2020. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan> (accessed January 2024)
- _____. Water Quality. <https://www.ebmud.com/water/about-your-water/water-quality> (accessed June 2024)
- Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook00.cfm (accessed December 2023).
- Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (accessed December 2023).
- Marin Clean Energy (MCE). 2018. 2019 Integrated Resource Plan. https://www.mcecleanenergy.org/wp-content/uploads/2020/01/MCE-Integrated-Resource-Plan_2019.pdf (accessed January 2024)
- Pinole, City of. 2010. General Plan Update. October 20, 2010. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/2010%20General%20Plan%20with%202023-2031%20Housing%20Element%20Update.pdf (accessed January 2024).
- _____. 2023. Draft CEQA GHG Thresholds.
-

- _____. 2024. Draft Climate Action Plan Appendix C.
 - _____. 2018. Design Review.
https://www.ci.pinole.ca.us/city_government/planning/design_review (accessed January 2024).
 - _____. General Plan Housing Element 2023-2031. https://cdns5-hosted.civicle.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/General%20Plan/Housing%20Element/2023-2031%20Housing%20Element%20-%20Certified.pdf (accessed January 2024)
 - _____. Municipal Code. https://codelibrary.amlegal.com/codes/pinole/latest/pinole_ca/0-0-0-10163 (accessed January 2024).
 - _____. 2024. Walk & Roll Pinole 2024: A Plan for People of All Ages and Abilities.
https://ghd.mysocialpinpoint.com/pinole_atp (Accessed February 2024)
 - _____. Wastewater Treatment Plant.
https://www.ci.pinole.ca.us/city_government/public_works/wastewater_treatment_plant#:~:text=In%201972%20the%20plant%20was,flow%20of%203.5%20million%20gallons.
 (Accessed February 2024)
 - _____. Pinole, City of. 2018. Wastewater Collection.
https://www.ci.pinole.ca.us/city_government/public_works/wastewater_collection
 (Accessed February 2024)
- Rincon Consultants, Inc. City of Pinole 2017 Community Inventory. Updated January 2024.
- United States Energy Information Administration (USEIA). 2023. California - Profile Overview. April 20, 2023. <https://www.eia.gov/state/?sid=CA> (accessed December 2023).

1. List of Preparers

Rincon prepared this CAAP and CEQA GHG Emissions Thresholds Initial Study-Negative Declaration under contract to the City of Pinole. Persons involved in data gathering, environmental impact analysis, quality review, graphics preparation, and document formatting include the following.

RINCON CONSULTANTS, INC.

Matt Maddox, Environmental and Sustainability Planning Principal (Expert CEQA Reviewer)
 Hannah Mize, Senior Sustainability Planner (Project Manager)
 Emily Saul, Sustainability Planner
 Nico Kent, Carbon Analyst
 Gina Gerlich, Graphics Specialist
 Debra Jane Seltzer, Publishing Specialist
 Yaritza Ramirez, Publishing Specialist

Appendix A

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Pollutant	Sources	Health Effects	Typical Controls
Ozone (O ₃)	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Reduce motor vehicle reactive organic gas (ROG) and nitrogen oxide (NO _x) emissions through emission standards, reformulated fuels, inspections programs, and reduced vehicle use. Limit ROG emissions from commercial operations, gasoline refueling facilities, and consumer products. Limit ROG and NO _x emissions from industrial sources such as power plants and manufacturing facilities.
Carbon monoxide (CO)	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Control motor vehicle and industrial emissions. Use oxygenated gasoline during winter months. Conserve energy.
Nitrogen dioxide (NO ₂)	See Carbon Monoxide.	Lung irritation and damage. Reacts in the atmosphere to form ozone and acid rain.	Control motor vehicle and industrial combustion emissions. Conserve energy.
Sulfur dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Respirable particulate matter (PM ₁₀)	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO _x , SO _x , organics).	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Control dust sources, industrial particulate emissions, woodburning stoves and fireplaces. Reduce secondary pollutants which react to form PM ₁₀ . Conserve energy.
Fine particulate matter (PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO _x , SO _x , organics, and NH ₃).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease.	Reduce combustion emissions from motor vehicles, equipment, industries, and agricultural and residential burning. Precursor controls, like those for ozone, reduce fine particle formation in the atmosphere.
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage. Control metal smelters.	No lead in gasoline or paint.
Sulfur Dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Sulfates	Produced by reaction in the air of SO ₂ , (see SO ₂ sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	See SO ₂

Climate Action and Adaptation Plan and CEQA GHG Emissions Thresholds

Pollutant	Sources	Health Effects	Typical Controls
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	Control emissions from geothermal power plants, petroleum production and refining, sewers, and sewage treatment plants.
Visibility Reducing Particulates	See PM _{2.5}	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	See PM _{2.5}
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries).	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	Control emissions from plants that manufacture or process vinyl chloride, installation of monitoring systems.
Toxic Air Contaminant (TAC)	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects.	Toxic Best Available Control Technologies (T-BACT), limit emissions from known sources.
Source: Compiled by Rincon Consultants, Inc. in October 2023			

Appendix B

Description of Greenhouse Gases of California Concern

Description of Greenhouse Gases of California Concern

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO ₂)	Odorless, colorless, natural gas.	1	50–200	Burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes
Methane (CH ₄)	Flammable gas and is the main component of natural gas.	28	12	Geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter
Nitrous oxide (N ₂ O)	Nitrous oxide (laughing gas) is a colorless GHG.	298	114	Microbial processes in soil and water; fuel combustion; industrial processes
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms.	3,800–8,100	45–640	Refrigerants; aerosol propellants; cleaning solvents
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140 to 11,700	1–50,000	Automobile air conditioners; refrigerants
Per-fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500 to 9,200	10,000–50,000	Primary aluminum production; semiconductor manufacturing
Sulfur hexafluoride (SF ₆)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	Electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas
Nitrogen trifluoride (NF ₃)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	Electronics manufacture for semiconductors and liquid crystal displays

Source: Compiled by Rincon Consultants, Inc. in October 2023