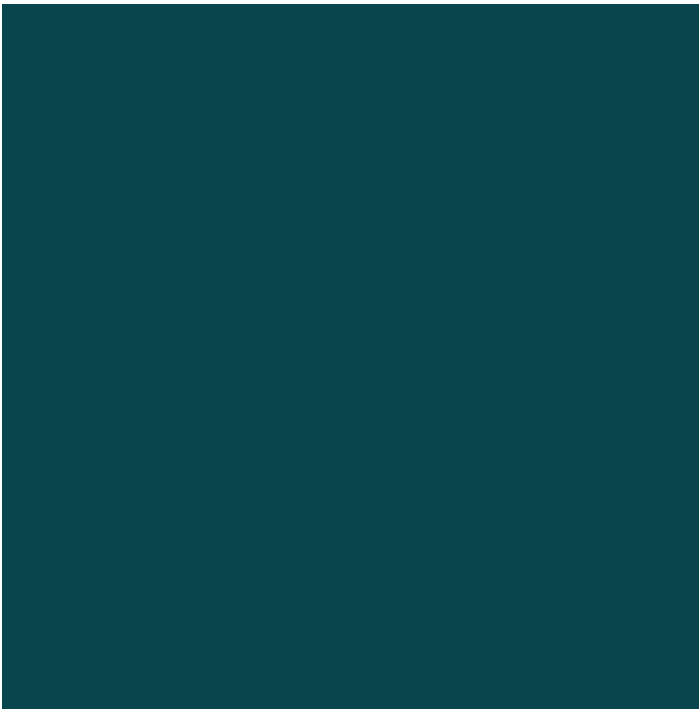
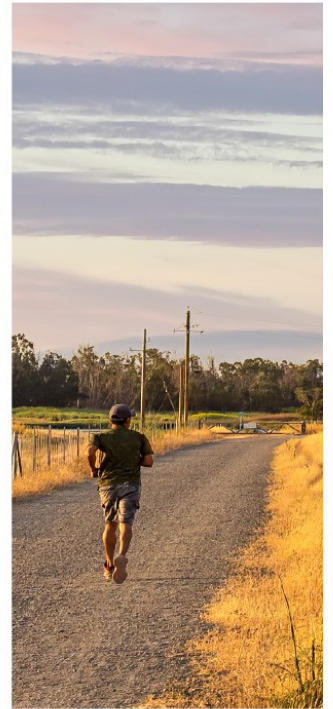




NAPA COUNTY REGIONAL CLIMATE ACTION AND ADAPTATION PLAN **Draft Initial Study**

JULY 2026

Prepared for:



Napa County
Planning, Building, and
Environmental Services Department
1195 Third Street, Suite 210
Napa, CA 94559



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LIST OF ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
AB	Assembly Bill
ACC II	Advanced Clean Cars II
ACC	Advanced Clean Cars
ACF	Advanced Clean Fleets
ACFPD	America Canyon Fire Protection District
ACT	Advanced Clean Trucks
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
ATCM	airborne toxic control measures
B.P.	before present
Basin Plan	Napa Valley Subbasin
BMP	best management practices
BTU	British thermal units
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAC	Climate Action Committee
CAFE	Corporate Average Fuel Economy Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
CALGreen	Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CBC	California Building Code
CCA	community choice aggregator
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHP	California Highway Patrol
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide

CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	decibels
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
EIA	US Energy Information Administration
EO	Executive Order
EPA	US Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zones
FHWA	Federal Highway Administration
FRA	Federal Responsibility Areas
FTA	Federal Transit Administration
GHG	greenhouse gas
GHGRP	greenhouse gas reduction plan
gpcd	gallons per capita per day
HDPUV	heavy-duty pickup trucks and vans
HFC	hydrofluorocarbons
HSC	Health and Safety Code
IEPR	Integrated Energy Policy Report
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IRP	integrated resource planning
IS/Proposed MND	Initial Study/Proposed Mitigated Negative Declaration
LCI	Land Use and Climate Innovation
LEA	local enforcement agency
L_{eq}	Equivalent Noise Level
LEV	Low Emission Vehicle
LID	low-impact development
L_{max}	Maximum Noise Level
LRA	Local Responsibility Areas
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MCV	Manual of California Vegetation
mpg	miles per gallon
mph	miles per hour
MRZ	mineral resource zone
MS4	municipal separate storm sewer systems
MTC-ABAG	Metropolitan Transportation Commission and Association of Bay Area Governments
MY	model year

N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCFD	Napa County Fire Department
NCMC	Napa County Municipal Code
NCSD	Napa County Sheriff Department
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRHP	National Register of Historic Places
NVTA	Napa Valley Transportation Authority
OES	Office of Emergency Services
OPR	Office of Planning and Research
ozone	photochemical smog
P.L.	Public Law
PCAP	Priority Climate Action Plan
PFC	perfluorocarbons
PG&E	Pacific Gas and Energy
PM	particulate matter
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
PRC	Public Resources Code
PRMP	paleontological resource management plan
PV	photovoltaic
RCAAP	Regional Climate Action and Adaptation Plan
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	regional transportation plans
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	sustainable communities strategy
SFBAAB	San Francisco Bay Area Air Basin
SIP	State Implementation Plans
<i>SLCP</i>	<i>Short-Lived Climate Pollutant</i>
SMARA	Surface Mining and Reclamation Act of 1975
SO ₂	sulfur dioxide
SO _x	sulfur oxide
SR	State Route
SRA	State Responsibility Areas

SSC	species of special concern
SWP	State Water Project
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TDM	transportation demand management
TRU	Transport Refrigeration Unit
UBC	Uniform Building Code
USACE	US Army Corps of Engineers
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
VDECS	Verified Diesel Emissions Control Strategy
VMT	vehicle miles travelled
Williamson Act	California Land Conservation
WL	watch list
WUI	wildland-urban interface
ZEV	zero-emission vehicle

1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND) has been prepared by Napa County to evaluate potential environmental effects resulting from the proposed Napa County Regional Climate Action and Adaptation Plan (RCAAP). Section 2 “Project Description” presents the detailed project information.

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

1.2 WHY THIS DOCUMENT?

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

Under CEQA, the lead agency is the public agency with primary responsibility for approving the project. The County of Napa is the CEQA lead agency because it is both the Administering Agency and the largest jurisdiction in the joint powers agreement that led to the preparation of the RCAAP. The purpose of this document is to provide decision-makers and the public with information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/Proposed MND will be available for a 32-day public review period from July 30, 2026 to August 31, 2026.

Supporting documentation referenced in this document is available for review at:

Planning, Building and Environmental Services (PBES)
1195 Third Street, Suite 210
Napa, CA

Comments should be addressed to:

Jesse Gutiérrez, Principal Planner
Napa County Department of Planning, Building and Environmental Services (PBES)
1195 Third Street, 2nd Floor
Napa, CA 94559

E-mail comments may be addressed to: rcaap@countyofnapa.org

If you have questions regarding the IS/Proposed MND, please call Jesse Gutiérrez at: 707-299-1362. If you wish to send written comments (including via e-mail), they must be postmarked by August 31, 2026.

After comments are received from the public and reviewing agencies, the Lead Agency may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, the project proponent may proceed.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of the project's potential environmental impacts. Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less-than-significant impact related to most of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines. Potentially significant impacts were identified for agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, and wildfire; however, mitigation measures included in the IS/Proposed MND would reduce all impacts to a less-than-significant level.

1.4 DOCUMENT ORGANIZATION

This IS/Proposed MND is organized as follows:

- ▶ **Chapter 1: Introduction.** This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document and presents a summary of findings.
- ▶ **Chapter 2: Project Description.** This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.
- ▶ **Chapter 3: Environmental Checklist.** This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.
- ▶ **Chapter 4: References.** This chapter lists the references used in the preparation of this IS/Proposed MND.
- ▶ **Chapter 5: List of Preparers.** This chapter identifies report preparers.

1.5 TERMINOLOGY

This IS/Proposed MND uses the following terminology to describe the project and various jurisdictions that participated in the preparation of, and would implement, the RCAAP:

Napa County Jurisdictions: This term is used to collectively refer to Napa County; the Cities of American Canyon, Calistoga, Napa, and St. Helena; and the Town of Yountville.

Lead Agency: Napa County is the lead agency for the programmatic evaluation of the RCAAP.

Implementing Agency: This term references the Napa County Jurisdiction carrying out a future project that implements the RCAAP. The implementing agency for a future project would be responsible for carrying out the provisions of all applicable mitigation measures.

2 PROJECT DESCRIPTION

This chapter presents a detailed description of the proposed Napa County Regional Climate Action and Adaptation Plan (RCAAP), which Napa County, the Cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville (hereinafter referred to as the “Napa County Jurisdictions”) have prepared to serve as a comprehensive roadmap to community sustainability and resilience. The purpose of the RCAAP is to 1) identify strategies and measures the region can take to reduce greenhouse gas (GHG) emissions to levels that align with the State of California’s goals; and 2) set forth strategies to adapt and promote resilience to the impacts of climate change. Napa County is the lead agency pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.).

2.1 INTRODUCTION AND BACKGROUND

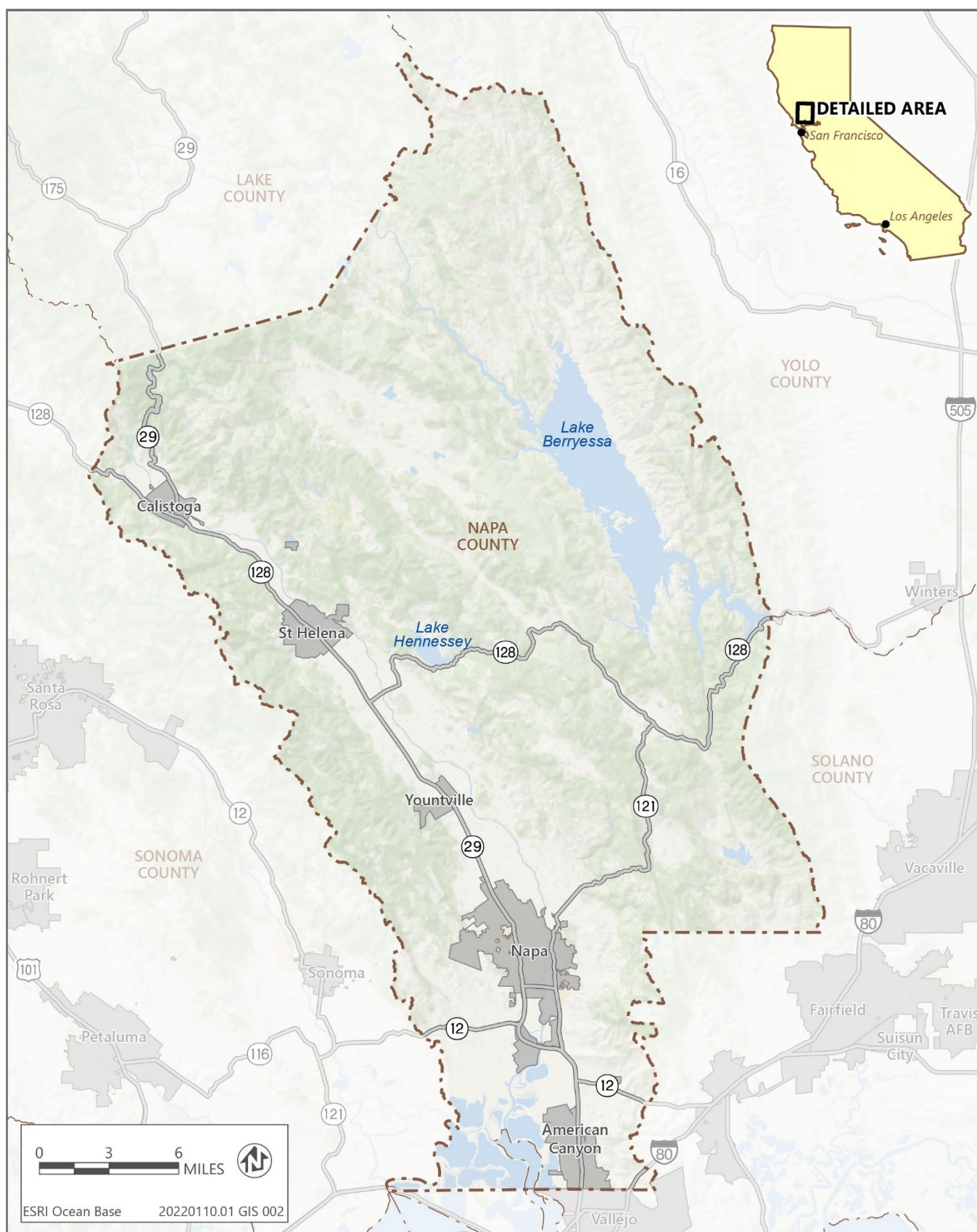
Napa County, California, is located approximately 50 miles north of San Francisco, California, and encompasses an area of approximately 790 square miles (Figure 2-1). Napa County is bordered by Yolo County, Solano County, Lake County, and Sonoma County. The County’s land area is primarily devoted to vineyards, wineries, farms, ranches, and forestland, with the majority of the County’s population of approximately 140,000 living in the cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville.

Each of the local governments operating these jurisdictions, along with the County government, adopted Resolutions or Proclamations regarding the “Countywide Commitment to Address Climate Change” in 2021 and early 2022. The Resolutions and Proclamations proposed to: (1) address climate change in their respective General Plans, consistent with State guidelines; (2) form a committee to identify countywide goals and strategies for addressing climate change, including an updated GHG inventory, countywide GHG goals and timelines, and common GHG reduction standards for each jurisdiction to adopt independently; and (3) identify potential threats and funding to improve community resiliency. The Napa County Climate Action Committee (CAC) comprises two elected officials from each of the six-member jurisdictions and is administered by Napa County. A joint powers agreement was approved by all six jurisdictions in April and May of 2021, which ultimately led to unanimous support for the preparation of the RCAAP. The RCAAP establishes a policy framework of measures and supporting actions that would achieve GHG reductions in alignment with State legislation when adopted and implemented by the six Napa County Jurisdictions.

2.2 POLICY FRAMEWORK

In December 2022, the California Air Resources Board approved the 2022 Climate Change Scoping Plan. This plan outlines the State’s comprehensive strategy to achieve its climate goals under Assembly Bill (AB) 1279, focusing on reducing anthropogenic GHG emissions to 48 percent below 1990 levels by 2030 and 85 percent below 1990 levels by 2045. It includes a variety of measures across different sectors to accelerate GHG emission reductions, enhance carbon sequestration, and implement new carbon capture, utilization, and storage measures consistent with Senate Bill (SB) 905 (also signed into law in 2022) to achieve net-zero emissions (sometimes also referred to by the California Air Resources Board as “carbon neutrality”) by 2045.

If adopted, the RCAAP would serve as a regional roadmap for reducing GHG emissions and adapting to climate change. It is consistent with methodologies and goals of the 2022 Climate Change Scoping Plan, the Bay Area Air District’s Climate Protection Planning Program, relevant state legislation (i.e., AB 32, SB 32, AB 1279, and SB 375), Governor’s Executive Orders S-03-05, B-30-15, and B-55-18, as well as other policies and requirements mandated by the State of California. Additionally, the RCAAP builds upon the six member jurisdictions’ existing climate change and sustainability-related efforts.



Sources: Adapted by Ascent in 2025.

Figure 2-1 Napa County Region

2.3 GHG REDUCTION AND ADAPTATION MEASURES SUMMARY

The RCAAP provides a holistic regional approach to climate mitigation and climate adaptation across all six jurisdictions in Napa County. It includes a suite of GHG-reduction and climate-adaptation measures that collectively establish a regional program to address climate change. The plan to reduce GHG emissions and improve resilience across Napa County is based on a policy framework that includes strategies, measures, and actions. Strategies are broadly stated goals for reducing GHG emissions within a given GHG emissions sector. Each strategy includes several measures, which are the specific objectives or policies that need to be achieved and implemented to reduce GHG emissions. Each measure includes one or more actions that identify the implementation mechanisms and specific steps the Napa County Jurisdictions will take to implement the measure, such as developing and adopting ordinances, programs, and partnerships, and conducting ongoing outreach and education. Short- and long-term actions are included under each measure to facilitate implementation. Short-term actions are designed to be completed within 5 years of the RCAAP's adoption. Long-term actions ensure measures meet their long-term goals by maintaining funding, increasing participation, or adjusting for changes in local or regulatory circumstances. A complete table of RCAAP strategies, measures, and actions is provided in Appendix A.

As described further below, the aspects of the RCAAP with the greatest potential for environmental effects are the strategies, measures, and actions that could result in the construction or modification of physical improvements. In addition to construction, implementation of some actions included in the RCAAP would require occasional operation and maintenance activities, such as vehicle use, equipment and facility repair and replacement, tree watering and landscaping, and vegetation management (e.g., Actions TR-4-C and AG-5-B). These operation and maintenance activities would occur on an intermittent schedule where activities are minimal (i.e., requiring only small crews of workers using primarily hand tools to complete maintenance and repair tasks) and are anticipated to be accomplished with existing personnel in conjunction with existing maintenance activities.

In some cases, the measures and actions in the RCAAP include or support existing programs that have been approved through a separate review process. The potential effects of these activities are included within the evaluation of this program to provide analysis of the whole of the action, as required under CEQA (State CEQA Guidelines 15378).

2.3.1 Greenhouse Gas Reduction Framework

GHG reduction measures are identified in the RCAAP to reduce emissions from on-road transportation, building energy use, off-road equipment, agriculture, solid waste, and water and wastewater. The GHG reduction measures also include carbon sequestration-related measures resulting in carbon removals outside the anthropogenic (i.e., human activity) emissions inventory and forecast. Across these six emissions sectors, 21 GHG reduction strategies are supported by 46 GHG reduction measures and 233 actions. The measures are organized by emissions sector and identified by a unique set of letters and numbers corresponding to each sector (e.g., BE-1 for the first measure in the building energy emissions sector). The GHG reduction measures reduce emissions from human activities (e.g., building energy use and transportation), and enhance carbon storage (e.g., carbon farming and restoring wildfire-affected areas). There are a limited number of measures and supporting actions in the GHG reduction framework that have the potential to result in impacts on the environment. Of the 233 GHG reduction actions in the plan, eight have the potential for adverse effects. The only GHG reduction action with the potential to result in the construction or relocation of facilities that could result in substantial changes to the environment is Action TR-4-C, which could result in the installation of a hydrogen fueling station in the county. Potential outcomes are evaluated programmatically for this action because no information is available about potential location or design.

Other actions would have minimal potential for ground disturbance and related effects, and would occur in mostly urban environments. These include Action BE-3-A, which would commit the Napa County Jurisdictions to collaborate with utilities and other partners to offer rebates and incentives for renewable energy generation and storage, and could indirectly result in citizens of the Napa County Jurisdictions installing rooftop solar and battery storage. Similarly, the Napa County Jurisdictions would incentivize installation of EV charging infrastructure in existing parking lots through Action TR-3-B. This could indirectly result in minor construction activities. Actions OF-2-A and OF-2-C

would commit all Napa County Jurisdictions to electrification of existing commercial loading docks, potentially resulting in minor construction activities. There may also be minimal, indirect effects associated with the actions that support the increase in methane capture and installation of waste-to-energy systems at local landfills, as well as minor construction related to the replacement of irrigation pumps under Actions AG-1-D and AG-1-G. Finally, expansion of urban forest in the cities and towns under Action AG-5-B could generate short-term effects as the trees are planted and established.

The remainder of the GHG reduction actions in the RCAAP would promote GHG reduction through encouragement or support for behavior changes, scientific study, and policy direction. There is no evidence that these programs have a reasonably foreseeable potential to directly or indirectly result in adverse physical changes in the environment.

The GHG reduction framework is designed for countywide application, and many measures will be implemented consistently across all Napa County Jurisdictions, addressing broad issues and emissions sources shared across multiple jurisdictions. However, some GHG reduction measures do not apply uniformly across all jurisdictions and only apply to specific local contexts and needs. For example, measures focusing on open space and agricultural lands may be pertinent primarily to the unincorporated area. By recognizing these distinctions, the RCAAP ensures that each jurisdiction can effectively contribute to the overall GHG reduction goals while addressing their unique challenges and opportunities.

The GHG reduction measures provide a comprehensive program of complementary actions that result in measurable emissions reductions. Where there is evidence to demonstrate a correlation between the successful implementation of a measure or action and a certain amount of GHG emissions reductions, the reductions have been quantified in the RCAAP. Of the 46 measures, 18 are quantified for their GHG reduction potential, while the remaining measures are not quantified because of a lack of available data or methodological limitations. Based on the modeling conducted and the assumptions made, the quantified measures proposed in the RCAAP would achieve the plan's 2030 and 2045 targets consistent with the 2022 Scoping Plan, if carbon sequestration measures and associated atmospheric GHG reductions are included.

2.3.2 Climate Adaptation

Climate adaptation prepares communities for worsening climate hazards. It protects public health, infrastructure, and natural resources while strengthening community resilience. While natural hazards have historically occurred in the county and surrounding regions, their frequency, intensity, duration, and/or onset timeframe are projected to increase or change due to climate change. Climate change effects in Napa County include, but are not limited to: increased wildfire risk; increased temperatures and extreme heat; extreme precipitation, sea level rise, and flooding; drought and water supply impacts; and energy grid impacts. The RCAAP includes six adaptation strategies with specific measures and actions intended to address the effects of climate hazards and enhance resilience across all jurisdictions.

Climate adaptation measures differ from GHG reduction measures in that they address the current and future effects of climate change, rather than mitigate the root cause of anthropogenic global warming and climate change. The RCAAP includes 40 proposed climate adaptation measures and 98 implementing actions to address the vulnerability of people, infrastructure, and the environment to climate change's current and projected effects. As described above for the GHG reduction measures and actions, the climate adaptation measures and actions can be roughly divided into three categories: those that could result in potential adverse effects associated with new construction, those with potential to result in minor modifications to developed areas, and policy and program guidance that would not result in significant adverse effects on the environment.

New construction may result from the implementation of Action TEMP-2.2, through which the Napa County Jurisdictions would establish new urban parks and trail systems. In addition, if the Napa County Jurisdictions relocate infrastructure and critical facilities exposed to flood hazards through implementation of Action FLOOD-5.1 or install barriers and floodgates for flooding hazards through Action ENERGY-2.1, there would be potential for construction

effects. Potential outcomes are evaluated programmatically for these actions because no information is available about potential location or design.

Measures and actions that would generate projects with minimal potential for ground disturbance and effects in mostly urban environments are those that would upgrade existing utilities in place. For example, wildfire risk reduction requirements established under Action ALL-3.2 for existing residential and commercial developments could reduce tree cover and affect habitat near existing buildings. Additionally, Action ALL-7.1 would implement nature-based solutions to improve infiltration in developed areas. Minor construction effects may also result from upgrade of communication, energy, public service, and transportation infrastructure to improve extreme heat resilience (Action TEMP-4.1), enhancing the capacity of stormwater infrastructure to manage high-intensity rainfall events (Action FLOOD-2.3); and improving sewage and solid waste infrastructure (Action FLOOD-3.1). The RCAAP also includes Action FIRE-5.3 to plan and implement forest management projects (e.g., weed control, planting, thinning, and other vegetation treatment), which could result in limited environmental effects.

The remainder of the adaptation actions would support positive change through encouragement or support behavior changes, scientific study, and policy direction. There are no reasonably foreseeable direct or indirect effects on the environment.

2.3.3 Implementation, Monitoring, and Reporting

Some of the proposed GHG reduction strategies and measures would be implemented through code updates based on the Napa County Jurisdictions' ability to protect the public health, safety, and welfare of its citizens. The discretionary review and permitting processes administered by each jurisdiction for proposed land use changes, new development, or similar projects would also provide a mechanism for implementing strategies and measures. Implementation of some strategies and measures would rely on financial incentives, research and development of new programs, partnerships with other agencies, and education and outreach.

The Napa County Jurisdictions would regularly monitor and annually report to the Napa County CAC or individual local governing bodies on the implementation status of all GHG reduction and climate adaptation measures in the RCAAP. The effectiveness of all quantifiable GHG measures and progress in achieving GHG reductions would also be monitored regularly and shared with the public. Napa County Jurisdictions would update the RCAAP approximately every 5 years; however, minor updates or adjustments to implementing actions associated with individual measures may occur without updating the full RCAAP document, in response to annual monitoring and reporting activities. Comprehensive 5-year RCAAP updates would include updates to regional GHG emissions inventories and forecasts, a full review and any necessary adjustments of GHG reduction measures and actions, and updates to the implementation strategy as necessary.

2.4 CEQA REQUIREMENTS AND STREAMLINING BENEFITS

Adoption of the RCAAP by the Napa County Jurisdictions would be a discretionary action by a public agency that could cause a direct, or reasonably foreseeable indirect, physical change in the environment. CEQA requires that, unless determined to be exempt, agency decisions to approve such actions be informed by analyzing the project's potential environmental impacts, including those related to implementation of measures and actions to reduce GHG emissions and adapt to climate change.

Following Napa County's consideration and adoption of the RCAAP and the IS/Proposed MND, the other member jurisdictions, as Responsible Agencies, can use this IS to adopt the RCAAP in a form appropriate to that community. Local adoption could take the form of a General Plan amendment, an ordinance, a resolution, or some combination thereof. Once adopted, the cities/town, County, and regional agencies will implement the measures each has committed to in their respective CAAP adoption processes.

If this IS is approved and an MND is adopted, member agencies implementing programs and specific projects detailed in the measures and actions of the RCAAP would be able to rely on the programmatic assessment of the

impacts of those measures in this IS, and focus subsequent review for a specific action, if required, on impacts not covered within the scope of this evaluation due to unique circumstances. For purposes of this CEQA analysis, including the Environmental Checklist in Chapter 3, the cities/town, County, and regional agencies that implement the adopted RCAAP measures and actions are referred to as “Implementing Agencies.”

As described further below, the Napa County Jurisdictions may also use the RCAAP to streamline GHG analysis and mitigation for future discretionary projects undergoing environmental review. This streamlining benefit is enabled because the RCAAP meets the criteria for a qualified “plan for the reduction of greenhouse gases” under the CEQA Guidelines (i.e., Title 14, Division 6, Chapter 3 of the California Code of Regulations).

2.4.1 CEQA Guidelines Section 15183.5 Requirements and GHG Analysis Streamlining Benefits

Under CEQA, projects requiring discretionary approval and environmental review must disclose whether they would generate GHG emissions that would significantly affect the environment or conflict with a plan or regulation adopted to reduce emissions. Section 15183.5 of the CEQA Guidelines establishes a mechanism for agencies to prepare a CEQA-qualified GHG reduction plan and outlines the benefits of preparation of such a plan – for which an environmental document has been prepared and certified or adopted by a lead agency – in streamlining the analysis of GHG emissions for individual projects that are consistent with the plan. The RCAAP’s compliance with the elements of a qualified GHG reduction plan under Section 15183.5(b) of the CEQA Guidelines is detailed in Table 6.2 of the RCAAP.

Pursuant to CEQA Guidelines Section 15183.5(b)(2), a certified or adopted environmental document prepared for a GHG reduction plan, such as the RCAAP, may be relied upon to streamline the analysis of GHG emissions associated with future projects that are consistent with the plan. This is because GHG reduction plans that meet all the requirements of Section 15183.5 are presumed to have fully and adequately evaluated and mitigated the jurisdiction’s GHG emissions at the program level. Future discretionary projects in the member agency’s jurisdiction that are consistent with the growth forecast assumptions in the RCAAP and demonstrate compliance with the GHG reduction measures in the RCAAP (thereby demonstrating consistency with both the GHG reductions modeled in the forecast and GHG reduction measures designed to reduce future emissions to achieve State targets) would not be required to conduct project-level GHG emissions modeling or implement mitigation beyond that required by the RCAAP.

Thus, while CEQA compliance for specific projects that are consistent with the RCAAP must still occur, future environmental documents may rely on a project’s consistency with the RCAAP to reduce GHG emissions and result in a less-than-significant impact related to GHG emissions. Such an environmental document would be required to identify the requirements specified in the RCAAP that apply to the project and, if those requirements are not otherwise binding and enforceable, to incorporate them as mitigation measures applicable to the project.¹

The existing development review processes of the Napa County Jurisdictions would demonstrate an individual project’s consistency with applicable GHG measures in the RCAAP. If a project would be consistent with the growth forecasts used to develop the RCAAP and demonstrates consistency with the RCAAP by satisfying all Checklist criteria, then the project would be considered consistent with the RCAAP and would be eligible for CEQA streamlining of its project-level GHG analysis. Project-level GHG emissions modeling would not be required. Projects that would result in an increase in density or intensity beyond what is reflected in the GHG emission projections contained in the RCAAP would be subject to the member agencies’ adopted GHG thresholds and would be required to conduct a project-level assessment. Such an analysis would quantify existing and projected GHG emissions for the project and incorporate applicable items from the RCAAP to the maximum feasible extent, along with any identified project-specific mitigation measures. A project’s incremental contribution to cumulative GHG emissions may be

¹ Consistent with CEQA Guidelines Section 15168, future discretionary activities may require subsequent CEQA analysis if their impacts are not adequately considered and mitigated, as necessary, in this program-level environmental document. If substantial evidence exists that the effects of a particular project may be cumulatively considerable notwithstanding the project’s compliance with the specified requirements in the plan for the reduction of GHG emissions (i.e., the RCAAP), a CEQA analysis of GHG emissions would be prepared for the project.

determined not to be cumulatively considerable based on consistency with the forecasts and GHG reduction measures presented within the RCAAP.

RCAAP CONSISTENCY REVIEW CHECKLIST

Napa County Jurisdictions will use an RCAAP Consistency Review Checklist to assist with determining GHG streamlining eligibility pursuant to CEQA Guidelines Section 15183.5, and to ensure that eligible projects are reviewed for consistency with applicable GHG reduction measures and incorporate appropriate mitigation measures into their environmental documents. A preliminary example of the RCAAP Consistency Review Checklist ("Checklist") is provided as Appendix J to the RCAAP. As an implementation tool, the Checklist will summarize the requirements of the RCAAP but will not impose any new or substantially different requirements than those of the RCAAP.

The Checklist will be finalized following the adoption of the RCAAP and will serve as an administrative document used during the development review process, which is separate from the RCAAP itself. Napa County Jurisdictions may customize the Checklist for individual jurisdictions' use to reflect applicable measures and performance standards appropriate to each jurisdiction. The Checklist will also be updated over time, if necessary, as the RCAAP is anticipated to be updated approximately every 5 years. The Checklist will not apply to ministerial projects or other actions that are not considered a "project" and therefore are not subject to discretionary review under CEQA. Because the Checklist is an implementation tool that does not affect the content of the RCAAP, there would not be any environmental impacts unique to the Checklist.

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3 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

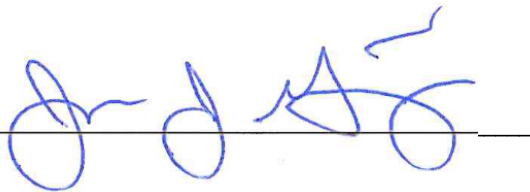
- | | | |
|---|--|---|
| ☐ Aesthetics | ☐ Hazards / Hazardous Materials | ☐ Transportation |
| ☐ Agriculture and Forest Resources | ☐ Hydrology / Water Quality | ☐ Tribal Cultural Resources |
| ☐ Air Quality | ☐ Land Use / Planning | ☐ Utilities / Service Systems |
| ☐ Biological Resources | ☐ Mineral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

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature



Date 7/28/2026

Printed Name

Jesus "Jesse" Gutierrez

Title Principal Planner, Sustainability

Agency Napa County

EVALUATION OF ENVIRONMENTAL IMPACTS

The State CEQA Guidelines provide the following direction for preparation of and Initial Study in Appendix G, "Environmental Checklist Form."

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

3.1 AESTHETICS

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

3.1.1 Environmental Setting

Napa County is situated within the California Coastal Range, north of the San Francisco Bay Area, and is bound on the south by San Pablo Bay, an extension of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The Coastal Range mountains run through the county, trending southeast to northwest with intervening interior valleys. Mountainous and sometimes rugged ridgelines frame the eastern and western boundaries of the county and provide visually distinct valley regions within the area. Some of these regions are densely forested with evergreen trees, while others are dominated by mature oak trees set amid shrubland and grasslands. Residences are scattered throughout the county, but urbanized areas tend to be concentrated in relatively few locations, including cities, surrounded by agricultural uses that consist primarily of vineyards. Napa County's natural visual and aesthetic resources include its scenic valleys, oak woodlands, grasslands, forested ridgelines, rivers, and scenic open spaces. Complementing these natural features are built visual resources such as historic towns, wineries, sprawling vineyards, agricultural structures, and scenic roadways, which reflect the county's cultural heritage and agricultural identity.

Within the Napa Valley, the most apparent viewsheds are the foothills to the east and west of the valley floor. This includes Bald Mountain, Mount St. Helena, the foothills of Sugarloaf Ridge, and the areas surrounding Bear Canyon and Sulphur Canyon on the western side of the valley, as well as Blue Ridge and Rocky Ridge on the eastern edge of the county (Napa County 2007). These major ridgelines and hills are designated scenic resources in the County's General Plan. The County has designated Mt. St. Helena, Stag's Leap, Calistoga Palisades, Round Hill, Mt. George, and Mt. St. John as unique geological features under the Viewshed Protection Program Ordinance in Zoning Code Section 18.106.040.

Each local jurisdiction has a code that establishes rules for government administration, public health and safety, business regulation, finance, and public services, while also adopting state-mandated standards for building, subdivision, and land use. Central components include zoning and development regulations that guide preservation of community character, environmental protection, and community growth. Elements of each jurisdiction's code pertain to visual

quality. For example, the County's Viewshed Protection Program (County Code 18.106) is established to protect the scenic quality of the county for both visitors to the county and its residents by ensuring that future improvements are compatible with existing landforms, particularly county ridgelines, and that views of the county's many unique geologic features and the existing landscape fabric of the county's hillside areas are protected and preserved.

Napa County contains no officially designated state scenic highways; however, segments of State Route (SR) 29, SR 121, SR 128, and SR 221 are eligible for scenic highway designation (Caltrans 2025a). There are currently approximately 280 miles of County-designated scenic roadways within Napa County, including SR 29. The majority of these scenic corridors are in the Napa Valley, and several are on the western side of the county (Napa County 2007).

Light and glare conditions within developed portions of the county are typical of those associated with urban and suburban uses. The main sources of daytime glare in the county are from sunlight reflecting from structures with reflective surfaces, such as windows, and from vehicles on major roadways. Due to the thousands of acres of open space and concentrated urban development pattern of the county, it has a relatively low-light, dark-sky environment (Napa County 2008). Nighttime light illumination primarily consists of structured illumination, streetlights, and headlights of motor vehicles; though on occasion night work can occur within vineyards located throughout the County, especially during harvest.

3.1.2 Discussion

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

Less than significant impact. Although not officially defined across all Napa County Jurisdictions, there are many scenic vistas and resources within the county. The foothills and ridgelines east and west of Napa Valley, visible from the valley floor, provide scenic views that influence the experience of residents and visitors to Napa Valley. Urban development is concentrated in the cities of Napa, American Canyon, St. Helena, and Calistoga and the Town of Yountville. The edges of each of these communities are softened by rural residences, resulting in very few abrupt delineations between city and agricultural land (Yountville 2019).

As described in Chapter 2, "Project Description," of this Initial Study, the majority of the actions in the RCAAP do not have the potential to result in direct or indirect adverse physical change in the environment. These actions would promote existing programs, help secure funding, provide education, commit to surveys and studies, and other supportive initiative for which substantial adverse effects on scenic vistas are not reasonably foreseeable. Generally, where projects that would implement the measures and actions in the RCAAP would result in physical ground disturbance and construction, they would occur in developed and more populated areas where elements of the existing environment obscure long range views and there would be minimal potential for changes to the views of the features such as hills and ridgelines that are considered scenic vistas. These actions are described in Chapter 2 and include adding EV infrastructure to existing parking lots (Action TR-3-B) and electrification of existing loading docks (Actions OF-2-A and OF-2-C). New construction may include a new hydrogen fueling station (Action TR-4-C), new parks and trails (Action TEMP-2.2), and relocated and hardened infrastructure (Actions FLOOD-5.1 and ENERGY-2.1). These types of projects are unlikely to obscure views of foothills and ridgelines from public viewing locations on the valley floor. In addition, the proposed greenhouse gas (GHG) reduction measures' co-benefits include the preservation and protection of natural ecosystems and habitats, which support the preservation of scenic vistas.

As described above, the scenic ridgelines and agriculture in Napa County occur in the unincorporated area, while the cities and Town of Yountville are more urbanized and afford views of these resources. While the urban areas cannot regulate vistas outside their jurisdictions, they generally have regulations in place to preserve these views. For example, the Town of Yountville preserves specific view corridors through its zoning ordinance (Yountville 2019). The City of St. Helena protects scenic resources through compliance with General Plan Policies LU2.3, LU2.C, LU3.11, CD5.1, and CD5.2. The City of Calistoga regulates some developments that can affect scenic vistas, most notably through its Hillside Development Ordinance, and General Plan Policy P5.1-1 that includes strategies to safeguard scenic vistas along key roadways. The City of American Canyon General Plan includes Policy PR-4.4 to minimize obstructions to public views in scenic areas. In the unincorporated county, enforcement of the Napa County Municipal Code (NCMC) and the County's

implementing provisions of the Napa County Viewshed Protection Program would avoid substantial damage to the visual character and quality of public views. Pursuant to NCMC Section 18.106.040(C)(4), new or existing projects in the unincorporated county must be in compliance with the County's Design Manual to reduce its visual impacts on the views of major and minor ridgelines as viewed from any county road, thereby reducing impacts to the visual character or quality of public views. All development would be required to comply with applicable local development and design standards. Therefore, where there is potential for effects on scenic vistas, compliance with local regulations would generally address the potential for an adverse effect to occur.

The RCAAP is a policy-level document that does not include any site-specific designs or proposals for development; however, implementation of the GHG reduction and adaptation measures and actions in the RCAAP anticipated to result in new construction or minor modifications to developed areas (as described in Chapter 2, "Project Description," of this checklist) have the potential to directly or indirectly affect scenic vistas or other scenic resources. Construction projects, such as infrastructure improvement projects that result from implementation of RCAAP Actions TEMP-4.1, FLOOD-2.3, and FLOOD-5.1, would be subject to discretionary review by the applicable Napa County Jurisdictions. Through the development review process, the implementing agency would evaluate consistency with jurisdiction-specific codes such as those described above that promote architectural unity and protection of scenic vistas. As necessary, site designs may be modified to minimize visual intrusion on important viewsheds through this process.

At the program level, there is no evidence to suggest that any particular action would result in a substantial adverse effect on a scenic vista. Future projects undertaken by the Napa County Jurisdictions to implement the measures and actions in the RCAAP would need to be reviewed in the context of this Initial Study to determine if additional environmental review is needed. If a future discretionary project, once sufficiently identified and described, is determined to have a potentially significant impact not analyzed and mitigated in this Initial Study, additional environmental review would be required. At the program level, however, it is reasonably foreseeable that all projects undertaken by the Napa County Jurisdictions would result in a less-than-significant impact due to compliance with code provisions to preserve scenic vistas, the co-benefits of the RCAAP measures and actions, and development review for individual projects. No mitigation is required.

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

No impact. Although there are currently approximately 280 miles of County-designated scenic roadways within Napa County, there are no designated state scenic highways located within the county (Caltrans 2025a). Therefore, there is no potential to damage scenic resources in a state scenic highway as a result of RCAAP implementation. Further, as described above, future projects subject to discretionary review would be evaluated for consistency with the applicable Napa County Jurisdiction's policies related to scenic resources. Therefore, the proposed RCAAP would have no impact on scenic resources within a designated State scenic highway, and no mitigation is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. Scenic resources associated with agricultural landscapes, distinctive historic structures and winery tasting rooms, and ridgelines and topographic features such as Mt. St. Helena all contribute to a unique visual character of the county. The RCAAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, implementation of measures contained within the RCAAP would result in the construction of new facilities (i.e., the installation of a hydrogen fueling station in the county [Action TR-4-C], new urban parks and trail systems [Action TEMP-2.2], and relocated and new infrastructure [Actions FLOOD-5.1 and ENERGY-2.1]) and the expansion of existing facilities in urban areas, as described in Chapter 2 of this checklist. As described below, the short-term and long-term changes to the visual environment resulting from the RCAAP would be consistent with existing visual character of the county and would comply with adopted regulatory standards.

The standard for evaluating these changes varies by location. In non-urbanized areas, effects occur where projects would substantially degrade the existing visual character or quality of public views. In non-urbanized areas, typical projects with potential to affect visual resources would include new and relocated infrastructure. Temporary construction activities, such as equipment use and material staging, would occur at discrete locations in the region throughout RCAAP implementation. In most cases, construction activities associated with RCAAP implementation would be consistent with existing development and practices (e.g., irrigation pump replacement on agricultural land). These projects would not be expected to substantially degrade public views because the changes that occur would be minor; there are fewer public vantage points within the non-urbanized areas; and the distance between non-urbanized areas and the urbanized areas on the valley floor substantially reduces the visibility of small changes in these non-urbanized areas. Additionally, the Napa County Jurisdictions have established regulations (such as NCMC Section 18.106.040(C)(2)(c), which requires improvement projects to prepare a detailed landscaping plan showing the location and replacement of trees and vegetation in a manner that screens the improvements from designated public roads) that would address the potential for a specific project to affect the visual character or quality of public views.

In urbanized areas, projects are evaluated against zoning and other regulations that preserve scenic quality, resulting in consistent visual character and quality. Typical projects in urban areas would include smaller projects consistent with the existing character of the area, such as new structures supporting rooftop solar panels, and installation of electric vehicle (EV) charging infrastructure (Measure TR-3). As described above, construction of these improvements would generally be consistent with other ongoing maintenance and capital improvement projects. Projects would involve minor changes to roadway intersections, sidewalks, parking lots, and landscaping, and would not typically involve features with substantial height, bulk, or massing. Through the permitting process, consistency with applicable zoning and other regulations governing scenic quality would be required. Generally, these projects would not detract from - and could potentially improve - the region's visual character once completed.

Based on the types of projects that area anticipated to occur at the program level, and because these projects would be required to adhere to local requirements that consider visual character and the quality of public views, implementation of the RCAAP would not substantially degrade the visual character or quality of public views throughout the county and its surroundings. Details about specific implementing projects, however, are unknown at this programmatic stage and would undergo their own review by the Napa County Jurisdictions in comparison to this Initial Study. If, through their subsequent discretionary review process, the implementing agency determines that any specific project proposed to implement the measures and actions under the RCAAP has the potential to result in effects that exceed those anticipated and disclosed in this checklist evaluation, subsequent environmental review would be required under CEQA. This impact would be less than significant, and no mitigation is required.

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

Less than significant impact. Development that occurs to implement the RCAAP could generate light and glare, both during construction after installation. As described below, however, these discrete projects – which would be spread throughout the Napa County Jurisdictions – would not generate light and glare that is inconsistent with surrounding conditions. Substantial adverse effects on day and nighttime views would not occur.

Construction activities do not typically generate substantial glare, but may require temporary illumination. Nighttime construction could be required for projects such as the upgrade and/or relocation of infrastructure and critical facilities (Action FLOOD-5.1) and installation of a hydrogen fuel station (Action TR-4-C). Although all Napa County Jurisdictions do not require the shielding of lights used during construction, effects of light during the limited construction duration in these jurisdictions would not be anticipated to create a substantial new source of light that would adversely affect nighttime views in the area. Additionally, projects in urban areas would occur in locations where nighttime light is common. In the unincorporated county, temporary lighting fixtures installed during roadwork and other associated construction activities are regulated under the County's outdoor lighting provisions established by NCMC Chapter 18.40 and require the utilization of downcast and shielded lighting fixtures to minimize light pollution.

The new or modified structures that result from implementation of the RCAAP could include solid waste, water, and wastewater infrastructure and changes to the built environment that introduce new sources of light or glare. Based on the types of subsequent projects anticipated, implementation of these measures and actions is not expected to generate substantial sources of light or glare. Projects would use outdoor light fixtures that comply with local codes and would not use highly reflective materials or other features that do not comply with applicable federal, state, or local statutes or regulations related to dark skies or glare. Action BE-3-A, which requires the Napa County Jurisdictions to collaborate to create incentives for renewable energy generation and storage, could lead to an increase in rooftop solar. However, because rooftop solar panels work by absorbing light and converting it to energy (and energy cannot be produced from light that is reflected), solar panels are designed to minimize glare, and solar panels would not be expected to create glare that would adversely affect views in the county.

At the program level, there is no evidence to suggest that any particular action would result in a substantial light or glare effect that would adversely affect day or nighttime views in the area. Future projects undertaken by the Napa County Jurisdictions to implement the measures and actions in the RCAAP would need to be reviewed in the context of this Initial Study to determine if additional environmental review is needed. If a future discretionary project, once sufficiently identified and described, is determined to have a potentially significant impact not analyzed and mitigated in this Initial Study, additional environmental review would be required. At the program level, however, it is reasonably foreseeable that all implementing projects undertaken by the Napa County Jurisdictions would result in a less-than-significant impacts to light and glare. No mitigation is required.

3.2 AGRICULTURE AND FOREST RESOURCES

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

3.2.1 Environmental Setting

Agricultural areas are widespread throughout Napa County, with approximately 51,000 acres of active agricultural land, primarily vineyards, along with smaller areas of crops and orchards. Napa County's land provides for a variety of agricultural uses, including row crops, field crops, orchards, and vineyards, as well as grazing land for cattle. The eastern portion of the county supports predominantly grazing land, with approximately 36 percent designated for grazing and livestock uses. The county contains Prime Farmland, Farmland of Statewide Importance, and Unique Farmlands. Additionally, the county contains approximately 40,500 acres of potential timberland (Napa County 2007).

In 1966, the California Legislature created the California Land Conservation (Williamson) Act, which allowed local jurisdictions to enter into contracts with agricultural landowners to maintain the agricultural use of their lands for a minimum of 10 years with automatic annual extensions unless renewed. In return for keeping the land agricultural, the owner may receive a property tax benefit. To be eligible for a contract, a parcel must generally be at least 10 acres if considered prime land as defined by the act and 40 acres in areas less suited to intensive agricultural production.

Napa County and the City of St. Helena have offered contracts, and both St. Helena and American Canyon have signed contracts on lands they own. There were over 84,000 acres of land in the county under Williamson Act contracts in 2022 (Napa County 2025a).

3.2.2 Discussion

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

Less than significant impact with mitigation. Future projects that are necessary to implement the RCAAP and would result in physical development could convert Farmland to non-agricultural use. As described in Chapter 2, these projects could include renewable energy and storage projects that indirectly result from the rebates and incentives offered pursuant to Action BE-3-A and upgrades to communication, energy, public service, and transportation infrastructure pursuant to Actions TEMP-4.1, FLOOD-5.1, and ENERGY-2.1; new or upgraded water supply infrastructure that results from investments called for by Action FLOOD-7.1; and construction of a hydrogen fuel station, as required by Action TR-4-C. Because the location and design of future projects that implement RCAAP measures and actions would be determined through subsequent planning, there is potential that individual future projects could result in the conversion of Farmland to non-agricultural use.

Implementation of the RCAAP generally would not involve short- or long-term physical changes that would convert a substantial amount of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Projects associated with implementation would primarily occur in already disturbed, developed areas such as roadways, parking lots, and areas of existing critical infrastructure that are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Even in circumstances where new or improved infrastructure would occur on land designated as Farmland, the amount of land converted would be nominal. Further, such development may not be considered a conversion of Farmland to non-agricultural use if it is compatible with the continued use of the remainder of the Farmland for agriculture. Development would also be consistent with any applicable local regulations related to conversion of Farmland. Most Farmland is located in the unincorporated area of the County, where Measure P prohibits the Board of Supervisors from re-designating agricultural land (as shown on the General Plan Land Use Map) for non-agricultural purposes and requires voter approval.

In addition, the RCAAP includes several measures and actions that could result in collaboration to improve farming practices and resiliency. Through Measures AG-1 and AG-2, the County would promote the use of sustainable agricultural equipment and continue programs to support the transition to renewable fuels. Measure ALL-6 would improve the resilience of the region's agricultural industry through actions that reduce heat and smoke exposure and create livestock evacuation plans. Under Measure DROUGHT-2, the Napa County Jurisdictions would collaborate with the agricultural community to develop incentives for users to adopt water conservation practices. These measures would not result in the conversion of Farmland.

For all the foregoing reasons, implementation of the RCAAP would not result in substantial conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Nevertheless, because some conversion of Farmland could occur as a result of RCAAP implementation, the impact would be significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.2-1: For implementation of measures and actions requiring discretionary approval at a project level, the implementing agency or project sponsor shall identify any portion of the land proposed for development that is designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland on the most current California Department of Conservation Farmland Mapping and Monitoring Program maps. Where designated Farmland is identified, the implementing agency or project sponsor shall demonstrate that adequate lands have been set aside within Napa County to offset the loss of Farmland. Farmland mitigation at a 1:1 ratio shall be satisfied through direct acquisition of an agricultural conservation easement or purchase of banked mitigation credits. Any agricultural easement shall include restrictions ensuring that the conservation easement property be restricted in

perpetuity to agricultural use, and ancillary uses compatible therewith that preserve and further the agricultural use of the conservation easement property, thereby permanently protecting such land from future conversion to nonagricultural use. The mitigation land shall be of "like kind;" that is, of the same soil type and water conditions as the land removed from agricultural production, and shall likewise include restrictions ensuring that the conservation easement property be restricted in perpetuity to agricultural use, and ancillary uses compatible therewith that preserve and further the agricultural use of the conservation easement property. The issuance of any building, grading or encroachment permit(s) required for development shall be contingent upon the execution of any necessary legal instrument and/or payment of fees.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For conversion of Farmland to non-agricultural uses, the local regulations must require compensation that is at least equivalent to the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measure 3.2-1. In combination with the elements of the RCAAP that would lead to enhanced agricultural practices, Mitigation Measure 3.2-1 would address the potential for localized conversion of Farmland as a result on implementing the RCAAP by requiring like-kind mitigation elsewhere in the county. With this mitigation, the impact would be less than significant.

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

Less than significant impact. The Williamson Act generally provides that only commercial agricultural uses and uses that are compatible with the agricultural use of land are permitted on land that is subject to a Williamson Act contract, though open space and recreational uses are also permitted under certain circumstances. The Williamson Act defines the term "compatible use" to mean any use determined by the county or city administering the agricultural preserve "to be compatible with the agricultural, recreational, or open-space use of land within the preserve and subject to contract" and "includes agricultural use, recreational use or open-space use unless the board or council finds after notice and hearing that the use is not compatible with the agricultural, recreational or open-space use to which the land is restricted by contract." The Williamson Act authorizes any compatible use on contracted land that the local agency determines is consistent with the Williamson Act's "principles of compatibility," as set forth in California Government Code 51238.1. The Williamson Act also provides that, unless the local agency makes a finding to the contrary following a noticed public hearing, the erection, construction, alteration or maintenance of gas, electric, water, or communication facilities are deemed to be a compatible use within any agricultural preserve, and that no land occupied by such facilities may be excluded from an agricultural preserve for that use.

Given the nature of the RCAAP measures and actions, construction activities associated with their implementation would generally occur in already disturbed, developed areas that are not in agricultural use or under Williamson Act contract. Where infrastructure upgrades are on land under a Williamson Act contract, these projects would not generally conflict with an established Williamson Act contract (because such uses are commonly determined to be consistent with ongoing agricultural use, as described above) or reduce the farmable acreage of the land under contract to less than 10 acres in prime land or 40 acres in areas less suited to intensive agricultural production, such that the parcel would become ineligible for the program. Where a potential use is determined to be non-compliant, the Williamson Act includes provisions for non-renewal and early cancellation. No projects or improvements would be constructed on land that is subject to a Williamson Act contract unless it is first determined, in accordance with the Williamson Act, that such improvement is compatible with the affected contract, or the affected Williamson Act

contract or portion thereof has been terminated in accordance with the Williamson Act (e.g., terminated through contract nonrenewal, rescission, or cancellation).

The Town of Yountville, City of Napa, City of St. Helena, and Napa County have established agricultural zoning designations. As described above, the RCAAP could result in discrete projects of an urban nature (i.e., vehicle charging stations) in existing communities and infrastructure projects in less developed areas. The Napa County Jurisdiction implementing a future project would evaluate it for consistency with any applicable agricultural zoning. Uses must be either allowed by right or within a use category requiring a permit. Where proposed uses are not expressly allowed by the jurisdiction's municipal code, the implementing agency would determine, through processing of a use permit application (or other applicable means), whether a particular project may be permitted on lands zoned for agricultural use. A future project that is not permitted or conditionally permitted could only proceed in conjunction with a zoning change.

Most projects that implement the RCAAP would be located outside of agricultural areas or would support ongoing agricultural activities and would be consistent with the uses allowed in the zoning district. Details about specific implementing projects, however, are unknown at this programmatic stage and would undergo their own review by the Napa County Jurisdictions in comparison to this Initial Study. The law presumes that a public body or officer will comply with all applicable laws and regulations in exercising their official duties. (Evidence Code section 664.) Likewise, this evaluation assumes that construction and development of projects required to implement the RCAAP would adhere to applicable regulations. Where existing regulatory requirements or permitting requirements exist to protect resources that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. Because existing regulations prohibit implementing agencies from approving projects that are inconsistent with existing agricultural zoning, conflicts with zoning would not occur.

As described above, future implementation projects would be generally consistent with agricultural zoning and Williamson Act contracts. Established regulatory procedures are in place that effectively address the potential for future projects to conflict with Williamson Act contracts and agricultural zoning designations, and the implementing agency would address any required amendments or cancellations through established processes at the project level. If, through their subsequent discretionary review process, the implementing agency determines that any specific project proposed to implement the measures and actions under the RCAAP has the potential to result in cancellation of Williamson Act Contract, or other effects that exceed those anticipated and disclosed in this checklist evaluation would occur, subsequent environmental review would be required under CEQA. Therefore, the implementation of the RCAAP would not conflict with existing agricultural zoning or a Williamson Act contract. The impact would be less than significant. No mitigation is required.

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

and

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

Less than significant impact. There are forested areas in the Napa region. In 2009, Napa County estimated that there were approximately 40,000 acres of land in the county that support tree species appropriate for commercial timber operations (Napa County 2009). Napa County is the only Napa County Jurisdiction with an existing timber or forest resources designation. In addition to timber harvesting, the Timber Preserve District (Chapter 18.68 of the Napa County code), allows for the erection, construction, alteration or maintenance of gas, electric, water or communication transmission facilities upon grant of a use permit. The applicability of the Timberland Preserve District is limited, and there are currently no parcels within this zoning designation.

Although the ultimate location of projects would be determined during implementation, most projects would be located in urbanized areas that do not support substantial forest resources. As a result, the potential for the RCAAP to convert forestland is low. Given the nature of the RCAAP measures and actions, construction activities would

primarily occur in already disturbed, developed areas such as roadways, parking lots, and areas of existing critical infrastructure that are not forested or used for timber production or management.

Further, because forest land sequesters carbon, the RCAAP would generally support the protection and expansion of forest land. The RCAAP includes a target to expand urban forests by 20 percent (Action AG-5-B), a plan to accelerate habitat restoration, focusing on historical oak woodlands and coniferous forests (Action AG-6-A), and includes measures that support carbon farming (e.g., Measures AG-3 and AG-4). Therefore, implementation of the RCAAP would not conflict with existing zoning or cause rezoning of any forest land, timberland, or timberland zoned for timberland production. RCAAP implementation would not result in the net loss of forest land or conversion of forest land to non-forest use. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. As described above, the RCAAP would result in some physical changes to the environment, including the potential for direct conversion of undeveloped agricultural land for infrastructure that supports reduced GHG emissions and community resilience. The RCAAP would not increase population or result in development that has the potential to create edge effects that indirectly drive conversion of Farmland and forestland. As a program, the RCAAP supports continued agricultural and forest use in the region. For these reasons and those provided above, this impact would be less than significant. No mitigation is required.

3.3 AIR QUALITY

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

3.3.1 Environmental Setting

EXISTING AIR QUALITY AND ATTAINMENT STATUS SUMMARY

The federal Clean Air Act requires the US Environmental Protection Agency (EPA) to set national ambient air quality standards (NAAQS) (40 CFR Part 50) for six pollutants considered harmful to public health and the environment: ground-level ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM) (subdivided into respirable PM [PM₁₀] and fine PM [PM_{2.5}]), and lead. EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels.

Under amendments to the federal Clean Air Act (CAA), EPA has classified air basins, or portions thereof, as either "attainment" or "nonattainment" for each criteria pollutant based on whether the national standards have been achieved. The federal Clean Air Act (CAA) requires states to develop State Implementation Plans (SIPs) that outline how each state will control air pollution under the CAA. A SIP includes the regulations, programs, and policies that a state will use to clean up polluted areas. The California Clean Air Act (CCAA), patterned after the federal Clean Air Act, also designates areas as "attainment" or "nonattainment" for state standards. The CCAA requires that all local air districts in the State endeavor to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources and provides districts with the authority to regulate indirect sources. Thus, California has two sets of attainment-nonattainment designations: one with respect to national standards and one with respect to state standards. The California Air Resources Board (CARB) is responsible for setting, updating, and enforcing the CAAQS.

Table 3.3-1 identifies the ambient air quality standards and attainment status for all criteria pollutants. The Bay Area is currently designated as a nonattainment area for state and federal ozone standards, the federal 24-hour PM_{2.5}

standard, and state PM₁₀ standards. According to the nonattainment status of these pollutants, this analysis is focused on ground-level ozone precursor emissions and PM emissions.

Table 3.3-1 Ambient Air Quality Standards and Napa County Attainment Status as of 2025

Pollutant	Averaging Time	California Standard	Attainment Status for California Standard	Federal Primary Standard	Attainment Status for Federal Standard
Ozone	8 hour	0.070 ppm	Nonattainment	0.070 ppm	Nonattainment ¹
	1 hour	0.09 ppm	Nonattainment	—	— ²
Carbon monoxide (CO)	8 hour	9.0 ppm	Attainment	9 ppm	Attainment
	1 hour	20 ppm	Attainment	35 ppm	Attainment
Nitrogen dioxide (NO ₂)	1 hour	0.18 ppm	Attainment	0.100 ppm	—
	Annual Arithmetic Mean	0.030 ppm	—	0.053 ppm	Attainment
Sulfur dioxide (SO ₂)	24 Hour	0.04 ppm	Attainment	0.14 ppm	— ³
	1 Hour	0.25 ppm	Attainment	0.075 ppm	— ³
	Annual Arithmetic Mean	—	—	0.030 ppm	— ³
Particulate matter (PM ₁₀)	24 Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Undclassified
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	—	—
Particulate matter, Fine (PM _{2.5})	24 Hour	—	—	35 µg/m ³⁻⁴	Nonattainment
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	9 µg/m ³⁻⁴	Undclassified/ Attainment
Lead ^{1B}	30-day Average	1.5 µg/m ³	—	—	Attainment
	Calendar Quarter	—	—	1.5 µg/m ³	Attainment
	Rolling 3-Month Average	—	—	0.15 µg/m ³	—
Visibility-reducing particles (VRP)	8 hour (10:00 to 18:00 PST)	—	—		
Sulfates	24 hour	25 µg/m ³	Attainment	No National Standards	
Hydrogen sulfide	1 hour	0.03 ppm	Undclassified		
Vinyl chloride ⁵	24 hour	0.010 ppm	No information available		

Notes: ppb = parts per billion; ppm = parts per million; µg/m³ = micrograms per cubic meter; NAAQS = national ambient air quality standards; VRP = visibility-reducing particles.

¹ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over 3 years, is equal to or less than 0.070 ppm. Nonattainment areas will have until late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.

² The national 1-hour ozone standard was revoked by EPA on June 15, 2005.

³ The current primary standard is set at a level of 75 ppb, as the 99th percentile of daily maximum 1-hour SO₂ concentrations, averaged over 3 years.

⁴ On February 7, 2024, EPA changed the NAAQS for PM_{2.5} to 9.0 micrograms per cubic meter to provide increased public health protection, consistent with the available health science.

⁵ CARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure below which there are no adverse health effects determined.

Sources: EPA 2025a; CARB 2023, CARB 2024

The 2017 Clean Air Plan (adopted April 19, 2017) provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the Bay Area Air District (formerly referred to as the Bay Area Air Quality Management District or BAAQMD) will continue to make progress toward attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution across Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those targets. The 2017 plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as PM, ozone, and TACs; reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion (BAAQMD 2017).

Ozone

Ozone is a reactive pollutant that is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x). Mobile sources (e.g., motor vehicle exhaust) and area sources (e.g., industrial emissions, gasoline vapors, architectural coatings, various consumer products, and chemical solvents) are some of the main sources of ROG and NO_x that contribute to the formation of ozone. Ozone is a regional air pollutant because it is formed downwind of sources of ROG and NO_x under the influence of wind and sunlight. During summertime (particularly on hot, sunny days with little or no wind), ozone levels are at their highest.

Short-term exposure to elevated concentrations of ozone is linked to health effects such as eye irritation and breathing difficulties. Repeated exposure to ozone can make people more susceptible to respiratory infections and aggravate preexisting respiratory diseases. Long-term exposures to ozone can cause more serious respiratory illnesses. Ozone also damages trees and other natural vegetation; reduces agricultural productivity and causes deterioration of building materials, surface coatings, rubber, plastic products, and textiles.

For State air quality planning purposes, the Bay Area is classified as a serious nonattainment area for the 1-hour ozone standard. The “serious” classification triggers various plan submittal requirements and transportation performance standards.

Carbon Monoxide

CO is an odorless and invisible gas. It is a nonreactive pollutant that is a product of the incomplete combustion of gasoline in automobile engines. CO is a localized pollutant, and the highest concentrations are found near the source. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic and are influenced by wind speed and atmospheric mixing. CO concentrations are highest in flat areas on still winter nights when temperature inversions trap the CO near the ground. When inhaled at high concentrations, CO reduces the oxygen-carrying capacity of the blood, which, in turn, results in reduced oxygen reaching parts of the body.

Nitrogen Dioxide

NO₂ is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO₂ are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x and are reported as equivalent NO₂. Because NO₂ is formed and depleted by reactions associated with photochemical smog (ozone), the NO₂ concentration in a particular geographical area may not be representative of the local sources of NO_x emissions.

Sulfur Dioxide

SO₂ is produced by stationary sources, such as coal and oil combustion, steel mills, refineries, and pulp and paper mills, as well as by the combustion of fuel containing sulfur. The major adverse health effects associated with SO₂ exposure pertain to the upper respiratory tract. SO₂ is a respiratory irritant with constriction of the bronchioles occurring with inhalation of SO₂ at 5 parts per million or more. On contact with the moist mucous membranes, SO₂

produces sulfurous acid, which is a direct irritant. Concentration rather than duration of the exposure is an important determinant of respiratory effects. Exposure to high SO₂ concentrations may result in edema of the lungs or glottis and respiratory paralysis (EPA 2025b).

Most of the Bay Area's SO₂ comes from petroleum refineries. Bay Area refineries are the largest source of sulfur oxide (SO_x) emissions. Although these major sources are present, the overall concentration of SO₂ in the region is low. No State or federal excesses of sulfur compound emissions have been recorded since 1976 (BAAQMD 2025).

Particulate Matter

PM includes dirt, dust, soot, smoke, and liquid droplets found in the air. PM₁₀ is primarily composed of large particles from sources such as road dust, residential wood burning, construction/demolition activities, and emissions from on- and off-road engines. Some sources of PM, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. PM_{2.5} particles are formed in the air from primary gaseous emissions. Examples include sulfates formed from SO₂ emissions from power plants and industrial facilities; nitrates formed from NO_x emissions from power plants, automobiles, and other combustion sources; and carbon from organic gas emissions from automobiles and industrial facilities. Most Bay Area anthropogenic PM_{2.5} derives from combustion – either wood (biomass) burning, or combustion of fossil fuels (BAAQMD 2017).

PM₁₀ and PM_{2.5} are small enough to get into the lungs and can cause numerous health problems, including respiratory conditions, such as asthma and bronchitis, and heart and lung disease. People with heart or lung disease, older people, and children are at the highest risk from exposure to PM (EPA 2025c). The Bay Area experiences its highest PM concentrations in the winter, especially during evening and night hours, because of the cool temperatures, low wind speeds, low inversion layers, and high humidity.

Toxic Air Contaminants

The California Health and Safety Code defines toxic air contaminants (TACs) as air pollutants that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. TACs are less pervasive in the urban atmosphere than criteria air pollutants, but they are linked to short-term (acute) or long-term (chronic and/or carcinogenic) adverse human health effects. For evaluation purposes, TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to TACs. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Cancer risk from carcinogens is expressed as excess cancer cases per 1 million exposed individuals, typically over a lifetime of exposure. Noncarcinogens differ in that there is a safe level at which it is generally assumed that no negative health impacts would occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs with varying degrees of toxicity. TACs may also exist as PM, vapors, or gases. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust—particularly diesel-powered vehicles. Diesel PM emissions are estimated to be responsible for about 70 percent of the total ambient air toxics risk statewide (CARB n.d.).

The three most potent carcinogens—diesel PM overall, and 1,3-butadiene and benzene as specific components of diesel PM—come primarily from motor vehicles. Cleaner motor vehicles and fuels are reducing the risks from these three priority toxic air pollutants. The remaining toxic air pollutants, such as hexavalent chromium and perchloroethylene, although not appearing to contribute as much to overall risks, can pose significant risks to people living near a source due to the highly localized concentration of TACs. CARB has control measures for motor vehicles, consumer products, and industrial source programs either already in place, in development, or under evaluation for most TACs.

Health risks from diesel PM are highest in areas of concentrated emissions, such as near ports, rail yards, freeways, or warehouse distribution centers. According to CARB, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Those most vulnerable are children, whose lungs are still developing, and older people, who may have other serious health problems. According to numerous studies, CARB has also stated that diesel PM is a contributing factor to premature death from heart and lung diseases.

Under the California Health and Safety Code, Division 26 (Air Resources), CARB is authorized to adopt regulations to protect public health and the environment by reducing TACs and other air pollutants with adverse health effects. CARB has promulgated several mobile and stationary source airborne toxic control measures (ATCMs) under this authority. For instance, effective as of July 2003, CARB approved an ATCM that limits school bus idling and idling at or near schools to only when necessary for safety or operational concerns (13 CCR Chapter 10, Section 2480). This ATCM is intended to reduce diesel PM and other TACs and air pollutants from heavy-duty motor vehicle exhaust. It applies to school buses, transit buses, school activity buses, youth buses, general public paratransit vehicles, and other commercial motor vehicles. This ATCM focuses on reducing public exposure to diesel PM and other TACs, particularly for children riding in and playing near school buses and other commercial motor vehicles, who are disproportionately exposed to pollutants from these sources. In addition, effective February 2005, CARB approved an ATCM to limit the idling of diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds, regardless of the state or country in which the vehicle is registered (13 CCR Chapter 10, Section 2485).

Public Law No. 119-15

On June 12, 2025, Public Law (P.L.) 119-15, enacting House Joint Resolution 87, was signed into law. The law utilized the Congressional Review Act to disapprove EPA's rule that had granted California a waiver to enforce stricter emissions standards for heavy-duty vehicles under the Clean Air Act. The disapproved rule included programs such as the Advanced Clean Trucks regulation and zero-emission requirements for airport shuttles. Passed under the Congressional Review Act, the law prevents EPA from implementing or reissuing the same or similar rules without new congressional authorization. This effectively blocks California and other states that follow its standards from enforcing these specific vehicle emission and warranty regulations. The implications of this law on the State's capability to enforce its independent heavy-duty vehicle regulations are uncertain at this time, as the California Attorney General filed a lawsuit challenging P.L. No. 119-15 on June 12, 2025. Whether this action will be successful is unknown, as is the possibility that a federal judge will issue a stay to halt the implementation of the heavy-duty vehicle regulations during the legal process.

Public Law No. 119-16

On June 12, 2025, P.L. No. 119-16, enacting House Joint Resolution 88, became law. The law also relied on the Congressional Review Act to disapprove the EPA's December 2024 waiver under the CAA that allowed California to implement and enforce the Advanced Clean Cars II (ACC II) regulation. ACC II included a zero-emission vehicle (ZEV) mandate targeting 100 percent new light-duty ZEV sales by 2035. P.L. No. 119-16 marks the first ever occurrence that waivers under the CAA have been revoked under the Congressional Review Act. The implications of this law on the State's capability to enforce its independent fuel economy standards are uncertain at this time, as the California Attorney filed a lawsuit challenging P.L. No. 119-16 on June 12, 2025. Whether this action will be successful is unknown, as is the possibility that a federal judge will issue a stay to halt the implementation of the ACC II regulation during the legal process.

Public Law No. 119-17

P.L. 119-17, enacted on June 12, 2025, disapproves, under the Congressional Review Act, of the EPA's rule titled "California State Motor Vehicle and Engine and Nonroad Engine Pollution Control Standards; The 'Omnibus' Low NO_x Regulation; Waiver of Preemption; Notice of Decision." The law disapproves the EPA's January 6, 2025, Low-NO_x rule that would have granted California a waiver to enforce stricter emissions standards for both on-road and non-road heavy-duty engines. Similar to the other CRA resolutions listed above targeting emissions waivers, this law prohibits the EPA from reissuing the same or substantially similar rule without new authorization from Congress. The law effectively blocks California, and any states following its standards, from implementing this omnibus Low-NO_x regulatory package. The implications of this law on the State's capability to enforce its low NO_x rule are uncertain at this time, as the California Attorney filed a lawsuit challenging P.L. No. 119-17 on June 12, 2025. Whether this action will be successful is unknown, as is the possibility that a federal judge will issue a stay to halt the implementation of the low NO_x rule during the legal process.

Endangerment Finding

On December 7, 2009, the EPA administrator found that the current and projected concentrations of the six key well-mixed greenhouse gases (GHGs) (carbon dioxide [CO₂], methane, nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) in the atmosphere threaten the public health and welfare of current and future generations. On July 29, 2025, EPA announced a proposal to rescind the Endangerment Finding and, repeal all GHG emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA section 202(a). The proposed rule would remove GHG-related provisions from 40 CFR part 600 without affecting provisions related to Corporate Average Fuel Economy Standards (CAFE) standards and fuel economy labeling. In general, the proposed rule would remove the GHG emission standards for passenger cars and light trucks (model year 2012 and later) and for medium-duty vehicles (model year 2014 and later). The public comment period for the rule ended on September 22, 2025. As of the writing of this analysis, EPA has not adopted this proposal, and CARB has not provided guidance on how to address this issue in emissions modeling.

While the Endangerment Finding is specifically concerned with GHGs, repeal of emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA section 202(a) would also affect air pollutant emissions from these sources. This is because mobile-source exhaust often contains both air pollutants, such as NO_x, PM₁₀, and PM_{2.5}, and GHGs. Thus, emissions standards and technologies intended to reduce air pollution or GHG emissions often overlap.

Advanced Clean Cars Program

AB 1493 of 2002 (known as Pavley I, Chapter 200, Statutes of 2002) provided the nation's first GHG standards for automobiles. AB 1493 required CARB to adopt vehicle standards that lowered GHG emissions from new light-duty automobiles to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards, referred to as the Advanced Clean Cars (ACC) Program's Low Emission Vehicle (LEV) III Regulation, was adopted in 2012 for vehicle model years 2017–2025 (13 CCR Section 1900 et seq.).

The ACC Program also includes the Zero Emission Vehicle Program and the Clean Fuels Outlet Regulation. The Zero Emission Vehicle Program is designed to achieve California's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of ZEVs, which include battery electric, fuel cell, and plug-in hybrid electric vehicles. The Clean Fuels Outlet regulation is intended to ensure that fuels, such as electricity and hydrogen, are available to meet the fueling needs of new advanced technology vehicles as they come to market. The ACC II Program was adopted by CARB in August 2022 and provides the regulatory framework to ensure the sales requirement goal of Executive Order (EO) N-79-20, ultimately reaching 100 percent ZEV sales in the State by 2035. EPA granted CARB its California CAA waiver request on December 18, 2024. As discussed above (see discussion under Public Law No. 119-6), the December 18, 2024, EPA waiver was voided by Congress in 2025 and signed into law by the president. As of November 2025, the State of California is challenging the legality of Congress's action, and given the pending litigation, it is assumed CARB will continue to enforce these programs for the purpose of the legislative-adjusted forecasts in the RCAAP.

Advanced Clean Fleets

CARB's 2022 Advanced Clean Fleets (ACF) Regulation was developed to reduce diesel PM by transitioning medium- and heavy-duty trucks to full electrification by 2045. At the time of the writing of this Draft EIR, California has withdrawn its request for a waiver and authorization for the addition of the Advanced Clean Fleets regulation to its emissions control program (CARB 2025a). CARB is not enforcing the existing portions of the ACF regulation that require a federal waiver or authorization, such as the portions of the Advanced Clean Fleet regulation that apply to high-priority and drayage fleets. However, not all elements of the Advanced Clean Fleets regulation require a federal waiver or authorization (CARB 2025a). State and local government fleets will still be required to be fully electric by 2045. Similar to the ACC II regulation discussed above, the GHG forecast prepared for the RCAAP included emissions reductions attributable to the ACF regulation. Notably, the passing of Public Law No. 119-16, described above, only rescinds the state's ability to enforce the ACC II regulation and does not affect implementation of the ACF Regulation.

Advanced Clean Trucks Regulation

CARB adopted the Advanced Clean Trucks (ACT) Regulation in March 2021, with minor amendments in 2024. The regulation aims to accelerate the sales of heavy-duty EVs. The regulation consists of two parts: a manufacturer component and a fleet reporting component. Manufacturers are required to sell an increasing percentage of heavy-duty ZEV between 2024 and 2035. By 2035, 40 percent of Class 8 truck purchases will be required to be zero emission. By 2035, 55 percent of class 2b-3, 75 percent of class 4-8, and 40 percent of class 7-8 tractors will be required to be ZEV (CARB 2025b). EPA granted the waiver request for the ACT regulation on April 6, 2023 (EPA 2023). Notably, the passing of Public Law No. 119-16, described above, only rescinds the state's ability to enforce the ACC II regulation and does not affect the implementation of the ACT Regulation.

Transportation Refrigeration Units

CARB's 2022 amendments to the 2004 Transport Refrigeration Unit (TRU) Airborne Toxic Control Measure (2022 TRU Amendments) increase the stringency of TRU PM_{2.5} standards and require the electrification of diesel-powered TRU trucks by 2029. On January 3, 2025, EPA granted CCAA authorization of elements of its TRU Regulation (90 FR 2000). In its action, EPA did not act on the Regulation's requirements for the turnover of at least 15 percent of diesel-fueled truck TRU fleet to zero emissions by December 31, 2023 (and each year thereafter), within the 2022 TRU Amendments (EPA 2025b). As of January 2025, CARB has withdrawn its request for the portions of the TRU Regulation on which EPA did not take action in its authorization decision on January 3, 2025 (CARB 2025c).

Bay Area Air District

The Bay Area Air District attains and maintains air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the air district includes the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The air district also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA and CCAA.

All projects are subject to the air district's rules and regulations in effect at the time of construction. Specific rules applicable to project construction and operation may include:

- ▶ **Regulation 2, Rule 1, General Permit Requirements.** This rule includes criteria for issuance or denial of permits, exemptions, appeals against decisions of the air pollution control officer, and Bay Area Air District actions on applications. This rule also requires that notice must be provided to relevant members of the community prior to approving an application for an authority to construct or permit to operate for a new or modified source located within 1,000 feet of a K-12 school site or an overburdened community as defined in Section 2-1-243 and for which a health risk assessment is required under to Section 2-5-401.
- ▶ **Regulation 6, Rule 1, General Requirements.** Regulation 6 limits the quantity of PM in the atmosphere by controlling emission rates, concentration, visible emissions, and opacity.
- ▶ **Regulation 7, Odorous Substances.** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. A person (or facility) must meet all limitations of this regulation, but meeting such limitations shall not exempt such person from any other requirements of the Bay Area Air District or State or national law. The limitations of this regulation shall not be applicable until the Bay Area Air District receives odor complaints from 10 or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. When the limits of this regulation become effective, as a result of the citizen complaints described above, the limits shall remain effective until such time as no citizen complaints have been received by the Bay Area Air District for 1 year. The limits of this regulation shall become applicable again if the air district receives odor complaints from five or more complainants within a 90-day period. Bay Area Air District staff investigate and track all odor complaints it

receives and make attempts to visit the site and identify the source of the objectionable odor and assist the owner or facility in finding a way to reduce the odor.

- ▶ **Regulation 8, Rule 3, Architectural Coatings.** This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the Bay Area Air District's jurisdiction.

Bay Area Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration, and the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, or proximate to transit service and local services, emissions would be less than the greenfield type of project that these screening criteria are based on.

According to the Bay Area Air District CEQA Guidelines (April 2022), if a proposed project meets all of the following construction and operational screening criteria, then the lead agency or applicant would not need to perform a detailed assessment of the proposed project's criteria air pollutant and precursor emissions:

Construction

- ▶ The project size is at or below the applicable operational screening level size shown in Table 4-1 of the Bay Area Air District CEQA Guidelines, which set thresholds based on commercial, educational, recreational, residential, and retail land use categories.
- ▶ All best management practices (see Table 5-2 in Chapter 5, "Project-Level Air Quality Impacts" in the Bay Area Air District CEQA Guidelines) are included in the project design and implemented during construction.
- ▶ Construction-related activities would not overlap with operational activities.
- ▶ Construction-related activities would not include:
 - demolition,
 - simultaneous occurrence of two or more construction phases (e.g., paving and building construction would occur simultaneously),
 - extensive site preparation (e.g., grading, cut and fill, or earth movement),
 - extensive material transport (e.g., soil import and export requiring a considerable amount of haul truck activity), or
 - stationary sources (e.g., backup generators) subject to Air District rules and regulations.

Operation

- ▶ Operational activities would not include stationary engines (e.g., backup generators) and industrial sources subject to Bay Area Air District rules and regulations.
- ▶ Operational activities would not overlap with construction-related activities.

3.3.2 Discussion

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

Less than significant impact. Napa County is currently in nonattainment for the ozone and PM_{2.5} NAAQS and for the ozone, PM₁₀, and PM_{2.5} CAAQS. The most current air quality attainment plan adopted by the Bay Area Air District is the 2017 Clean Air Plan, adopted in April of 2017 (BAAQMD 2017). The emissions inventory used to develop the 2017

Clean Air Plan is based primarily on projected population and employment growth and associated vehicle miles travelled (VMT) for the San Francisco Bay Area Air Basin (SFBAAB). Estimates of this regional growth are based in part on the planned growth identified in regional and local land use plans such as general plans or distinct area plans. Therefore, projects that would result in population and/or employment growth beyond that projected in regional or local plans could result in increases in VMT exceeding that forecasted in the attainment plans, in turn resulting in mobile-source emissions that could conflict with or obstruct implementation of the air quality plans. Increases in VMT beyond the projections in the County's General Plan, the Metropolitan Transportation Commission and Association of Bay Area Governments' (MTC-ABAG's) regional VMT modeling, and the Bay Area Air District regional air quality plans generally would be considered to have a significant adverse incremental effect on the SFBAAB's ability to attain the NAAQS and CAAQS for all criteria air pollutants. The RCAAP is not a growth-inducing plan and does not propose changes to existing land use and zoning designations that would result in population or employment growth. Thus, implementation of the RCAAP would not conflict with the region's air quality planning efforts based on populations and employment growth. Further, as discussed in criteria "b," below, implementation of the RCAAP would not increase project-level operational air quality emissions such that they would exceed Bay Area Air District thresholds of significance. Therefore, the RCAAP would not conflict with the intent of the 2017 Clean Air Plan to attain and maintain the NAAQS and CAAQS.

The 2017 Clean Air Plan's comprehensive control strategy includes 85 control measures with some measures focusing on reducing a single type of air pollutant. Many of these measures, however, reduce multiple pollutants and serve both to protect public health and to protect the climate. The control strategies in the 2017 Clean Air Plan recognize the need to reduce motor vehicle travel and emissions by integrating transportation, land use, and air quality planning. Cleaner fuels and improved emission controls have substantially reduced emissions from mobile sources in recent decades. However, growth in motor vehicle use (as measured in VMT on both a per-capita and an absolute basis) has offset some of the benefit of the improved emission controls. The 2017 Clean Air Plan encourages future population and job growth in areas that are well served by transit and where mixed-use communities provide jobs, housing, and retail in close proximity.

Key themes embedded in the 2017 Clean Air Plan include:

- ▶ the need to reduce motor vehicle emissions by driving cleaner, driving smarter, and driving less;
- ▶ reducing per-capita VMT and promoting policies that enable families to reduce their motor vehicle ownership;
- ▶ designing communities where people can walk, bike, or use transit on a convenient basis; and
- ▶ ensuring that focused growth in priority areas is planned and designed to protect people from both existing sources and new sources of emissions.

The RCAAP contains GHG emissions reduction measures and actions that have the co-benefit of reducing criteria pollutant emissions, as many measures which target GHG reductions through reduced fossil fuel consumption similarly reduce air pollutant emissions by reducing fossil fuel combustion and VMT (which can correspond with emissions from sources such as brake and tire wear). Examples of potential air pollutant reductions achieved by these actions include reduced fossil fuel consumption related to the implementation of VMT reduction strategies, as included in Action TR-1-C, and reduced fossil fuel consumption related to the implementation of Action TR-7-A, which would support the continued statewide transition to EVs by facilitating a partnership with the Bay Area Air District and others to pursue EV funding/rebates for residents. Action TR-10-H would also reduce VMT and associated mobile-source emissions by facilitating cross-agency collaboration between Caltrans, MTC-ABAG, Napa Valley Transportation Authority (NVTa), and local jurisdictions in the county to prioritize and secure funding for active transportation projects consistent with local and regional plans. Lastly, Action TR-11-C would reduce mobile-source air pollutant emissions by developing and adopting local transportation demand management (TDM) ordinances in all jurisdictions by 2028.

As stated above, the emission inventories used to develop regional air quality plans are based primarily on projected population and employment growth and associated VMT for the SFBAAB. By reducing VMT in the county through the implementation of measures and actions meant to reduce VMT such as those listed above, the RCAAP would be

beneficial to the VMT reduction goals of the 2017 Clean Air Plan. Decreasing per capita emissions, especially those related to VMT, also aligns with the goals of the 2022 SIP (CARB 2022: 73). While the RCAAP would result in some emissions from the construction of various measures that would, ultimately, reduce air pollution in the long-term, such emissions would be offset by the air pollution benefits of the RCAAP. All future projects within the Bay Area Air District's jurisdiction would be required to follow applicable Bay Area Air District rules, including dust best management practices (BMPs) to limit construction emissions.

The proposed plan's core objectives and strategies align with and would support the implementation of the Bay Area Air District's 2017 Clean Air Plan. Therefore, the RCAAP would not conflict with or obstruct applicable air quality plans, and this impact would be less than significant. No mitigation is required.

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

Less than significant impact with mitigation.

Construction

The RCAAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, implementation of the RCAAP measures may result in future construction activities that could increase short-term emissions of criteria air pollutants and precursors. Specific actions which could result in construction-related emissions include, expanding EV charging infrastructure (Action TR-3-B); leveraging new development to support ZE vehicles (Action TR-4-C); implementing ZE loading docks (Actions OF-2-A and OF-2-C); reducing fossil fuel use in agricultural equipment (Actions AG-1-D and AG-1-G); increasing the climate resilience of new residential and commercial development (Action ALL-3.2); implementing new parks and trail systems (Action TEMP-2.2); upgrading communications, energy, public services, and transportation infrastructure to improve extreme heat resilience (Action TEMP-4.1); maintaining and enhancing flood control, storm water, and sewage/solid-waste infrastructure (Action FLOOD-2.3, Action FLOOD-3.1); and upgrading and/or relocating infrastructure and critical facilities exposed to flooding hazards (Action FLOOD-5.1).

This type of construction activity would generally be small-scale and done using small machinery, limited heavy-duty construction equipment, and would involve minimal numbers of construction workers and associated worker vehicle trips. Bike and pedestrian improvements, as well as infill development, may require the use of equipment including graders, pavers, and trenchers. Additionally, measures such as Measure ENERGY-2 (Strengthen Energy Infrastructure Resilience and Enhance Redundancy via Collaboration) and Measure ALL-8 (Integrate Climate Change into Emergency Management Planning & Response) could require the use of heavy equipment and involve more intense construction phases to, for example, construct energy infrastructure equipment (Measure ENERGY-2) or construct resiliency hubs (Measure ALL-8). However, some RCAAP measures and actions were developed to reduce GHG emissions generated from the combustion of fossil fuels during construction activities and would also reduce air pollutant emissions. Measures OF-3 and OF-4 encourage the use of electric construction equipment to reduce GHG emissions from the combustion of fossil fuels during construction for community and municipal construction projects. Action SW-2-A involves developing a unified Construction Waste Management Plan to require and achieve recycling or reuse of at least 70 percent of construction waste from every project starting in 2035, which would exceed state requirements and reduce emissions associated with producing new construction materials.

As individual projects are constructed, construction activity would result in emissions of criteria air pollutants (e.g., PM_{2.5} and PM₁₀) and precursors (e.g., ROG and NO_x) from site preparation (e.g., excavation, grading, and clearing); exhaust from off-road equipment, material delivery vehicles, and worker commute vehicles; vehicle travel on paved and unpaved roads; and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings, and trenching for utility installation). The above pollutants are specifically relevant because the region is in nonattainment for state and federal ozone standards, the federal 24-hour PM_{2.5} standard, and state PM₁₀ standards. These emission types and associated levels fluctuate greatly depending on the particular type, number, and duration of usage for the varying equipment used during construction. The site preparation phase typically generates the most substantial emission levels because of the on-site equipment and ground-disturbing activities

associated with grading, compacting, and excavation. Site preparation equipment and activities typically include backhoes, bulldozers, loaders, and excavation equipment (e.g., graders and scrapers). With respect to construction equipment, EPA and CARB have adopted rules and regulations establishing criteria pollutant and hazardous emissions limits for diesel powered on-road vehicles and off-road equipment. The current EPA and CARB rules and emission standards are in the process of being implemented and are therefore reasonably foreseeable. EPA and CARB regulations of on-road and off-road engines target the primary sources of emissions at construction sites. These include on-road heavy-duty trucks and off-road aerial lifts, backhoes, cranes, crawler tractors, excavators, forklifts, graders, loaders, mowers, rollers, scrapers, skid steer loaders, tractors, trenchers, two-engine vehicles, and workover rigs. In addition, CARB's clean fuel standards would reduce emissions from all internal combustion engines, and its stationary and portable equipment regulations would reduce emissions from the smaller equipment used at construction sites, such as portable generators and tub grinders.

As the City of American Canyon, City of Calistoga, City of Napa, City of St. Helena, the Town of Yountville, and Napa County evaluate discretionary projects subject to CEQA against Bay Area Air District CEQA thresholds for construction-related air pollutant emissions and would be required to implement construction mitigation to reduce emissions exceeding Bay Area Air District thresholds, the same would be the cases for future discretionary projects resulting from RCAAP implementation. Furthermore, all projects within the Bay Area Air District's jurisdiction would be required to follow applicable Bay Area Air District rules, including dust best management practices (BMPs) to limit construction emissions. Projects resulting from RCAAP implementation would also be required to comply with all applicable local regulations and General Plans in the incorporated City of American Canyon, City of Calistoga, City of Napa, City of St. Helena, and the Town of Yountville. Napa County General Plan policies would apply to individual RCAAP-related projects in the unincorporated county. For example, Napa County General Plan Policy CON-85 states that the County shall utilize construction emission control measures required by CARB or the Bay Area Air District and that these measures shall be made conditions of approval and/or adopted as mitigation to ensure implementation. Additionally, Napa General Plan Policy CON-66 includes the requirement that development projects utilize alternative fuels in construction equipment and require construction equipment to utilize the best available technology to reduce emissions, while Policy CON-81 states that the County shall require dust control measures to be applied to construction projects consistent with measures recommended for use by the Bay Area Air District. Similarly, American Canyon General Plan Policy ENV-5.2 requires new development and redevelopment projects to prepare and implement a construction management plan that incorporates best available control measures and BMPs in accordance with the Bay Area Air District's standards to reduce criteria pollutants; and the City's sustainability standards require the use alternative fuels in construction equipment. Calistoga General Plan Policy P6.1-5 commits the city to implementing measures to control dust and PM₁₀. The City of Napa General Plan includes policies that require that development projects incorporate the Bay Area Air District's Basic Construction Mitigation Measures to reduce construction and operational emissions for ROG, NO_x, PM₁₀ and PM_{2.5} (Policy NRC 5-2), the use on BMPs to reduce emission of particulate matter and dust during construction (Policy NRC 5-3), and that all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emission requirements, including use of Tier 4 engines in off-road equipment and cleaner heavy-duty trucks to reduce NO_x and PM exhaust emission levels (Policy NRC 5-4). Notably, inclusion of dust BMPs is required for all construction projects within the Bay Area Air District's jurisdiction to have a less-than-significant impact related to construction PM emissions.

Due to the regional scale of the proposed plan and the programmatic level of this analysis, specific construction-related details (e.g., location, schedule, equipment) for individual land use development projects are not available. Although construction impacts are considered temporary and localized in nature because they are limited to the time during which an individual project is being constructed and confined to areas adjacent to the construction site, there remains the potential for individual projects related to the implementation of the RCAAP to result in construction-related impacts that increase air pollutant concentration levels such that pollutant concentrations would exceed the Bay Area Air District's thresholds, particularly if the Bay Area Air District's fugitive dust BMPs are not incorporated as a component of a future project's design.

Operations

The RCAAP includes strategies and actions that could generate operational air pollutant emissions when implemented. Occasional operation and maintenance activities, such as vehicle use, equipment and facility repair and replacement, tree watering and landscaping, and vegetation management, would be required in response to the implementation of some actions included in the RCAAP (e.g., Actions TR-4-C and AG-5-B). These operation and maintenance activities would occur on an intermittent schedule where activities are minimal (i.e., requiring only small crews of workers using primarily hand tools to complete maintenance and repair tasks) and anticipated to be accomplished with existing personnel in conjunction with existing maintenance activities. While these types of maintenance and operations activities would generate air pollutant emissions, the increase in emissions would be minimal, given the expectation that such activities would be combined with existing maintenance and operations, and overall operational air pollutant emissions would not substantially increase.

Implementation of Action SW-2-A could indirectly expand local capacity at recycling facilities to accommodate increased intake and processing of construction and demolition waste. This could, in turn, result in additional truck hauling trips to recycling facilities because of the increased local construction waste recycling capacity. However, these trips would be diverted from landfills within and outside Napa County and are thus unlikely to induce additional trips compared to baseline trip activity. Rather, truck trips would be redistributed within and outside the county. Therefore, the RCAAP would not significantly increase truck trips or associated operational emissions.

Although the proposed RCAAP is intended to reduce GHG emissions, many of the measures and actions would also have the co-benefit of improving air quality. Implementation of actions such as those that would reduce the combustion of fossil fuels used in the transportation sector (e.g., Actions TR-1-A through TR-1-D, Actions TR-3-A through TR-3-D), and the agriculture sector (e.g., Actions AG-1-A through AG-1-G) would be beneficial in helping to reduce operational air pollutant emissions within the county. Any operational emissions associated with implementing RCAAP measures and actions would be offset by the overall net benefit of emissions reductions from the full suite of programs included in the RCAAP.

Summary

At the program level, the plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. If, through the discretionary review process, the implementing agency identifies that any specific project would have potential to result in effects that exceed those anticipated and disclosed in this checklist evaluation, subsequent environmental review would be required under CEQA. Additionally, implementation of the RCAAP would aid in attainment due to the emissions-reducing characteristics of the RCAAP's measures and actions. For these reasons, implementation of the RCAAP would not result in a cumulatively considerable net increase in air pollutant emissions from construction or operation that would inhibit attainment of the NAAQS and CAAQS. Construction and operation of RCAAP would, therefore, not result in adverse health outcomes, as the NAAQS and CAAQS were specifically developed to be protective of human health.

Construction activities associated with implementation of the RCAAP are not expected to require intensive or prolonged construction activities (e.g., construction requiring consistent use of heavy equipment, large construction crews, large-scale excavation or demolition for an extended time period). However, specific construction-related details (e.g., location, schedule, equipment) for individual land use development projects are not available and there is a potential for individual projects related to the implementation of the RCAAP to result in construction-related impacts that increase air pollutant concentration levels such that pollutant concentrations would exceed the Bay Area Air District's thresholds, particularly if the Bay Area Air District's fugitive dust BMPs are not incorporated as a component of a future project's design. As described above, operational emissions, which would primarily be associated with maintenance activities, are not expected to generate emissions exceeding Bay Area Air District thresholds, and would be offset by the RCAAP's overall reduction in emissions in the county.

The Bay Area air District's thresholds and BMPs are nonbinding recommendations. Although Napa County, American Canyon, and the City of Napa have explicit general plan policies requiring the implementation of the Bay Area Air District's Basic Construction Mitigation Measures, the requirements may not be uniformly applied throughout the region. Because implementation of the RCAAP could result in construction projects that are not required to

implement the Bay Area Air District's BMPs (i.e., projects within jurisdictions that do not have policies expressly requiring implementation of the District's BMPs), including projects that could exceed the established screening levels, this impact would be significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.3-1: For implementation of measures and actions requiring discretionary approval, implementing agencies and/or project sponsors shall include as a condition of grading permit approval the following measures to minimize fugitive dust emissions, which shall be applied throughout the duration of construction activity:

- ▶ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. For projects over 5 acres in size, soil moisture should be maintained at a minimum of 12 percent. Moisture content can be verified by lab samples or a moisture probe.
- ▶ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- ▶ All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.
- ▶ All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour (mph).
- ▶ All roadway, driveway, and sidewalk paving shall be completed as soon as possible. Building pads shall be paved as soon as possible after grading.
- ▶ All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the implementing agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. The Bay Area Air District's Complaint Line (1.800.334.6367) shall also be included on posted signs to ensure compliance with applicable regulations.
- ▶ All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- ▶ All trucks and equipment, including their tires, shall be washed off before leaving the site.
- ▶ Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For fugitive dust emissions, the local regulations must be at least as effective at controlling such emissions as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Mitigation Measure 3.3-2: The implementing agency shall apply the construction site screening guidance in the Bay Area Air District's 2022 CEQA Guidelines. Where screening levels are exceeded, the project sponsor shall require preparation of a project-specific air quality study that identifies applicable methods to reduce criteria air pollutant and precursor emissions to below the Bay Area Air District threshold(s) as set forth in the 2022 CEQA Guidelines. Implementing agencies and/or project sponsors shall implement the measures identified in the air quality study, which shall include the measures below (or equally effective measures) to reduce emissions based on project- and site-specific considerations. Applicable measures shall be included as a condition of grading permit approval and shall be implemented throughout the duration of construction activity:

Construction Best Practices for Exhaust

- ▶ The applicant or general contractor for the project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated for more than 20 hours over the entire duration of project construction,

including equipment from subcontractors, to the Bay Area Air District for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirements:

- Equipment shall be zero emission or have engines that meet or exceed either EPA or CARB Tier 4 off-road emission standards, and it shall have engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.
- Idling time of diesel-powered construction equipment and trucks shall be limited to no more than 2 minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.
- Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites, or propane and natural gas generators may be used when grid power electricity is not feasible.
- Current certificate(s) of compliance with CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation (CCR, Title 13, Sections 2449 and 2449.1) shall be provided.

Construction Best Practices for Fugitive Dust

- ▶ The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities shall be limited.
- ▶ Wind breaks (e.g., trees, fences) with a maximum 50 percent air porosity shall be installed on the windward side(s) of actively disturbed areas of construction.
- ▶ Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. Hydroseed or apply nontoxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.
- ▶ Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
- ▶ Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- ▶ Minimize the amount of excavated material or waste materials stored at the site.
- ▶ Hydroseed or non-toxic soil stabilizers shall be applied to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For construction emissions, the local regulations must be at least as effective at controlling such emissions as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance after Mitigation

With implementation of Mitigation Measures 3.3-1 and 3.3-2, all construction activities would follow the Bay Area Air District recommendations related to construction emissions. Where potential effects related to the generation of construction-related criteria pollutants could occur, agencies or project applicants would be required to complete detailed air quality assessments and to implement recommended measures to reduce construction related emissions. The mitigation measures described above would minimize emissions of criteria air pollutants (e.g., PM₁₀ and PM_{2.5})

and precursors (e.g., ROG and NO_x) by requiring best practices for dust and exhaust emissions through the use of readily available, lower-emitting diesel equipment, and/or equipment powered by alternative cleaner fuels (e.g., propane) or electricity, as well as on-road trucks using particulate exhaust filters. Future discretionary projects that the Napa County Jurisdictions undertake to implement the RCAAP would be evaluated against Bay Area Air District CEQA thresholds for construction-related air pollutant emissions and would be required to implement, at a minimum, the Bay Area Air District's fugitive dust BMPs, and other applicable construction mitigation to reduce emissions exceeding its thresholds. To the extent that an implementing agency requires an individual project to implement the feasible mitigation measures described above, a project's impact would be less than significant with mitigation.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation. The focus of the TAC emissions analysis for the RCAAP is diesel PM. Other TACs (e.g., benzene, 1,3-butadiene, hexavalent chromium, formaldehyde, and methylene chloride) are associated primarily with industrial operations and mobile sources; however, CARB has determined that diesel PM is responsible for the majority (about 70 percent) of California's estimated known cancer risk attributable to TACs (CARB 2012). Regarding operational TACs, the RCAAP does not propose any industrial development, and any potential TAC emissions would result from relatively minor maintenance activities, as discussed below.

Regarding exposure to diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. According to the California Office of Environmental Health Hazard Assessment's Air Toxics Hot Spots Program Risk Assessment Guidelines, exposure of sensitive receptors to TAC emissions should be based on a 30-year exposure period for estimating cancer risk at the maximally exposed individual, with 9- and 70-year exposure periods at the maximally exposed individual as supplemental information. Furthermore, a 70-year exposure period is recommended for estimating cancer burden or providing an estimate of population-wide risk (OEHHA 2015).

Construction

Sensitive receptors are located throughout the county where projects necessary to implement the RCAAP would occur; therefore, the RCAAP could result in construction-related TAC emissions that affect these sensitive receptors. Specific actions that could result in construction-related TAC emissions include expanding EV charging infrastructure (Action TR-3-B); leveraging new development to support ZE vehicles (Action TR-4-C); implementing ZE loading docks (Actions OF-2-A and OF-2-C), reducing fossil fuel use in agricultural equipment (Actions AG-1-D and AG-1-G); increasing the climate resilience of new residential and commercial development (Action ALL-3.2); implementing new parks and trail systems (Measure TEMP-2.2); upgrading communications, energy, public services, and transportation infrastructure to improve extreme heat resilience (Measure TEMP-4.1); maintaining and enhancing flood control, stormwater, and sewage/solid-waste infrastructure (Measures FLOOD-2.3 and FLOOD-3.1); and upgrading and/or relocating infrastructure and critical facilities exposed to flooding hazards (Measure FLOOD-5.1).

As discussed above, the construction activity required to implement these and similar projects is generally small-scale, using small machinery and limited heavy-duty construction equipment, and would involve minimal numbers of construction workers and associated worker vehicle trips. Bike and pedestrian improvements, as well as infill development, may require the use of equipment such as graders, pavers, and trenchers.

Operations

The RCAAP includes measures and actions that could generate operational TAC emissions when implemented. Occasional operation and maintenance activities, such as vehicle use, equipment and facility repair and replacement, tree watering and trimming, landscaping and vegetation management, and irrigation and water-use inspections, would be required in response to the implementation of some actions included in the RCAAP (e.g., Actions TR-4-C and AG-5-B). These operations and maintenance activities would occur on an intermittent schedule, with minimal activities and anticipated completion with existing personnel in conjunction with existing maintenance activities. While

these types of maintenance and operation activities could generate TAC emissions from any diesel fuel consumed, the increase would be minimal, and overall operational emissions would not substantially increase.

As described above, the dose to which receptors are exposed is the primary factor used to determine health risk, and dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Consequently, TAC emissions from stationary sources, such as factories, power plants, or on-site generators, are often of greater concern than emissions from mobile sources, such as those required for occasional maintenance under the RCAAP. Because maintenance activities are anticipated to be accomplished in conjunction with existing maintenance activities, would be relatively small-scale (requiring small crews and minimal, if any, heavy equipment), would occur for short periods of time, and would occur sporadically throughout the county, TAC emissions from operational activities would not be likely to expose receptors to substantial concentrations for an extended period. The Bay Area Air District recommends evaluating localized air quality impacts on sensitive receptors in the immediate vicinity of a project. However, the impacts are based on specific equipment and operations. Because the exact nature, location, timing, and operation of the future projects facilitated by the proposed RCAAP measures and actions are unknown, quantification of localized operational impacts and health risks is not feasible and would be speculative at this program level of analysis.

As stated above, the proposed RCAAP would have the co-benefit of improving air quality and reducing GHG emissions in the county. The proposed RCAAP contains measures and actions that, over time, would reduce overall TAC emissions in the county compared to existing conditions. As described above, transportation-related measures and actions would work in unison to reduce VMT and increase EV usage, both of which would reduce fossil fuel consumption and associated TAC emissions. These include Action TR-4-F (require 50 percent of parking spaces in new development to be EV-capable by 2030), Action TR-4-B (identify locations where hydrogen fueling stations could be built), and Action TR-2-D (continue to monitor winery wastewater treatment trends to identify opportunities to reduce hauling VMT).

The proposed RCAAP also contains measures that would be beneficial in terms of reducing TAC emissions associated with the consumption of fossil fuels for energy production. These include Action BE-1-I (review existing permitting processes for building owners seeking to replace fossil fuel-powered equipment with electric equipment and modify as needed), Action BE-1-J (waive or reduce permitting fees for building retrofit projects that convert mixed-fuel buildings to all-electric and cap natural gas lines), and Action BE-3-A (collaborate with utilities and other partners to offer rebates and incentives for renewable energy and storage).

Action SW-2-A, which would develop a unified Construction Waste Management Plan to require and achieve recycling or reuse of at least 70 percent of construction and demolition waste from every project starting in 2035, could result in increased haul truck trips to and from waste recycling facilities in the county; however, it is anticipated that the haul truck trips to these facilities would be diverted from the landfill and would not constitute new trips. Therefore, a net increase in the number of haul truck trips within the county is not anticipated, and the net increase in diesel emissions, if any, would not be substantial.

Operation of the projects facilitated by the RCAAP measures and actions would primarily involve sporadic, short-term maintenance activities requiring relatively few diesel-powered vehicles or pieces of equipment and potentially some long-term emissions of fugitive dust that would be controlled and regulated through compliance with applicable general plan policies (e.g., Napa County Policy CON-85, Policy CC-54, and Policy CON-84) and Bay Area Air District Rules (e.g., Regulation 6, Rule 1).

Summary

Due to the small scale and sporadic nature of construction projects required to implement the measures and actions under the RCAAP, it is not expected that construction activities would expose receptors to substantial pollutant concentrations for an extended period. However, there is potential for larger construction projects to generate TAC emissions that could expose sensitive receptors to substantial pollutant concentrations. This would be a significant impact prior to mitigation.

Mitigation Measures

Implement **Mitigation Measure 3.3-2** (above).

Significance after Mitigation

The operation of the projects identified in the RCAAP measures and actions would primarily involve sporadic, short-term maintenance activities that would require relatively few diesel-powered vehicles or pieces of equipment. These activities would not generate substantial pollutant concentrations. Further, the RCAAP includes measures and actions that would be beneficial in reducing TAC emissions by helping to reduce fossil fuel combustion in the building energy and transportation sectors. When larger construction projects result in exceedances of applicable screening levels set by the air district during construction, implementing agencies and/or project sponsors would implement the construction best practices for exhaust outlined in Mitigation Measure 3.3-2 to reduce impacts based on project- and site-specific considerations. Therefore, impacts related to TAC emissions would be less than significant with mitigation and would not result in adverse health effects related to the prolonged exposure of receptors to substantial pollutant concentrations.

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

Less than significant impact. Implementation of the RCAAP could result in the construction of new EV charging stations (Measure GHG-07), minor bicycle and pedestrian infrastructure (e.g., bike lanes, bike parking, pedestrian paths) (Measures GHG-11 and GHG-12), new renewable energy systems (Measures GHG-03 and GHG-05), minor residential and commercial retrofits (Measure GHG-04), infill development (Measure GHG-13), and new infrastructure to capture additional landfill gas (Measure GHG-14), and could also involve tree and vegetation planting (Measure GHG-02). Construction activities to implement these measures would require the use of handheld tools and minor construction equipment that would not emit odors adversely affecting a substantial number of people.

Implementation of RCAAP measures that would result in the construction of minor transportation infrastructure (e.g., bicycle and pedestrian facilities) may entail asphalt paving and diesel-truck trips. These types of activities would generally occur in populated residential and commercial areas, but asphalt and diesel PM emissions that generate odors would be minimal, temporary, and highly localized. Because odors would be temporary and would disperse rapidly with distance from the source, construction-generated odors would not adversely affect a substantial number of people. Action SW-2-A could result in the hauling of increased volumes of construction and demolition waste to facilities via truck, which could result in some odors associated with diesel exhaust, but would not adversely affect substantial numbers of people, given the relatively short amount of time any single receptor would be exposed to diesel exhaust odors from truck trips occurring on roadways. Napa County General Plan Policy AQ-3 requires buffers or other appropriate exposure-reduction measures between sensitive land uses and sources of odor, thereby reducing impacts on those uses. All projects under the RCAAP would also be required to comply with Bay Area Air District's Rule 7, "Odorous Substances." In the unincorporated county, Napa County requires that adequate buffers be maintained between air pollution and odor sources and sensitive receptors, such as residences, or that filters or other mitigation be provided to reduce potential exposures to acceptable levels consistent with regulatory requirements (Napa County General Plan Policy CC-54).

Notably, implementing Measure GHG-14 could reduce odors from existing landfills. Capturing landfill gas reduces odors by trapping and converting the gas (composed of methane, CO₂, and other compounds, including siloxanes, odor-causing VOCs, and hydrogen sulfide) into renewable natural gas before it is emitted into the atmosphere, where it may affect receptors as a nuisance odor. Therefore, odor impacts related to the implementation of the proposed RCAAP would be less than significant. No mitigation is required.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

The county is topographically characterized by a series of long, linear, major and lesser valleys, separated by steep ridges and hill systems that run north to south. The county is also located within the California Floristic Province, which is rich in endemic plant species.

Vegetation community and land cover types within the county include grassland, chaparral/scrub, oak woodland, riparian woodland and forest, coniferous forest, wetlands, open water, agricultural cropland, rock outcrops, and developed land (Napa County 2005). These are distributed throughout the county and are comprised of stands of both non-native and native vegetation communities, some of which are classified as sensitive by the California Department of Fish and Wildlife (CDFW). Sensitive natural communities are plant communities that are of limited distribution statewide, or within a county or region, that provide important habitat value to native species and have high potential to support special-status plant and wildlife species. Vegetation alliances and/or associations with state rank of S1 through S3 are considered by CDFW as sensitive natural communities. Vegetation communities with the

rank S1 are considered critically imperiled and at very high risk of collapse, S2 are considered imperiled and are at high risk of collapse, and S3 are considered vulnerable and at moderate risk of collapse. These rankings are based on the range and distribution of a given type of vegetation, and proportion of occurrences that are of good ecological integrity (CDFW n.d.; NatureServe n.d.). CDFW uses the vegetation types described in the Manual of California Vegetation (MCV) to classify natural communities (Sawyer et al. 2009). Vegetation types within the county were not classified based on the MCV classification, but are rather described as general ecosystem types, many of which may contain alliances or associations that are classified by sensitive natural communities, as defined by CDFW.

The vegetation communities and land cover types within the county provide suitable habitat for a wide variety of plant and animal species, including special-status species that are listed, proposed for listing, or candidates for listing as threatened or endangered under the provisions of the federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA); species designated by the CDFW as “fully protected” (FP), “species of special concern” (SSC), or “watch list” (WL); plants listed as rare or threatened under the California Native Plant Protection Act; plants listed by the California Native Plant Society (CNPS) as being “rare, threatened, or endangered in California;”¹ and species that meet the definitions of rare and endangered under CEQA.² There are 117 special-status plant species and 38 special-status wildlife species known to occur within the county, some of which are listed as federally or state endangered, threatened, or candidate species including Clara Hunt’s milk-vetch (*Astragalus claranus*; FE, SE), Tiburon paintbrush (*Castilleja affinis* var. *neglecta*; FE, ST), soft salty bird’s-beak (*Chloropyron molle* ssp. *molle*; FE, SR), Burke’s goldfields (*Lasthenia burkei*; FE, SE), Contra Costa goldfields (*Lasthenia conjugens*; FE), Mason’s lilaeopsis (*Lilaeopsis masonii*; SR), Sebastopol meadowfoam (*Limnanthes vinculans*; FE, SE), few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*; FE, ST), Calistoga popcorn flower (*Plagiobothrys strictus*; FE, ST), Napa blue grass (*Poa napensis*; FE, SE), Keck’s checkerbloom (*Sidalcea keckii*; FE), two-fork clover (*Trifolium amoenum*; FE), Crotch’s bumble bee (*Bombus crotchii*; SCE), western bumble bee (*Bombus occidentalis*; SCE), vernal pool fairy shrimp (*Branchinecta lynchi*; FT), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; FT), California freshwater shrimp (*Syncaris pacifica*; FE, SE), green sturgeon (*Acipenser medirostris* pop. 1; FT), steelhead (*Oncorhynchus mykiss irideus* pop. 8; FT), longfin smelt (*Spirinchus thaleichthys* pop. 2; FE, ST), California red-legged frog (*Rana draytonii*; FT), tricolored blackbird (*Agelaius tricolor*; ST), burrowing owl (*Athene cunicularia*; SCE), Swainson’s hawk (*Buteo swainsoni*; ST), western snowy plover (*Charadrius nivosus nivosus*; FT), bald eagle (*Haliaeetus leucocephalus*; SE), California black rail (*Laterallus jamaicensis coturniculus*; ST), California Ridgeway’s rail (*Rallus obsoletus obsoletus*; FE, SE), bank swallow (*Riparia riparia*; ST), and salt-marsh harvest mouse (*Reithrodontomys raviventris*; FE, SE) (CDFW 2025; CNPS 2025). Critical habitat for two additional species, California tiger salamander (*Ambystoma californiense* pop. 3; FE, ST) and northern spotted owl (*Strix occidentalis caurina*; FT, ST), has been designated within the county, indicating that these species could occur. A full list of special-status species that have been detected or have the potential to occur based on the presence of suitable or critical habitat within the county is included in Appendix B.

The US Fish and Wildlife Service (USFWS) designates critical habitat for the survival and recovery of federally listed endangered or threatened species. Designated critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Critical habitat includes areas for foraging, breeding, roosting, shelter, and movement or migration. Critical habitat designations primarily apply to federal agencies and activities requiring federal permits, licenses, or funding. These areas are crucial for federally endangered and threatened species, and federal agencies must consult with the USFWS to ensure their actions avoid ‘destruction’ or ‘adverse modification’ of designated critical habitat. Critical habitat for Contra Costa goldfields, soft salty bird’s beak, vernal pool fairy shrimp, longfin smelt, western snowy plover, northern spotted owl, and California tiger salamander has been designated by USFWS within the county

¹ California Rare Plant Ranks: CRPR 1A (plants presumed to be extinct in California); CRPR 1B (plants that are rare, threatened, or endangered in California and elsewhere); CRPR 2 (plants that are rare, threatened, or endangered in California but more common elsewhere); CRPR 3 (plants about which more information is needed); and CRPR 4 (plants of limited distribution). CRPR 1B and 2B species meet the definitions of Section 1901 of the Native Plant Protection Act (NPPA) or California Fish and Game Code Sections 2062 and 2067 (CESA) and are eligible for state listing. Many CRPR 3 and 4 species do not meet the definitions of special-status plants but may be significant locally and are recommended for consideration under CEQA (CNPS 2025).

² CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380).

(USFWS 2025). Aquatic resources within the county include freshwater wetlands, salt marshes, streams, and reservoirs. Freshwater wetlands are distributed throughout the county in swales and low-lying areas, while salt marshes are mapped in the tidal areas around the mouth of the Napa River. Approximately 6,650 miles of stream channels, including ephemeral washes, have been mapped within the county, which feed into seven major public reservoirs within the county (i.e., Lake Berryessa, Lake Hennessey, Friesen Lakes, Lake Curry, Rector Reservoir, Bell Canyon Reservoir, and Kimbal Reservoir) and many smaller private reservoirs (Napa County 2005). Although a formal aquatic resource delineation has not been completed for all features within the county boundary, these aquatic resources have potential to be considered waters of the United States or waters of the state that could be regulated and require permits from federal and/or state resource agencies such as the U.S. Army Corps of Engineers (USACE), CDFW, and applicable Regional Water Quality Control Board (RWQCB) for any potential effects.

Wildlife movement areas, or habitat linkages, are areas within the overall range of a species or suite of species that possess sufficient cover, food, forage, water, and other essential elements for their survival within one contiguous movement pathway, or between two or more larger areas of habitat. Depending on the species, linkages can vary in size and may include wildlife corridors, migration corridors, and areas of essential habitat connectivity (including landscape blocks and smaller connective areas). A functional network of interconnected open spaces is required to effectively support habitat linkages and corridors. Larger tracts of natural habitat and the linkages between them that are important for wildlife movements, ecological range shifts, and other ecological flows (termed "Essential Connectivity Areas") have been identified by CDFW and the California Department of Transportation (Caltrans) in the California Essential Habitat Connectivity Project (CDFW 2010). The county contains extensive and contiguous sections of Essential Connectivity Areas as identified by CDFW and Caltrans.

3.4.2 Discussion

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

Less than significant impact with mitigation. As described above, 117 special-status plant species and 38 special-status wildlife species are known to occur within the county. In addition, USFWS-designated critical habitat for Contra Costa goldfields, soft salty bird's beak, vernal pool fairy shrimp, longfin smelt, western snowy plover, northern spotted owl, and California tiger salamander is present within the county. Nesting birds protected under the Migratory Bird Treaty Act (MBTA) are also present within the county. In addition, development could affect sensitive natural communities (discussed further under criterion b, below), which indirectly affect candidate, sensitive, or special-status species. The RCAAP is a policy-level document that does not include any site-specific designs or proposals and does not grant any entitlements for development; however, implementation of the RCAAP GHG reduction and adaptation measures may require future development that could result in direct and indirect impacts to these resources.

Construction or ground disturbance could result in impacts to special-status plants and wildlife species, their habitats, USFWS-designated critical habitat, or nesting birds under the MBTA. Measures and associated actions that have a reasonably foreseeable potential to result in these effects include: Action TR-4-C, which could result in installation of a hydrogen fueling station; Action BE-3-A, which could indirectly result in installation of rooftop solar and battery storage; Action TR-3-B, which could result in installation of EV charging infrastructure in existing parking lots; Actions OF-2-A and OF-2-C, which would commit all Napa County Jurisdictions to electrification of existing commercial loading docks; Actions AG-1-D and AG-1-G, which would result in replacement of irrigation pumps; Action TEMP-2.2, which would prioritize new urban parks and trail systems in communities that lack access; Action FLOOD-5.1, which could result in relocation of infrastructure; Action ENERGY-2.1, which could result in installation of barriers and floodgates; Action TEMP-4.1, which could result in upgrades of communication, energy, public service, and transportation infrastructure; Action FLOOD-2.3, which would enhance capacity of stormwater infrastructure; Action FLOOD-3.1, which would improve sewage and solid waste infrastructure; and Action ALL-7.1, which would promote biodiversity and enhance species' climate resilience by implementing nature-based solutions and green infrastructure.

Implementation of many of these RCAAP measures would be limited to previously disturbed areas within the county; however, special-status plant and wildlife species, as well as nesting birds protected under the MBTA, may still be present in disturbed or developed areas and could be directly or indirectly affected by construction activities. In addition, measures that could result in vegetation management, including Actions ALL-3.2, ALL-7.1, and FIRE-5.3, could result in impacts to special-status plant and wildlife species, their habitat, USFWS-designated critical habitat, and nesting birds, if present.

Direct impacts on special-status plant and wildlife species and/or nesting birds could result from mortality or injury from use of heavy construction equipment during construction activity or vegetation removal. Direct impacts to critical habitat could also occur due to construction or ground disturbance that results in conversion of critical habitat. Indirect impacts may occur to special-status plant and wildlife species and/or nesting birds from increased construction noise, lighting, human presence, and/or introduction of nonnative weed species during construction or vegetation removal activities, which could result in a loss of suitable habitat for these species. Construction activities may also require the use of materials like fuels and lubricants that have potential to degrade habitat for special status species if improperly used and stored. Additionally, during operation, any new facilities located in currently undeveloped areas could result in indirect impacts to special-status plant and wildlife species and/or nesting birds from increased noise, lighting, and human presence that could result in loss of suitable habitat for these species.

However, implementation of the proposed GHG reduction and adaptation measures would also result in the preservation and protection of vegetation communities and land cover that could support special-status species or their habitats in the long-term. The RCAAP may result in actions that reduce adverse effects on biological resources through the development of programs that support restoration of woodland and forest habitat (Measure AG-6), establishing post-fire ecological recovery programs (Measure FIRE-2), monitoring key metrics of forest health and wildfire resilience (Action FIRE-5.2), prioritization of restoration efforts by assessing and mapping areas of bare soil (Action FLOOD-6.1), and conserving undeveloped land to facilitate ecosystem adaptation in areas prone to sea level rise. These co-benefits of RCAAP implementation could improve conditions for special-status species and their habitats overall.

Future projects would be required to comply with the applicable policies for protecting biological resources included in the pertinent general plan (i.e., the Napa County General Plan, the City of American Canyon General Plan, the City of Calistoga General Plan, the City of Napa 2040 General Plan, the City of St. Helena 2040 General Plan, and the Yountville General Plan) and the regulations related to the protection of biological resources included in the applicable jurisdiction's Municipal Code. Projects in the unincorporated county would also be evaluated for consistency with the County's Conservation Regulations (Chapter 18.108). In addition, future projects that implement the RCAAP would be required to comply with all federal and state regulations and requirements regarding protections for special-status plants and wildlife, and their habitats.

As described above, there are a variety of projects that may result from the policy commitments in the RCAAP. This analysis evaluates the full scope of typical effects based on known resources in the county and the scope of project commitments in the RCAAP. At the project level, some construction and ground disturbance or vegetation removal activities may occur in locations that could support special-status species and project activities could result in direct and indirect impacts to these species or their habitats. Where project construction would occur in areas with potential to support special-status species, compliance with local, state, and federal regulations that require the identification and reduction of potential impacts to these species would generally reduce the effects of implementing specific projects. However, because the location and design of future projects have not been developed, the effects of all potential construction activities and the effectiveness of regulatory compliance at minimizing or avoiding substantial adverse effects on special-status species cannot be confirmed. Therefore, because adoption and implementation of the RCAAP could result in construction and ground disturbance or vegetation clearing activities with potential for substantial effects on special-status species, their habitats, USFWS-designated critical habitat, and/or nesting birds protected under the MBTA, there would be a significant impact prior to mitigation.

Mitigation Measures

Mitigation Measure 3.4-1: For implementation of measures and actions requiring discretionary approval, the implementing agency shall require a qualified biologist, as approved by the Napa County Jurisdiction serving as the lead agency for project-level implementation, to conduct vegetation mapping and reconnaissance surveys to determine whether a project would occur in a location that could include habitat for candidate, sensitive, or special-status species. These initial reconnaissance surveys shall occur following the identification and preliminary design of a project and prior to the commencement of construction activities within a project site and a 500-foot buffer. Vegetation mapping shall be conducted according to floristic alliance- and/or association-based mapping protocols consistent with CDFW natural communities or other locally approved vegetation classification system to identify whether the project area is classified as sensitive habitat by CDFW or has the potential to support special-status species. Any suitable habitat identified to support special-status plants, invertebrates, fish, amphibians, reptiles, and/or mammals, sensitive natural communities, or potentially jurisdictional aquatic resources shall be identified and mapped.

If no suitable habitat identified to support these special-status resources and no nesting bird habitats are present within the survey area, then no further mitigation is necessary. If any suitable habitat for candidate, sensitive, or special-status species are detected, and it is determined that the project would have the potential to impact candidate, sensitive, or special-status species of their habitat, then Mitigation Measures 3.4-2, 3.4-3, 3.4-4 and/or 3.4-5, shall be implemented, as applicable.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For purposes of identifying habitat, as described above, the local regulations must be at least as effective at surveying for special-status species and habitat as the survey protocols identified above and require that such surveys be conducted by a qualified biologist.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Mitigation Measure 3.4-2: If suitable habitat for candidate, sensitive, or special-status species are identified in the initial reconnaissance survey conducted pursuant to Mitigation Measure 3.4-1, and it is determined that the project would have the potential to impact candidate, sensitive, or special-status species of their habitat, a biological resources memorandum shall be conducted for the specific project site(s). The memorandum shall document any endangered, threatened, rare, or other special-status species detected or with potential to occur along with any suitable habitat present. Any focused surveys required to determine the presence/absence of special-status species shall be conducted according to established CDFW or USFWS protocols, as applicable, and results shall be valid for 24 months from survey completion. The implementing agency shall require that this biological resources memorandum be prepared by a qualified biologist prior to the start of construction activities on a project site.

The biological resource memorandum shall describe the results of the vegetation mapping and reconnaissance survey and shall assign appropriate measures based on those results and the project impacts. Depending on the sensitive biological resources present and project activities proposed, the measures described in the biological resources memorandum shall be based on applicable federal and state legal requirements and permit approval conditions for permits issued by the city or other agencies such as the state and federal resource agencies (CDFW, USFWS) and include the following, as determined necessary by the qualified biologist to ensure that the project would not have a substantial adverse effect on candidate, sensitive, or special-status species or their habitat:

- General construction best management practices: Require construction contractors to adhere to the following general construction best management practices during construction:

- Construction vehicles shall limit speed to 10 miles per hour in unpaved areas.
 - Open excavations shall be fenced and/or sloped to prevent entrapment of wildlife species or have wildlife ramps available to allow for escape.
 - All vehicle and equipment maintenance shall be performed in designated staging areas.
 - Access to construction areas shall be limited to established work hours.
 - If construction activities must be performed at night, all lighting shall be shielded and directed downwards to minimize light spillover and/or glare.
 - All construction equipment shall be properly maintained to avoid leaks of oil, fuel, or residues.
 - Provisions shall be in place to remediate accidental spills from construction equipment or other construction activities. All vehicle maintenance/fueling/staging shall occur a minimum of 100 feet away from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
 - No equipment shall be permitted to enter wetted portions of any affected drainage channel.
 - Any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman and the appropriate Napa County Jurisdiction.
- ▶ Worker environmental awareness training: A qualified biologist shall be retained to conduct a pre-construction worker environmental awareness training for all personnel working at the construction site. The worker environmental awareness training shall educate workers about special-status species identification and regulated biological resources known to occur or potentially occur on the site, and avoidance buffers and measures necessary to avoid and/or minimize potential impacts to biological resources.
 - ▶ Invasive plant species control measures: Construction contractors shall be required to ensure that equipment is free of invasive plant seeds, propagules, and any material that may contain them (e.g., soil). For purposes of this measure, invasive plant species are all species with a Cal-IPC rating of moderate or high. Prior to entering the construction site, equipment shall be inspected to confirm that it is free of mud, dirt, and debris. For larger sites accessed via non-paved roads, tire track stations should be installed at the construction site entrances and exits. Staging areas and access routes shall avoid weed infestations, and infestations within the work area(s) should be flagged and avoided. Only certified weed-free materials (e.g., fiber rolls, straw, and fill) shall be used during construction.
 - ▶ Pre-construction surveys: A preconstruction survey shall be conducted by a qualified biologist within 14 days prior to the start of construction. The surveys shall cover the entire project footprint and a 200-foot buffer and shall identify all special-status wildlife species that may occur on-site. If any special-status species are detected within or near construction areas, an appropriate setback buffer, as recommended by the qualified biologist based on species and/or behavior observed, shall be established.
 - ▶ Biological monitoring: A qualified biologist shall be present during construction activities as necessary to ensure avoidance of impacts to sensitive biological resources. The qualified biologists shall recommend appropriate setback buffers for the protection of biological resources, where necessary, and shall have the authority to temporarily stop work if special-status species are observed that may be impacted by project activities. The biologist can recommend actions to ensure compliance with avoidance and minimization measures and applicable permit conditions related to the protection of biological resources.
 - ▶ Agency consultation: If a future project may impact endangered/threatened wildlife species and/or occupied habitats, the implementing agency or project sponsor shall consult with CDFW and USFWS to ensure compliance with FESA and/or CESA, as applicable. All necessary permits shall be obtained.
 - ▶ Critical habitat: If USFWS-designated critical habitat could be impacted by a project; there is a federal nexus for the project; and the habitat to be impacted contains the physical and biological features necessary to support the

federally listed species (as defined in the Federal Register designating critical habitat for that species), then consultation with the USFWS shall be required and could include additional special conditions from the USFWS biological opinion.

The above conditions shall be implemented, as applicable, on a project specific basis in order to avoid, minimize, and/or compensate for substantial adverse direct and indirect impacts on special-status species or their habitat, as determined by the qualified biologist and based upon agency standards.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For purposes of impacts to special-status species, the local regulations shall be at least as effective at avoiding impacts as the measures identified above as determined by a qualified biologist.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Mitigation Measure 3.4-3. If suitable habitat for special-status nesting birds is identified during the reconnaissance survey (conducted pursuant to Mitigation Measure 3.4-1), a pre-construction nesting bird survey shall be conducted no more than 14 days prior to the initiation of the construction activity and/or vegetation removal activities for construction activities during the nesting bird season (February 1-September 15) that could disrupt nesting behavior or affect habitats suitable for nesting birds. The nesting bird pre-construction survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur within the county and shall include a survey of the project site and a 500-foot buffer, unless a smaller buffer is warranted based on project conditions and approved by the project's qualified biologist. If an active nest (or nests) is identified, an avoidance buffer (the size of which is at the discretion of the qualified biologist, dependent on the species, proposed work activities, and existing disturbances associated with the site) shall be demarcated with bright orange construction fencing, flagging, or a clear visible marker delineating the boundary. No construction activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is complete and the young have fledged. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to active nesting behavior. Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and are prohibited. Any act associated with flushing birds from project areas shall undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For purposes of impacts to special-status nesting birds, the local regulations shall be at least as effective at avoiding impacts as the measures identified above as determined by a qualified biologist.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by

reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measures 3.4-1 through 3.4-3. Mitigation Measure 3.4-1 requires that a qualified biologist conduct vegetation mapping and a reconnaissance survey to identify the presence of candidate, sensitive, or special-status species and/or their habitats. If candidate, sensitive, or special-status species and/or their habitats, are identified during implementation of Mitigation Measure 3.4-1, the future project would implement Mitigation Measure 3.4-2, which requires preparation of a biological resources memorandum and the implementation of measures such as general construction best management practices, pre-construction surveys, biological monitoring, and agency consultation, as necessary. Furthermore, if the vegetation mapping and reconnaissance survey conducted pursuant to Mitigation Measure 3.4-1 identifies the presence of suitable nesting bird habitat, Mitigation Measure 3.4-3 would be implemented. Mitigation Measure 3.4-3 requires that a pre-construction nesting bird survey be conducted and no-disturbance buffers be established, if necessary. With the implementation of these measures, impacts to special-status species and their habitats, USFWS-designated critical habitat, and nesting birds protected under the MBTA would be reduced. The impact would be less than significant with mitigation.

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

Less than significant impact with mitigation. The county comprises land cover types such as grassland, chaparral/scrub, oak woodland and forest, coniferous forest, and wetlands that may include riparian habitat and sensitive natural communities (see criterion c, below, for a discussion of effects on wetlands). The RCAAP is a policy-level document that does not include any site-specific designs or proposals and does not grant any entitlements for development. However, implementation of the RCAAP GHG reduction and adaptation measures may require future development that could result in adverse effects on riparian habitat or other sensitive natural communities.

Measures and associated actions that have a reasonably foreseeable potential to result in construction or ground disturbance and that could result in impacts to sensitive natural communities from habitat conversion include: Action TR-4-C, which could result in installation of a hydrogen fueling station; Action TEMP-2.2, which prioritize new urban parks and trail systems in communities that lack access; Action FLOOD-5.1, which could result in relocation of infrastructure; Action ENERGY-2.1, which could result in installation of barriers and floodgates; Action TEMP-4.1, which could result in upgrades of communication, energy, public service, and transportation infrastructure; Action FLOOD-2.3, which would enhance capacity of stormwater infrastructure; and Action FLOOD-3.1, which would improve sewage and solid waste infrastructure. In addition, measures that could result in vegetation management, including Actions ALL-3.2, ALL-7.1, and FIRE-5.3, could result in direct effects to sensitive natural communities. Many of these RCAAP measures would be implemented in developed areas that are not identified in local or regional plans, policies, or regulations, or by CDFW or USFW, as sensitive natural communities. However, some projects that require construction or ground disturbance, or vegetation clearing – particularly those that would support climate change adaptation—could be located in undeveloped areas with the potential to support riparian habitats or sensitive natural communities. Specific locations for these actions would be identified at the project level.

While effects to riparian habitats and sensitive natural communities could occur, as described above, the RCAAP may also result in the preservation and protection of sensitive natural communities. More specifically, the RCAAP may result in actions that reduce adverse effects on these biological resources through programs that support restoration of woodland and forest habitat (Measure AG-6), establishing post-fire ecological recovery programs (Measure FIRE-2), supporting the prioritization of restoration efforts by assessing and mapping areas of bare soil (Action FLOOD-6.1), and conserving undeveloped land to facilitate ecosystem adaptation in areas prone to sea level rise. Future projects would be consistent with applicable regulations, including local regulations that generally support avoidance of sensitive natural communities.

As described above, there are a variety of projects that may result from the policy commitments in the RCAAP. This analysis evaluates the full scope of typical effects based on known resources within the county and the scope of commitments in the RCAAP. Although the RCAAP includes in its program actions that are supportive of overall ecosystem health and habitat preservation, there is potential for individual projects necessary to implement the RCAAP to result in project-specific effects on discrete riparian habitats or other sensitive natural communities. The potential for effects cannot be further defined because the specifics of these projects, including location and design, are not available and cannot be known before the RCAAP is adopted and implementation of the measures and actions begins. Therefore, the impact is significant prior to mitigation.

Mitigation Measures

Implement Mitigation Measures 3.4-1 and 3.4-2 (above).

Mitigation Measures 3.4-4: If sensitive natural communities and/or jurisdictional aquatic resources are identified in the initial reconnaissance survey conducted pursuant to Mitigation Measure 3.4-1, and it is determined that the project would have the potential to impact sensitive natural communities and/or jurisdictional aquatic resources, a biological resources memorandum shall be conducted for the specific project site(s). This memorandum may be prepared in conjunction with the memorandum prepared pursuant to Mitigation Measure 3.4-2 or under a separate cover. Natural communities shall be identified according to floristic alliance- and/or association-based mapping protocols consistent with CDFW natural communities or other locally approved vegetation classification system and mapped within the project site, consistent with the requirements of Mitigation Measure 3.4-1, above.

If sensitive natural communities are found within the project limits, the implementing agency or project sponsor shall design or modify the project to avoid direct and indirect impacts on these habitats. To avoid impacts, the lead Napa County Jurisdiction shall require that, prior to construction, orange construction barrier fencing be installed to identify buffer areas around sensitive natural communities. Buffer size shall be established in compliance with the requirements of the Napa County Conservation Regulations (Chapter 18.108 of the Napa County Municipal Code), or as determined appropriate by the qualified biologist. The location of fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period. Project activities (e.g., ground disturbance, vegetation removal, staging) would be prohibited within the established buffer. The qualified biologist shall periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and sensitive natural community impacts are being avoided.

If sensitive natural communities, including oak woodlands, cannot be avoided and are impacted as part of an individual project, the lead Napa County Jurisdiction shall require compensatory mitigation for impacts to these resources. Individual project compensatory mitigation ratios shall be based on site-specific information and determined by the implementing agency. Compensatory mitigation may include any combination of creation/re-establishment, restoration, and/or purchase of compensatory mitigation credits at an approved mitigation bank so long as the mitigation proposed achieves no-net loss (i.e., mitigation must be provided in the form of creation/re-establishment at a minimum ratio of 1:1), or preservation so long as like habitat is preserved at a 2:1 ratio or greater as determined by the implementing agency. The implementing agency shall require the development and implementation of a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, details of restoration/creation/enhancement (e.g., plant palette, soils, irrigation design standards and requirements), specific monitoring periods and reporting guidelines, and a maintenance plan. In general, compensatory mitigation is monitored for a minimum of 5 years and is considered successful when at least 75 percent cover (or greater percentage cover considered appropriate for the vegetation type, as determined by the qualified biologist based on the selected vegetation) of installed vegetation has become successfully established. Remedial measures shall be implemented (e.g., replanting, reseeding, grading adjustments, supplemental irrigation, access control, increased weed control, and extended maintenance and monitoring periods) if the success criteria are not achieved. After final success criteria have been met and relevant permitting agencies have approved the mitigation project as complete, all mitigation areas shall be permanently conserved (e.g., conservation easement) and managed in perpetuity.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For purposes of impacts to sensitive natural communities and jurisdictional aquatic resources, the local regulations shall be at least as effective at avoiding impacts as the measures identified above as determined by a qualified biologist.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measures 3.4-1 and 3.4-2. Future RCAAP projects would implement Mitigation Measure 3.4-1, which requires vegetation mapping and a reconnaissance survey to identify the potential for presence of candidate, sensitive, or special-status species. If suitable habitat for candidate, sensitive, or special-status species are identified in the initial reconnaissance survey conducted pursuant to Mitigation Measure 3.4-1, the project would implement Mitigation Measure 3.4-2. Mitigation Measure 3.4-2 requires preparation of a biological resources memorandum and implementation of measures such as general construction best management practices and pre-construction surveys. In addition, if aquatic resources, including riparian habitat, are identified during the implementation of Mitigation Measure 3.4-1, Mitigation Measure 3.4-4 requires that adverse effects on state- and federally protected wetlands, including riparian habitat, are addressed through avoidance or, where avoidance is not possible, compensatory mitigation.

These mitigation measures would result in avoidance, minimization, or compensatory mitigation for project-related impacts to sensitive biological resources, including riparian habitat or sensitive natural communities. The impact would be less than significant with mitigation.

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

Less than significant impact with mitigation. As described above, aquatic resources within the county include freshwater wetlands, salt marshes, streams, and reservoirs that may be considered state or federally protected wetlands. The RCAAP is a policy-level document that does not include any site-specific designs or proposals and does not grant any entitlements for development. However, implementation of the RCAAP GHG reduction and adaptation measures may require future development that could result in impacts to state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Measures and associated actions that have a reasonably foreseeable potential to result in construction or ground disturbance and that could result in substantial adverse effect on state or federally protected wetlands include: Action TR-4-C, which could result in installation of a hydrogen fueling station; Action TEMP-2.2, which prioritize new urban parks and trail systems in communities that lack access; Action FLOOD-5.1, which could result in relocation of infrastructure; Action ENERGY-2.1, which could result in installation of barriers and floodgates; Action TEMP-4.1, which could result in upgrades of communication, energy, public service, and transportation infrastructure; Action FLOOD-2.3, which would enhance capacity of stormwater infrastructure; and Action FLOOD-3.1, which would improve sewage and solid waste infrastructure. Many of these RCAAP measures would be implemented in developed areas that do not contain state or federally protected aquatic resources. However, some projects that require construction or ground disturbance, or vegetation clearing – particularly those that would support climate change adaptation – may be located in less developed areas that include state or federally protected wetlands. Specific locations for these actions would be identified at the project level.

In the long term, the RCAAP may result in a net benefit to wetlands and other waters. Through Action FLOOD-4.2, the Napa County Jurisdictions would advance wetland restoration projects that provide multiple resilience benefits because wetlands create natural buffers, replenishing aquifers, and reducing flood risks for nearby communities while supporting biodiversity and long-term ecosystem health. Through Action ALL-7.1, the Napa County Jurisdictions would partner with the Napa RCD to advance habitat restoration efforts, with emphasis on wetlands, riparian areas, and wildlife corridors, to support ecosystem connectivity and long-term resilience. Other potentially beneficial RCAAP actions include investments in green stormwater infrastructure (Action FLOOD-2.1) and identification of new locations suitable for multi-benefit flood control projects (Action FLOOD-4.1). While these future projects would likely result in an overall beneficial effect on wetlands and other waters, these projects could also result in temporary effects on these resources through direct removal, filling, or hydrological interruption of protected wetlands. As described above, there are a variety of projects that may result from the policy commitments in the RCAAP. This analysis evaluates the full scope of typical effects based on known resources within the county and the scope of commitments in the RCAAP. Implementation of the RCAAP would include investments in infrastructure that would likely result in an overall beneficial impact on wetlands and other waters, and is not generally anticipated to result in substantial effects to state or federally protected wetlands because there are limited future projects within the program with the potential to result in direct removal, filling, hydrological interruption, or other means. However, RCAAP implementation could result in temporary effects on these resources during construction of individual projects. The extent of these effects cannot be further defined, because the specifics of these projects, including location and design, are not available and cannot be known before the RCAAP is adopted and implementation of the measures and actions begins. Therefore, the impact is significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.4-5: If aquatic resources are identified within a project site during the reconnaissance survey (conducted pursuant to Mitigation Measure 3.4-1), the implementing agency shall require that a qualified biologist perform a wetland delineation. For aquatic resources that may be considered waters of the U.S. based on current federal guidance at the time of project implementation, the delineation will comply with the 1987 *Corps of Engineers Wetland Delineation Manual* and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*.

If wetlands, riparian habitat, or other sensitive aquatic resources are found within the project limits, the Napa County Jurisdiction implementing the project shall prioritize the preservation of sensitive natural communities through project designs that avoid direct and indirect impacts on these habitats. Where avoidance will occur, the implementing agency shall require that, prior to construction, orange construction barrier fencing be installed to identify buffer areas around aquatic resources. Buffer size shall be established in compliance with the requirements of the Napa County Conservation Regulations (Chapter 18.108 of the Napa County Municipal Code), or as defined by the agency with regulatory authority over the resource(s). The location of fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period. Project activities (e.g., ground disturbance, vegetation removal, staging) shall be prohibited within the established buffer. The qualified biologist shall periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.

If wetlands or other aquatic resources cannot be avoided, the implementing agency shall require compensatory mitigation for any loss of these resources to achieve, at a minimum, no-net loss of aquatic resource area. Individual project compensatory mitigation ratios shall be based on site-specific information and determined at the project level by the implementing agency. The mitigation ratio(s) assigned by the implementing agency shall be consistent with the mitigation ratios assigned in any applicable state, federal, and/or local agencies (i.e., regulatory agencies) permit authorization or verification. For any project where wetland impacts are proposed and the applicable regulatory agencies' mitigation ratios are either unknown or have not yet been determined at the time of submittal, the compensatory mitigation ratio shall be assigned a minimum ratio of 2:1 for all wetland impacts.

Compensatory mitigation may include any combination of creation/re-establishment, restoration, enhancement, preservation, and/or purchase of compensatory mitigation credits at an approved mitigation bank so long as the mitigation proposed achieves no-net loss (i.e., mitigation must be provided in the form of creation/re-establishment

at a minimum ratio of 1:1). The implementing agency shall require the development and implementation of a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, details of restoration/creation/enhancement (e.g., plant palette, soils, irrigation design standards and requirements), specific monitoring periods and reporting guidelines, and a maintenance plan. In general, compensatory mitigation is monitored for a minimum of 5 years and is considered successful when at least 75 percent cover (or greater percentage cover considered appropriate for the vegetation type, as determined by the qualified biologist based on the selected vegetation) of installed vegetation has become successfully established. Remedial measures shall be implemented (e.g., replanting, reseeding, grading adjustments, supplemental irrigation, access control, increased weed control, and extended maintenance and monitoring periods) if the success criteria are not achieved. After final success criteria have been met and relevant permitting agencies have approved the mitigation project as complete, all mitigation areas shall be permanently conserved (e.g., conservation easement) and managed in perpetuity.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. The local regulations must be at least as effective at avoiding and compensating for the loss of wetlands as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Significance after Mitigation

If aquatic resources, including riparian habitat, are identified during the implementation of Mitigation Measure 3.4-1, the project would implement Mitigation Measure 3.4-5. With the implementation of Mitigation Measure 3.4-5, adverse effects on state- and federally protected wetlands would be addressed through avoidance or, where avoidance is not possible, compensatory mitigation. Mitigation for wetland impacts would be based on project-specific wetland mitigation plans, subject to approval by applicable State, federal, and local agencies. With the implementation of Mitigation Measure 3.4-5, the impact would be less than significant.

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

Less than significant impact with mitigation. As described above, Essential Connectivity Areas for wildlife movement are located within Napa County. The RCAAP is a policy-level document that does not include any site-specific designs or proposals and does not grant any development entitlements. However, given the documented presence of movement corridors in the county and the fact that the locations of future projects have not yet been identified, implementation of the RCAAP GHG reduction and adaptation measures could result in short-term and/or long-term impacts on wildlife movement.

Measures and associated actions that have a reasonably foreseeable potential to result in construction or ground disturbance that could result in impacts to wildlife movement corridors from development and increased lighting, noise, and human presence include: Action TR-4-C, which could result in installation of a hydrogen fueling station; Action TEMP-2.2, which would establish new urban parks and trail systems; Action FLOOD-5.1, which could result in relocation of infrastructure; Action ENERGY-2.1, which could result in installation of barriers and floodgates; Action TEMP-4.1, which could result in upgrades of communication, energy, public service, and transportation infrastructure;

Action FLOOD-2.3, which would enhance capacity of stormwater infrastructure; and Action FLOOD-3.1, which would improve sewage and solid waste infrastructure. In addition, operation of any new facilities located in currently undeveloped areas could result in impacts to wildlife movement corridors from increased noise, lighting, and human presence. Furthermore, implementation of RCAAP actions that could result in vegetation management including Actions ALL-3.2, ALL-7.1, and FIRE-5.3 could reduce the quality or extent of natural habitat areas and/or wildlife movement corridors. Many of these RCAAP measures would be implemented in developed areas that do not support wildlife movement. However, some projects that require construction or ground disturbance, or vegetation clearing – particularly those that would support climate change adaptation – may be located in less developed areas that may serve as wildlife movement corridors. Specific locations for these actions would be identified at the project level.

As described above, there are a variety of projects that may result from the policy commitments in the RCAAP. This analysis evaluates the full scope of typical effects based on known resources within the county and the scope of the commitments in the RCAAP. Although the RCAAP includes in its program actions that are supportive of overall ecosystem health and habitat preservation, there is potential for individual projects necessary to implement the RCAAP to result in project-specific effects on wildlife movement and the quality of wildlife movement corridors. Because the specifics of these projects, including location and design, are not available and cannot be known before the RCAAP is adopted and implementation of the measures and actions begins, the impact is significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.4-6: For implementation of measures and actions requiring discretionary approval, where projects will traverse or interface with an existing wildlife corridor or intersect with areas identified as Essential Connectivity Areas by CDFW and Caltrans (CDFW 2010), the implementing agency shall require the project proponent or the contractor working on their behalf to implement measures that allow wildlife to move through an existing wildlife corridor, both during and after construction. These measures, which shall be approved by the implementing agency prior to final design and construction, shall include some or all of the following, as determined applicable by the implementing agency:

- ▶ Design projects to minimize impacts on wildlife movement and habitat connectivity and preserve existing and functional wildlife corridors;
- ▶ Design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches;
- ▶ Consult relevant publicly available datasets and guidance documents regarding wildlife movement and habitat connectivity during the project design phase, including but not limited to statewide and regional guidance (e.g., California Regional Barriers 2020);
- ▶ Retain a qualified biologist, as approved by the implementing agency, to conduct site-specific analyses of opportunities to preserve or improve habitat linkages within areas on- and off-site;
- ▶ Use wildlife-friendly fences that allow larger wildlife, such as deer, to jump over (i.e., no greater than 4-5 feet tall on average) and smaller wildlife to move under (by leaving a gap under the fence);
- ▶ Limit wildland conversions in identified wildlife corridors such that the function of the wildlife corridor is not impaired;
- ▶ Retain wildlife-friendly vegetation in and around developments (e.g., native plant species; vegetation that provides sufficient cover, nesting, or foraging opportunities; mature trees; and riparian vegetation);
- ▶ Monitor and maintain fencing, under crossings, and/or other crossing structures as needed to ensure corridor permeability and functionality;
- ▶ Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 Section 460 of the CCR (protecting fur-bearing mammals), during the breeding season;

- ▶ Comply with existing local regulations and policies, (e.g., Napa County Conservation Regulations [Chapter 18.108 of the Napa County Code]).

If the project cannot be designed with these measures, the implementing agency shall consult with CDFW to determine appropriate measures to minimize direct and indirect impacts and implement measures to mitigate impacts on wildlife corridors to ensure that substantial interference of native species movement does not occur.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For wildlife movement, the local regulations must be at least as effective at allowing wildlife to move through an existing wildlife corridor, both during and after construction, as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Note: The implementing agency shall determine the specific qualifications required of a qualified biologist based on the resources requiring analysis and the standards established by the applicable resource agencies. Generally, a qualified biologist is someone who can conduct biological field surveys and habitat assessments, identify species and map biological resources accurately, prepare biological technical reports recognized by reviewing agencies, and interpret and apply relevant ecological and regulatory standards to assess impacts and recommend mitigation measures.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would implement Mitigation Measure 3.4-6, which requires projects that traverse or interface with an existing wildlife corridor or Essential Connectivity Area to incorporate viable design measures to allow for the movement of species during and after construction. Impacts to wildlife movement would be less than significant with mitigation.

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

Less than significant impact. Local policies or ordinances protecting biological resources adopted by the Napa County Jurisdictions include the following:

- ▶ Napa County General Plan Conservation Element, which includes goals, policies, and implementation actions related to the protection of biological resources (Napa County 2008);
- ▶ Napa County Municipal Code Chapter 18.108, which includes regulations for stream setbacks and tree and riparian vegetation protection;
- ▶ Napa County Municipal Code Chapter 16.04, which includes requirements pertaining to floodplain management;
- ▶ City of American Canyon General Plan Natural and Historic/Cultural Resources Element, which includes goals, objectives, and policies related to the protection of biological resources (City of American Canyon 2025);
- ▶ City of American Canyon Municipal Code Chapter 18.40, which includes provisions for the preservation of trees for residential subdivisions;
- ▶ City of American Canyon Municipal Code Chapter 19.24, which includes provisions for the protection, preservation, and enhancement of significant biological habitats, plants, and wildlife;
- ▶ City of Calistoga General Plan Open Space and Conservation Element, which includes goals, objectives, and policies for the protection of natural resources (City of Calistoga 2003);
- ▶ City of Calistoga Municipal Code Chapter 19.01, which includes provisions for the protection of trees;
- ▶ City of Calistoga Municipal Code Chapter 19.08, which includes provisions for the preservation of natural resources;

- ▶ City of Napa 2040 General Plan Natural Resources Conservation Element, which includes goals and implementing policies for the protection of habitat and wildlife, as well as open space and natural areas (City of Napa 2022);
- ▶ City of Napa Municipal Code Chapters 12.44 and 12.45, which include provisions for the protection of trees on public and private property;
- ▶ City of Napa Municipal Code Chapter 17.52, which includes provisions for the protection of wetlands and marshes;
- ▶ City of St. Helena 2040 General Plan Open Space and Conservation Element, which includes policies and implementing actions addressing natural habitat and biodiversity, open space, and water resource protection and conservation (City of St. Helena 2019);
- ▶ City of St. Helena Municipal Code Chapter 12.24, which includes provisions for the protection of trees and other vegetation;
- ▶ Town of Yountville General Plan Open Space and Conservation Element, which includes goals, policies, and programs for protecting trees, native vegetation, riparian habitat, and sensitive natural communities (Town of Yountville 2019); and
- ▶ Town of Yountville Municipal Code Chapters 12.16 and 17.128, which include provisions for the protection of public and private trees.

The RCAAP is a policy-level document that does not include any site-specific designs or proposals and does not grant any development entitlements. For this reason, a full evaluation of consistency with these regulations cannot be completed at this time. As the Napa County Jurisdictions develop and implement the actions identified in the RCAAP, the jurisdictions would evaluate project-level consistency with the applicable local policies and ordinances that have been adopted to protect biological resources. Based on the nature of the projects identified in the measures and actions and the Napa County Jurisdictions' oversight in the implementation of the projects in the plan, implementation of the RCAAP is not anticipated to conflict with applicable local policies and ordinances protecting biological resources. The impact would be less than significant, and no mitigation is required.

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

No impact. There are no existing landscape-level Habitat Conservation Plans or Natural Community Conservation Plans within Napa County. Thus, implementation of the RCAAP would not conflict with any such plans, and no impact would occur. No mitigation is required.

3.5 CULTURAL RESOURCES

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

3.5.1 Environmental Setting

The precontact history of the county is within the North Coast Ranges Chronological sequence (Carper 2015). The chronological sequence of the North Coast Ranges is ordered around a series of patterns beginning with the Post Pattern [13,400 to 10,500 before present (B.P.)]; the Borax Lake Pattern (10,500 to 7,000 B.P.), Mendocino Pattern (7,500 to 1,200 B.P.), Berkeley Pattern (7,000-1,200 B.P.), and Augustine Pattern (1,200 B.P. to European arrival).

The Post Pattern is the oldest known occupation of the North Coast Range. Artifacts associated with this pattern include a Clovis-like fluted concave-base projectile point most likely used in conjunction with an atlatl (spear-throwing device), and chipped stone crescents.

The most characteristic artifacts of the Borax Lake Pattern are fluted projectile points with square-stemmed bases. Large "bladelet" flakes, unifacial flaked stone tools, manos (hand stones), and milling slabs have also been found associated with some Borax Lake Pattern sites. These artifacts suggest a diet of animals, seeds, and nuts.

The Mendocino Pattern is a distinct regional pattern, more common in the uplands and mountains of the North Coast Range. The Mendocino Pattern is characterized by notched, concave-based, and leaf-shaped projectile points, indicative of the continued use of spear-throwing technology. Milling equipment includes shaped and cobble manos and metates, mortars and pestles, and basalt core tools. Rock-lined hearth and oven features, as well as other rock features, are common.

The Berkeley Pattern is characterized by tightly flexed burials with very few associated grave goods, Olivella saucer- and saddle-shaped beads, Haliotis ornaments, concave-base and non-stemmed projectile points, and other artifacts. This pattern also exhibits an advanced bone tool industry. Spear technology is still in use, as evidenced by bone and antler hooks and large dart-sized projectile points. Although mano and metate milling tools are still in use, there is an increase in mortars and pestles, suggesting a shift towards an acorn-based economy.

The beginning of the Augustine Pattern is marked by the introduction of bow and arrow technology, shaped mortars, and pestles, which become the common form of milling equipment, indicating increased reliance on acorn resources. Bone tools, including awls for basketry work, become common, and fishing equipment, including bone hooks and gorges, becomes more prevalent. Within the pattern, changes occur. During the earlier part of the time span, Olivella whole shell and lipped beads, incised bird bone whistles, ear tubes, flanged soapstone pipes and Haliotis ornaments are more common. After circa 1,500 B.P., diagnostic artifacts include small corner-notched and triangular points, clam shell beads, bead drills, and magnesite cylinders (Carper 2015).

At the turn of the 19th century, people from around the world began migrating to the Napa Valley. In 1836, the Rancho Era began, marking Mexico's expansion into the region. On February 18, 1850, the county was officially established as one of California's original 27 counties. Between 1850 and 1852, the Court of Sessions laid the foundation for county governance, later evolving into the Board of Supervisors. As the population grew, so did the county's diversity. The Napa River, temperate climate, and fertile soil attracted settlers from across the globe. Although the county is now celebrated for its world-class wines, its agricultural heritage extends far beyond vineyards. In the early 1850s, Napa ranked among California's largest wheat producers and was second in the state overall. The land also supported fruit and nut orchards and livestock such as cattle and horses. In 1839, ranchero George C. Yount planted the first grapevines in the valley, and by 1858, John Patchett had established Napa's first commercial winery. However, the region faced significant challenges. The Great Depression and the first phylloxera outbreak devastated vineyards, destroying thousands of acres before a resistant rootstock was discovered. Napa's revival began during World War II, when domestic demand for agricultural products surged. The 1960s saw the establishment of numerous new wineries, ushering in a new era of growth and innovation (Napa County 2025b).

The analysis below is informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources. Section 15064.5 of the State CEQA Guidelines defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Material impairment includes changes to the physical characteristics that make a historical resource eligible for listing in the California Register of Historical Resources (CRHR) such that the resource would no longer be eligible for the National Register of Historic Places (NRHP), CRHR, or local historical registers (State CEQA Guidelines Section 15064.5[b][2]).

Public Resources Code (PRC) Section 21083.2(g) defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a resource that is not unique is not a significant environmental impact under CEQA (State CEQA Guidelines Section 15064.5[c][4]). If an archaeological resource qualifies as a resource under CRHR criteria, it is treated as a unique archaeological resource for the purposes of CEQA.

In addition, according to State CEQA Guidelines Section 15126.4(b)(1), if a project adheres to the Secretary's Standards for the Treatment of Historic Properties, the project's impact "will generally be considered mitigated below the level of significance and thus is not significant." For the purposes of the impact discussion, "historical resource" is used to describe built-environment historic-era resources. Archaeological resources (both precontact and historic-era) that may qualify as "historical resources" pursuant to CEQA are analyzed separately from built-environment historical resources.

3.5.2 Discussion

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

Less than significant impact with mitigation. Implementation of the RCAAP could involve improvements to or near properties that contain listed or eligible historical resources, or improvements to or near properties that have not yet been recorded and could meet the criteria/definition of a historical resource. Several of the RCAAP GHG reduction and adaptation measures would involve minor changes to the exterior (e.g., waterproofing, electric charging ports) of existing buildings and structures and would not otherwise involve features with substantial height, bulk, or massing that could substantially cause an adverse change to a historic resource. For example, Action ALL-3.1 would require the waterproofing of structures and foundations in 100- and 500-year floodplains. The actions under Measure BE-1 to retrofit existing buildings to zero carbon are generally supportive of existing programs and the development of future reach codes. Although Action BE-1-J would result in the Napa County Jurisdictions waiving or reducing permitting fees for building retrofit projects that convert mixed-fuel buildings to all-electric and cap natural gas lines, projects

would be subject to the Napa County Jurisdictions' permitting and code requirements relative to historic structures. The measures and actions in the RCAAP would not result in the demolition of historic structures because the RCAAP does not include programs that require, or are reasonably anticipated to result in, the demolition of structures.

Direct permanent impacts resulting from construction may include damage, destruction, relocation, or alteration of historical buildings or structures or the historic character of their physical surroundings with the introduction of incompatible development. Permanent indirect impacts stemming from construction related to RCAAP implementation due to the introduction of new visual elements may indirectly diminish the character of the setting that contributes to the historic significance of a historical built environment resource. These indirect impacts may be significant if incompatible with the historic character and viewshed of historical built environment resources. The potential impacts on historical built environment resources related to projects that could result in modification or removal of a historical resource and indirect impacts resulting from implementation of the RCAAP is significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.5-1: For implementation of measures and actions requiring discretionary approval, the implementing agency shall determine whether physical changes could occur to or near a structure that is over 50 years old during the design and planning phase. The following procedure shall be followed to determine if there are structures over 50 years old, whether substantial physical effects could occur, and measures that shall be implemented to address site-specific impacts:

- ▶ As part of the project/environmental review of individual projects, a records search at the appropriate Information Center of the CHRIS and a review of literature and historic maps shall be conducted to determine whether the project area has been previously surveyed and whether historic built environment resources were identified.
- ▶ In the event the records indicate that no previous survey has been conducted within the last 5 years, a qualified architectural historian (36 CFR Section 61) shall conduct a study of the project area for the presence of historic built environment resources. The study shall include conducting a field survey, necessary background, archival and historic research, consultation with local historical societies, museums or other interested parties as relevant, and preparation of a historic resource assessment report. The report shall document the results of the survey and the historic context, evaluate the federal, state, or local significance of built environment resources greater than 45 years in age that may potentially be directly or indirectly impacted by project activities, recommend appropriate protection or mitigative treatment, if any, and include recordation of identified built environment resources on appropriate California Department of Parks and Recreation (DPR) series 523 forms. The final report and DPR forms shall be filed by the architectural historian with the CHRIS. Recommended treatment for historical built environment resources identified in the report shall be implemented.
- ▶ If no significant historic built environment resources are identified in the Historic Resource Assessment Report or prior survey of the project study area that may be directly or indirectly impacted by project activities, then mitigation for built environment resources is complete, and there is no adverse change to documented historical built environment resources for the project.
- ▶ If significant historic built environment resources are identified in the Historic Resource Assessment Report or prior survey of the project study area, the project sponsor and/or implementing agency shall consider avoidance as the primary mitigation measure. If avoidance is possible, mitigation to documented historical built environment resources is complete.
- ▶ If avoidance of a significant built environment resource is not feasible, then any maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historical resource shall occur in a manner as recommended by a qualified architectural historian or historic architect (36 CFR Section 61) and consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings or Historic Landscapes.

- No demolition or other alterations of the resource's physical characteristics or setting determined to result in substantial adverse effects to a significant built environment resource shall occur without subsequent environmental review and mitigation.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For historic resources, the local regulations must be at least as effective at avoidance and preservation as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance After Mitigation

As described above, the RCAAP is not anticipated to result in projects with potential to substantially affect historical resources. Mitigation Measure 3.5-1 would require that the implementing agency to evaluate the potential for effects at the project level. Alterations to a historical structure with potential to cause that resource to lose its ability to convey its historic significance (e.g., removing distinctive elements and/or features or alter the spatial relationship of contributing elements in a historic district or historic landscape) would be addressed by design phase planning to ensure appropriate measures are devised in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties or Historic Landscapes that would minimize or reduce significant modifications to the historical resource's character-defining materials and features that could adversely impact the physical integrity of the built resource. This impact would be less than significant with mitigation.

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

Less than significant impact with mitigation. Implementation of the RCAAP would involve ground-disturbing activities, including grading and excavation, through which archaeological resources could be encountered. Several of the RCAAP GHG reduction and adaptation measures (e.g., Measure FLOOD-2, Measure FLOOD-3, Measure FLOOD-5, and Measure ENERGY-2, as described in Chapter 2 of this checklist) could involve ground-disturbing activities. Ground-disturbing activities could damage or destroy known unique archaeological resources, unevaluated archaeological sites, and previously undiscovered archaeological resources; this impact is significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.5-2: For implementation of measures and actions requiring discretionary approval, the implementing agency shall define each project's area of effect for archaeological resources in consultation with a qualified archaeologist, as defined by the Secretary of the Interior, during project-specific environmental review. Once the exact locations of project-specific areas have been determined and before the commencement of earth-disturbing activities, a records search shall be conducted to determine whether any known archaeological resources are located in the disturbance area. For project areas without ground surface (e.g., paved), a desktop review shall be conducted. For project areas with exposed ground surface (e.g., unpaved), a pedestrian survey shall also be conducted to identify archaeological resources. In the event of a surface find, materials will be evaluated and recorded on standard Department of Parks and Recreation primary record forms (DPR 523) in accordance with NRHP and CRHR criteria. Avoidance of archaeological resources shall be the preferred alternative to reduce impacts to unknown archaeological resources. A recommendation of eligibility/ineligibility to the NRHP and CRHR shall be completed for any surface finds and for any resources identified by the records search. The survey and report shall be completed by a qualified archaeologist who meets the Secretary of the Interior's professional qualifications for Archaeology. The report will include recommendations for minimizing potential adverse effects on any significant resources identified.

The applicable Napa County Jurisdiction shall follow the recommendations identified in the report, which may include activities such as subsurface testing, implementing a Worker Environmental Awareness Program, avoiding sites,

conducting construction monitoring by a qualified archaeologist, or notifying the geographically and culturally affiliated Native American tribe to extend an invitation for construction monitoring.

If an archaeological site is determined by a qualified archaeologist to qualify as a unique archaeological resource and avoidance or preservation in place is not feasible, a qualified archaeologist, in consultation with the applicable jurisdiction, and Native American tribes as applicable, shall:

- 1) Prepare a research design and archaeological data recovery plan for the recovery that shall capture those categories of data for which the site is significant and implement the data recovery plan before or during development of the site.
- 2) Perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.
- 3) If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the applicant shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment.

If any precontact or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits are discovered during construction, all ground-disturbing activity within 30 meters (approximately 100 feet) of the resources shall be halted, and a qualified professional archaeologist shall be retained to assess the significance of the find. If the qualified archaeologist determines that the archaeological material is Native American in nature, the applicable jurisdiction shall contact the appropriate Native American tribe for its input on the preferred treatment of the find. If the find is determined to be significant by the archaeologist (i.e., because it constitutes a unique archaeological resource), the archaeologist shall develop, and the applicable jurisdiction shall implement appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include, but would not necessarily be limited to, preservation in place (which shall be the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or contiguous block unit excavation and data recovery (when it is the only feasible mitigation, and pursuant to a data recovery plan). No further grading shall occur in the area of the discovery until the applicable jurisdiction and Native American tribe (as applicable) approve the measures to protect these resources.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For archaeological resources, the local regulations must be at least as effective at avoidance and minimization as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance After Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measure 3.5-2. Implementation of Mitigation Measure 3.5-2 would reduce impacts to archaeological resources by requiring that steps be taken to avoid, record, or otherwise treat the archaeological resource appropriately, in accordance with pertinent laws and regulations. Therefore, impacts to archaeological resources would be less than significant with mitigation.

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

Less than significant impact. Implementation of the RCAAP would involve ground disturbing activities, including grading and excavation, which could encounter human remains interred outside formal cemeteries. All projects implemented under the RCAAP would adhere to the policies and regulations of the respective Napa County

Jurisdiction for the protection of human remains. In addition, California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains, and discovery of any human remains, are contained in California Health and Safety Code Section 7050.5 and PRC Section 5097. These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Napa County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated most likely descendants and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to protect resources that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains and to appropriately treat any remains that are discovered. Therefore, this impact would be less than significant, and no mitigation is required.

3.6 ENERGY

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

3.6.1 Environmental Setting

California maintains an energy system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. According to the US Energy Information Administration (EIA), California consumed approximately 6,817 trillion British thermal units (BTUs) of energy in 2023 (EIA 2025). Per capita energy consumption, the total energy consumption of the state divided by the total population, was the second lowest in the country, at 174 million BTUs in 2023 (EIA 2025). Although California consumes more electricity than all other states except Texas and Florida, it uses less electricity per capita than any other state but Hawaii (EIA 2025). California imports more electricity than any other state and has historically received between one-fifth and one-third of its electricity supply from outside of the state; however, in 2023, in-state utility-scale electricity generation equaled about 90 percent of California's electricity sales, and the rest of the state's power supply came from out of state (EIA 2025).

California is second in the nation, after Texas, in total electricity generation from renewable resources (EIA 2025). Renewable resources, including eligible hydropower and small-scale (less than 1 megawatt) customer-sited solar PV systems, supplied 54 percent of California's total in-state electricity generation in 2023 (EIA 2025). Natural gas-fired power plants provided 39 percent of the state's total net generation, and nuclear power's share of California's total electricity generation was about 7 percent (EIA 2025). According to CEC, per capita energy consumption is generally declining due to improvements in energy efficiency and design (CEC 2024a). However, despite this reduction in per capita energy use, the state's total overall energy consumption (i.e., non-per-capita energy consumption) is expected to increase over the next several decades due to growth in population, jobs, and vehicle travel (CEC 2024a).

In 2022, the transportation sector was the largest energy end-use sector in the state, totaling 42 percent, followed by the industrial sector, 22 percent; the residential sector, 17 percent; and the commercial sector, 17 percent (EIA 2025). On-road vehicles use about 90 percent of the petroleum consumed in California. The California Energy Commission (CEC) reported retail sales of 39 million and 6 million gallons of gasoline and diesel, respectively, in Napa County in 2023 (the most recent data available) (CEC 2024a). California has a growing number of alternative fuel vehicles through the joint efforts of CEC, CARB, local air districts, the federal government, transit agencies, utilities, and other public and private entities. As of May 2026, California contained over 67,500 public alternative fueling stations (AFDC 2026).

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, the 2022 Scoping Plan for Achieving Carbon Neutrality [2022 Scoping Plan]). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- ▶ biodiesel,
- ▶ electricity,
- ▶ ethanol (E-10 and E-85),
- ▶ hydrogen,
- ▶ natural gas (methane in the form of compressed and liquefied natural gas),
- ▶ propane,
- ▶ renewable diesel (including biomass-to-liquid),
- ▶ synthetic fuels, and
- ▶ gas-to-liquid and coal-to-liquid fuels.

In 2024, Napa County consumed 1,053 GWh of electricity, 37 percent of which was consumed by the residential sector, while non-residential uses accounted for the remaining 63 percent. Regarding natural gas, Napa County consumed a total of 36.58 million therms, with total consumption being split roughly equally between residential and non-residential uses (CEC 2025).

Electricity is supplied to users in Napa County by Pacific Gas and Electric (PG&E) and Marin Clean Energy (MCE). Napa County joined the MCE Joint Powers Authority, a community choice aggregator (CCA) that provides electrical energy to customers who enroll in its network, in 2015. MCE either buys or builds clean electrical power generation and delivers electrical power to applicable recipients through the PG&E grid. PG&E maintains the grid and bills customers directly for the power that MCE provides. Available service options include power generation from 60 percent renewable sources, 100 percent renewable sources, and 100 percent renewable sources with locally produced solar power.

Table 3.6-1 below summarizes PG&E’s energy resource profile in 2023 (the most recent available data). Table 3.6-2 summarizes MCE’s energy resource profile for 2023 (the most recent data available).

Table 3.6-1 Pacific Gas and Electric Energy Resource Profile (2023)

Energy Resource	Percent of Total
Eligible Renewable (biomass and biowaste, geothermal, eligible hydroelectric, solar, and wind)	33
Coal	0
Large hydroelectric	14
Natural Gas	0
Nuclear	53
Other	0
Unspecified Power ¹	0
Total	100

¹ Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.
Source: CEC 2024b.

Table 3.6-2 MCE Energy Resource Profile (2023)

Energy Resource	Percent of Total
Eligible Renewable (biomass and biowaste, geothermal, eligible hydroelectric, solar, and wind)	60
Coal	0
Large hydroelectric	40
Natural Gas	0
Nuclear	<1
Other	0
Unspecified Power ¹	<1
Total	100

Notes: totals may not sum due to rounding.

¹ Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

Source: CEC 2024c.

3.6.2 Discussion

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

Less than significant impact. The RCAAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development; however, the construction and operation of facilities identified in GHG reduction measures and adaptation strategies that would be implemented with RCAAP adoption would result in the consumption of energy resources during construction and operation, as described further below.

Construction

Implementation of RCAAP strategies and actions that may require construction activities and as such, have the potential to directly or indirectly emit GHG emissions, include expanding EV charging infrastructure (Action TR-3-B); installation of a hydrogen fueling station in the county (Action TR-4-C); implementing ZE loading docks (Actions OF-2-A and OF-2-C); implementing new parks and trail systems (Action TEMP-2.2); upgrading communications, energy, public services, and transportation infrastructure to improve extreme heat resilience (Action TEMP-4.1); maintaining and enhancing flood control, storm water, and sewage/solid-waste infrastructure (Actions FLOOD-2.3 and FLOOD-3.1); and upgrading and/or relocating infrastructure and critical facilities exposed to flooding hazards (Action FLOOD-5.1). These measures would increase electricity demand, fuel consumption, and the use of non-renewable resources during construction by using fuels for activities such as construction crew commutes, the operation of construction equipment, and material delivery.

These types of projects would not involve large amounts of labor or extensive use of construction equipment. Some worker trips may be required during the installation of these facilities and features, resulting in short-term diesel fuel and gasoline consumption. While construction equipment (e.g., backhoes, front loaders, pavers, bulldozers, and skid steers) may also be used during installation of these facilities and features, it is likely that this equipment would be used intermittently and for relatively short periods of time and, to reduce costs, would be used as minimally as feasible. Additionally, Action OF-3-A, which proposes providing information about available incentives for electric construction and portable equipment to contractors at the building permit counter, and Action OF-4-A, which proposes incorporating the use of electric construction and portable equipment in evaluation processes for capital improvement projects, would support the transition toward the use of renewable fuel sources in construction equipment that would be used to implement the RCAAP. Demand for energy resources during construction would vary over the course of the construction period and generally cease upon completion.

Operation

The measures listed above may result in occasional operational maintenance activities (e.g., maintenance vehicle use, equipment replacement, tree watering and trimming, vegetation management). These maintenance activities would be minimal or accomplished with existing personnel and in conjunction with established maintenance activities; thus, associated energy consumption would also be minimal or would not substantially increase. Some energy consumption could occur from the treatment and transportation of water used to irrigate the new trees planted to accomplish the 20 percent expansion of urban forests targeted in Action AG-5-B. Maintenance trips would likely be infrequent and would involve relatively few crew members and pieces of equipment. Because operational vehicle trips would be minimal, associated operational fuel consumption would not be substantial.

Demand for energy facilities and services that lead to environmental impacts would be reduced under the proposed RCAAP due to the introduction of a series of additional energy-saving measures that promote greater energy conservation in projects constructed and operated within the county. The RCAAP's transportation-related strategies, measures, and subsequent actions would reduce transportation-related fossil fuel consumption in the county by encouraging a reduction in VMT per capita and increasing EV usage. Implementation of measures and subsequent actions such as Measure TR-1, "Reduce Vehicle Miles Traveled Countywide" (Actions TR-1-A through TR-1-D), Measure TR-3, "Expand Electric Vehicle Charging Infrastructure" (Actions TR-3-A through TR-3-D), Measure TR-10, "Implement the Active Transportation Plan" (Actions TR-10-A through TR-10-J), Measure TR-11, "Expand Commute Transportation Demand Management Programs" (Actions TR-11-A through TR-11-E), and Measure TR-14, "Empower Community to Choose Active Transportation Options" (Actions TR-14-A through TR-14-F) would reduce the consumption of fossil fuel used for transportation by reducing VMT, encouraging ZEVs and EVs, incentivizing electrification of equipment, and increasing public awareness around public and alternative transportation programs and services. Examples of potential reductions in fossil fuel use achieved by these actions include monitoring of winery wastewater treatment trends to identify opportunities to reduce hauling VMT, as included in Action TR-2-D, or reduced fossil fuel consumption through the continued county-wide transition to alternative fuels by adopting an ordinance that expedites scaled permitting of fuel stations that offer renewable fuels, as included in Action TR-4-D.

The RCAAP's energy-related strategies, measures, and subsequent actions would reduce fossil fuel consumption and improve energy efficiency within the county through the implementation of measures and actions such as Measure BE-1: "Retrofit Existing Buildings to Zero Carbon" (Actions BE-1-A through BE-1-T), Measure BE-3, "Increase Renewable Energy Generation" (Actions BE-3-A through BE-3-C), and Measure BE-5, "Decarbonize New Buildings" (Actions BE-5-A through BE-5-D). For example, Action BE-1-O would support building decarbonization and increased energy efficiency by securing long-term funding to continue offering energy efficiency, electrification, and other net-zero carbon rebates, while Action BE-1-B would support building electrification by facilitating the creation of a pre-electrification program that provides affordable financing, rebates, or other incentives for electric panel upgrades. Notably, as a result of the effort to decarbonize new and existing buildings, the county's energy demand and consumption are expected to progressively shift toward a greater amount of electricity being consumed, while natural gas demand and consumption would decrease.

Lastly, the RCAAP's agriculture-related strategies, measures, and subsequent actions would reduce GHG emissions generated by agricultural equipment. This would be accomplished through the implementation of measures and actions such as Measure AG-1, "Reduce Fossil Fuel Consumption in Field Equipment," which includes actions such as Action AG-1-B, which would reduce GHG emissions from agricultural equipment by encouraging the retirement of fossil fuel-powered equipment and the use of fossil fuels, and Action AG-1-D, which would develop an irrigation pump replacement program to achieve 100 percent transition to electric, solar, or renewable diesel.

Summary

The goal of the RCAAP is to reduce GHG emissions generated within the county by increasing the use of alternatively fueled vehicles, reducing VMT, increasing energy and water efficiency, generating and utilizing renewable energy, and reducing waste. Although implementation of the RCAAP would result in temporary construction activities that would consume energy resources, Action OF-4-A would promote the use of alternative fuel in construction equipment and would, therefore, reduce fossil fuel consumption.

Moreover, while the GHG reduction measures were formulated to reduce operational GHGs, many would also improve energy efficiency, promote renewable energy, reduce fossil fuel demand, and decrease transportation-related fossil fuel consumption, as detailed above. Thus, the implementation of the RCAAP would not result in wasteful, inefficient, or unnecessary energy consumption during project construction. Furthermore, measures that encourage improvements to alternative transportation infrastructure, electrify new and existing buildings, and require energy efficiency and water conservation would result in long-term reductions in energy consumption and the use of nonrenewable energy sources. These changes increase local energy independence, resilience, and system reliability. While the construction of the measures above would require energy consumption, the RCAAP is intended to reduce county-wide GHGs, largely by improving energy efficiency and conservation. Therefore, construction-related energy use would be offset by the energy savings from implementing the RCAAP. Implementation of the RCAAP would not result in wasteful energy consumption, and impacts would be less than significant. No mitigation is required.

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

No impact. As GHG emissions are inherent to the generation and consumption of fossil-fuel-related energy, plans that reduce fossil-fuel-related energy consumption, require all-electric development, increase renewable energy generation, and improve energy efficiency (such as the proposed RCAAP and the 2022 Scoping Plan) are also considered energy plans. The RCAAP's overarching objective is to reduce GHG emissions, and many of these reductions are achieved through strategies and actions that increase energy efficiency, reduce the use of fossil fuels in the transportation, building, and agricultural sectors, and increase renewable energy generation. As discussed under criterion "a" in Section 3.8, "Greenhouse Gas Emissions," implementation of the RCAAP would help reduce anthropogenic emissions in the county by 50 percent below 2019 levels by 2030, 70 percent below 2019 levels by 2035, and 87 below 2019 levels by 2045, which exceeds the locally adjusted 2022 Scoping Plan targets of 42 percent below 2019 levels by 2030, 57 percent below 2019 levels by 2035, and 85 below 2019 levels by 2045.

Appendix D of the 2022 Scoping Plan identifies three key priority areas for GHG reductions by local governments: VMT Reduction, Transportation Electrification, and Building Decarbonization. RCAAP measures related to VMT reduction, EVs, and increased energy efficiency and renewable energy use (e.g., Measures TR-1, TR-7, TR-10, BE-1, BE-3, and BE-5) are consistent with these priority areas. Thus, the RCAAP would not conflict with the goals of the 2022 Scoping Plan to reduce GHG emissions by increasing energy efficiency and reducing statewide fossil fuel consumption. No mitigation is required.

3.7 GEOLOGY AND SOILS

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

3.7.1 Environmental Setting

GEOLOGIC CONDITIONS

Napa County is located in the Coast Ranges Geomorphic Province. This province is bound on the west by the Pacific Ocean and on the east by the Great Valley geomorphic province. The Coast Ranges Province extends several hundred miles northward from southern California to near the Oregon border. The province, including Napa County, has a general northwest-southeast orientation of physiographic features such as valleys and ridgelines.

The County's highest topographic feature is Mount St. Helena, which is in the northwest corner of the County and whose peak elevation reaches 4,343 feet. Principle ridgelines have maximum elevations that roughly vary between 1,800 and 2,500 feet above sea level. These elevations decrease in the southern part of the county. This physiography has influenced the local climate, the development of soils, and the existence and location of geologic features, including hazards such as landsliding (Napa County 2007).

The principal soil series in the Napa Valley is Bale-Cole-Yolo. Soils of this series have formed on the near level to gently sloping, deep alluvium of the valley. The soils are well-drained to somewhat poorly drained loams, silt loams, and clay loams on flood plains, alluvial fans, and terraces. These soils are among the most agriculturally productive in the county. Soils present on the ridge systems to either side of the valley formed from a wide range of parent materials under varying conditions of slope steepness and stability, slope aspect, time, and annual rainfall (Napa County 2007).

The California Geological Survey identifies fault zones in the county. There are four faults (West Napa, Hunting Creek, Green Valley, and Cordelia) that are of concern to Napa County (Napa County 2007). The West Napa Fault is located west of the City of Napa, and the Green Valley Fault Zone is located along the eastern side of the county (CGS 2002). The severity of ground shaking and potential damage to structures varies with both distance to the epicenter of the earthquake, the magnitude of the earthquake, and the nature and thickness of the surface soils. The alluvial fill of the valleys in the county, particularly Napa Valley, is susceptible to strong ground motion.

While deep unconsolidated deposits have greater potential for stronger earthquake shaking, this greater potential is recognized in the Uniform Building Code (UBC) and the California Building Code (CBC). These codes provide for more stringent earthquake-resistant design parameters for such areas. Thus, while these shaking impacts are potentially more damaging, they are also typically mitigated in their structural effects by UBC or CBC criteria that account for this potential. This includes provisions for buildings to structurally survive an earthquake without collapsing and includes such measures as anchoring to the foundation and structural frame design (Napa County 2007).

PALEONTOLOGICAL RESOURCES

Paleontological resources are classified as non-renewable scientific resources and are protected by state statute (e.g., Public Resources Code Section 5097.5 (a), Removal or Destruction; Prohibition). No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on state or private land in a project site in a limited fashion.

A search of the University of California Museum of Paleontology collections database conducted in conjunction with Napa County's 2008 General Plan Update identified eight locations in Napa County where paleontological resources have been identified. A total of fifty-two specimens, primarily plants (i.e., 38 specimens) were identified at eight paleontological sites in the county (Napa County 2007).

3.7.2 Discussion

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

Less than significant impact. The highest potential for surface fault rupture is along the three known, active faults within the County: the West Napa, Green Valley, and Hunting Creek faults. These faults are zoned (at least in part) for special investigation according to the provisions of the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Napa County 2007). Projects in an Alquist-Priolo Zone would require site-specific investigations conducted by licensed geotechnical professionals to fully evaluate the potential for damage from fault rupture. Measures and actions that would be

implemented as part of the RCAAP would not cause substantial adverse effects related to the rupture of a known earthquake fault because all new construction would be subject to the requirements of the site-specific investigations in compliance with Alquist-Priolo. This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to protect resources that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. This impact would be less than significant. No mitigation is required.

ii) Strong seismic ground shaking?

Less than significant impact. As noted above, there are several delineated Alquist-Priolo Earthquake Fault Zones, including other potentially active faults that have been mapped within the county. In general, ground shaking is more severe in softer sediments, such as alluvial deposits, where surface waves can be amplified, causing a longer duration of ground shaking compared to bedrock materials. Areas where bedrock is exposed or located at relatively shallow depth tend to experience surface waves from an earthquake as more of a sharp jolt, compared to other areas. Areas located within or near the Bay shoreline where alluvial sediments tend to be thicker, especially in areas where un-engineered fill or loose alluvial materials are found, could experience considerable ground shaking.

The Napa County Jurisdictions would comply with the applicable version of the CBC when implementing a future project. This includes conducting geotechnical studies and implementing all recommendations. Compliance with the regulatory requirements in the CBC and any applicable local ordinances would be confirmed by the Napa County Jurisdiction's building officials. Projected development must comply with Chapter 16, Section 1613 of the CBC, which provides earthquake loading specifications for structures and associated attachments that must also meet the seismic criteria of American Society of Civil Engineers Standard 07-05.

To determine seismic criteria for proposed improvements, geotechnical investigations would be prepared by state-licensed engineers and engineering geologists who provide recommendations for site preparation and foundation design, as required by Chapter 18, Section 1803 of the CBC. The geotechnical engineer, as a registered professional with the State of California, is required to comply with the CBC and local codes while applying standard engineering practice and the appropriate standard of care for the particular region in California. Geotechnical investigations would also evaluate hazards such as liquefaction, lateral spreading, landslides, and expansive soils in accordance with CBC requirements and the California Geological Survey's (CGS's) Guidelines for Evaluating and Mitigation Seismic Hazards in California (Special Publication 117A, 2008), where applicable.

The geotechnical engineer is responsible for investigating the underlying soils and bedrock on a site and, if necessary, developing remedies to improve soil conditions based on standard engineering practices. The geotechnical investigation must characterize, log, and test soils and bedrock conditions and determine the response of those underlying materials to ground shaking generated during an earthquake. The geotechnical investigation and the recommendations developed during the investigation must be presented in a report, which is reviewed, signed, and stamped by the professional engineer in charge. Based on the site's geotechnical conditions, the geotechnical report must include methods and materials for all aspects of the site development, including the site preparation, building foundations, structural design, utilities, and sidewalks and roadways, to remedy any geotechnical conditions related to seismic impacts. In connection with grading, foundation, building, and other site development permits, the local jurisdiction reviews the geotechnical investigation and recommendations and imposes permit requirements based on the geotechnical recommendations and CBC provisions. Recommended corrective measures, such as structural reinforcement and replacing native soils with engineered fill, must be incorporated into project designs. Developments must also adhere to local building code requirements for seismic safety, which identify and require specified construction techniques that aid in structural resistance to ground shaking, as well as local general plans and zoning ordinances, where applicable policies exist.

As discussed above, state laws and local regulations require that potential seismic hazards be identified and remedied prior to construction. Reliable mechanisms are in place to enforce these regulations, and the implementation of design strategies identified in required geotechnical investigations is anticipated to protect public health and safety from substantial risks through appropriate engineering practices. Thus, implementation of the RCAAP would not

exacerbate hazards to people or property from strong seismic ground shaking. A less-than-significant impact would occur. No mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. Liquefaction is the process in which water is combined with unconsolidated soils, generally from ground motion and pressure, which causes the soils to behave like a liquid. Liquefaction potential is determined from a variety of factors, including soil type, soil density, depth to the groundwater table, and the duration and intensity of ground shaking. Liquefaction is most likely to occur in deposits of water-saturated alluvium or areas of considerable artificial fill. Other types of seismic-related ground failure include ground lurching, differential settlement, and lateral spreading.

Liquefaction hazard is generally greatest along the San Francisco Bay shoreline and along existing and historic riverine systems. The alluvial valleys in the county, which are comprised of geologically young and relatively unconsolidated soils, have the highest potential for liquefaction. These areas are also the most heavily developed. As described above, geotechnical investigations would evaluate hazards such as liquefaction in accordance with CBC requirements and CGS's Guidelines for Evaluating and Mitigation Seismic Hazards in California (Special Publication 117A 2008). The Seismic Hazards Mapping Act requires a geotechnical site-specific investigation before any parcel subdivisions or structure permits may be issued, to determine the strength of underlying soils or rock. Subsequent development (excavations, foundations, building frames, retaining walls, and other building elements) would be required to conform to the current seismic design provisions of the CBC to reduce potential losses from ground failure as a result of an earthquake. Section 1613 of the CBC states that projects located in liquefaction zones shall incorporate seismic design features into both grading and construction plans. Chapter 18 of the CBC includes the requirements of geotechnical investigations (Section 1803), as well as foundations (Section 1808). Design criteria developed through this process may require practices such as ground treatment, replacing existing soils with engineered fill, or using deep foundation systems.

The projects constructed as part of RCAAP would be relatively small improvements occurring throughout the county. These projects would have limited potential to cause potential substantial adverse effects due to seismic-related ground failure. Individual development projects would be required to comply with applicable versions of local, state, and federal standards that regulate the infrastructure. Through design requirements established through the geotechnical review, these projects would be constructed both to withstand ground failure and avoid the exacerbation of existing seismically induced ground failure hazards.

The RCAAP would not directly or indirectly cause substantial adverse effects involving seismic-related ground failure. Further, the impacts of ground failure, including liquefaction, lateral spreading, and subsidence on individual development projects would be addressed through site-specific geotechnical studies required by local jurisdictions in accordance with standard industry practices and State-provided guidance, such as CGS Special Publication 117A. In addition, development would conform to the current seismic design provisions of the IBC and CBC to reduce potential losses from ground failure as a result of an earthquake. With compliance with local, state, and federal regulations, including preparation of geotechnical studies, projects would avoid or minimize hazards related to ground failure/liquefaction on the project. Thus, implementation of the RCAAP would not exacerbate hazards to people or property from seismic-related ground failure, including liquefaction. The impact would be less than significant. No mitigation is required.

iv) Landslides?

Less than significant impact with mitigation. Landslides are most common on steep slopes with unstable soils, and there are landslide zones and steep slopes identified within the county. Areas that are prone to landslides around Napa Valley are predominantly located on the hillsides northeast of American Canyon and generally located on the hillsides east of Yountville and St. Helena, as well as the hillsides west of Conn Creek (particularly along SR 128). Landslides are also located on the hillsides surrounding Pope Valley, Hardin Creek, Capell Creek, Atlas Peak Road, and SR 121. Finally, landslides occur on the hillsides west of Lake Berryessa, and in the most northeastern portion of Napa County (Napa County 2007).

Existing slopes and slope stability are considered in local land use planning and zoning, and areas within landslide zones tend to be designated for uses other than development. Approvals of development projects in areas subject to slope failures are also contingent on geologic and engineering studies that define and delineate potentially hazardous conditions and recommend adequate mitigation. The Seismic Hazard Mitigation Act addresses landslide hazards from earthquake shaking, requiring site evaluation in areas identified by the state. Earthwork recommendations for improved slope stability follow adopted state standards, such as the Guidelines for Evaluating and Mitigation Seismic Hazards in California (CGS 2008); incorporate site-evaluation findings; and inform the eventual engineered design of slope stabilization systems and other infrastructure. These documents are reviewed by the appropriate building official or engineer and may be reviewed by other county or city departments to ensure compliance with the laws and ordinances under their jurisdiction. Future developments must also be consistent with the CBC and adhere to the requirements for structural design, special inspections, and soils and foundations contained in Chapters 16 through 18 of the code. Local general plans and local building codes also often contain development policies to avoid landslides through construction design and slope stabilization techniques.

Generally, RCAAP implementation would not have the potential to result in projects that occur on steep slopes or require substantial ground-disturbing activities that could cause a landslide. Given the nature of the RCAAP, construction activities would typically occur in already disturbed, developed areas such as roadways, parking lots, and areas of existing critical infrastructure. However, the RCAAP also includes programs that would result in the relocation and construction of infrastructure in unspecified locations. For example, Action FLOOD-5.1 could result in the relocation of infrastructure and critical facilities exposed to flooding. Because the region includes steep slopes with potential for landslides that may be outside the areas of required investigation and remediation pursuant to the Seismic Hazard Mitigation Act and new or relocated infrastructure could result from implementation of the RCAAP, the RCAAP could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. This impact is significant prior to mitigation.

Mitigation Measures

Mitigation Measure 3.7-1: For implementation of measures and actions requiring discretionary approval that will result construction of any proposed project under the RCAAP that would occur in an area characterized by steep slopes and that is prone to landslides (as determined by the implementing agency), the implementing agency shall require preparation of a site-specific geotechnical study in accordance with standard industry practices and state-provided guidance, such as CGS Special Publication 117A, and implementation of recommendations from the geotechnical study in accordance with local, state, and federal code and regulation requirements. If necessary, the study shall identify design refinements that address the potential for landslides, lateral spreading, subsidence, liquefaction, collapse, or expansive soil. The implementing agency shall require the implementation of all regulatory requirements in the geotechnical study as well as all identified design refinements. Projects that cannot demonstrate that substantial adverse effects associated with landslides, lateral spreading, subsidence, liquefaction, collapse, or expansive soil would be avoided with implementation of identified design refinements shall not be permitted.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For geotechnical considerations, the local regulations must be at least as effective at avoiding substantial adverse effects associated with landslides, lateral spreading, subsidence, liquefaction, collapse, or expansive soil, as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measures 3.7-1. With implementation of Mitigation Measure 3.7-1, the implementing agency would require a site-specific geologic investigation and analysis in accordance with standard industry practices and state-provided guidance, such as CGS Special Publication 117A, to minimize risk associated with landslides. Where new development

is proposed, it would be subject to local building codes and the CBC, which require implementation of design standards. As a result, implementation of the RCAAP would not directly or indirectly cause substantial adverse effects involving seismic-related landslides. This impact would result in a less-than-significant impact with mitigation.

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

Less than significant impact. Implementation of the RCAAP would involve minor ground-disturbing activities, including grading and excavation, which, depending on their location, could cause soil erosion and loss of topsoil. For example, minor grading, excavation, and other ground disturbance would occur during the installation of new EV charging infrastructure (Actions OF-2-A and OF-2-C), the construction of a hydrogen fueling station (Action TR-4-C), the development of transportation infrastructure upgrades (Action TEMP-4.1), and maintaining and enhancing existing flood control, storm water, and sewage/solid-waste infrastructure (Actions FLOOD-2.3 and FLOOD-3.1). However, given the nature of the RCAAP, construction activities associated with the implementation would primarily occur in already disturbed, developed areas such as roadways, parking lots, and areas of existing critical infrastructure. EV charging stations would be installed in new and existing developments, and roadway improvements such as upgrades to transportation infrastructure would occur along existing developed roadways.

Additionally, projects would be required to adhere to National Pollutant Discharge Elimination System (NPDES) permit requirements for construction, as well as any local grading ordinance requirements that may include erosion prevention measures. One of the requirements of this permit is the implementation of nonpoint source control of stormwater runoff through the application of BMPs. Projects to implement RCAAP measures and actions that result in disturbance of 1 or more acres would be required to comply with a project-specific storm water pollution prevention plan (SWPPP) that complies with the NPDES Construction General Permit (Order 2022-0057-DWQ). The SWPPP would identify erosion and sediment controls to substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters during construction. By complying with applicable requirements, measures implemented as part of the RCAAP would not result in substantial soil erosion or loss of topsoil. For all the foregoing reasons, implementation of the RCAAP would not result in substantial soil erosion or the loss of topsoil. This impact would be less than significant. No mitigation is required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than significant impact with mitigation. The location and design of future projects that implement RCAAP measures and actions would be determined through subsequent planning. As a result, future project could be located on the unstable geologic units mapped in the region. Although all construction associated with the implementation of the RCAAP measures and actions would be subject to established regulations that address geologic and soil stability, including the UBC and CBC, because projects could be located on a geologic unit or soil that is or could become unstable, this impact is significant prior to mitigation.

Mitigation Measures

Implement Mitigation Measure 3.7-1 (above)

Significance after Mitigation

As described above, the construction of new structures near or above unstable soil or geologic units would be addressed through the implementation of recommendations from the geotechnical studies in the planning and design process in accordance with local, state, and federal code and regulation requirements. Projects on roadways or highways subject to review by the Federal Highway Administration (FHWA) would also be subject to compliance with FHWA regulations and design guidelines. Thus, implementation of the RCAAP would not exacerbate the risk of lateral spreading, subsidence, liquefaction, or collapse. The impact would be less than significant with mitigation.

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

Less than significant impact with mitigation. Clay-rich soils, which are prone to expansion, predominantly occur at low elevations near Yountville and the City of Napa, in the Pope Valley and surrounding Suisun Creek, and east and southeast of Lake Berryessa. The location and design of future projects that implement RCAAP measures and actions would be determined through subsequent planning. Because projects could be located on expansive soil and create a substantial risk to life or property, this impact is significant prior to mitigation.

Mitigation Measures

Implement Mitigation Measure 3.7-1 (above)

Significance after Mitigation

Where expansive soils are mapped, site-specific geotechnical studies would be conducted, consistent with the requirements of Mitigation Measure 3.7-1. As described above, these geotechnical investigations would evaluate hazards such as expansive soils in accordance with CBC requirements and CGS's Guidelines for Evaluating and Mitigating Seismic Hazards in California (Special Publication 117A, 2008). The adverse effects of expansive soils can be avoided through proper drainage, subsoil preparation, and foundation design (Napa County 2007).

Therefore, although expansive soils are known to occur within the county, routine, industry-standard techniques would be required to treat the soil prior to construction. Special engineering methods can be used to reduce the stresses on buildings and utility lines. With adherence to the local policies and ordinances, CBC requirements, and site-specific recommendations from required geotechnical studies, RCAAP implementation would not create substantial risks to life or property from expansive soils. The impact would be less than significant with mitigation.

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

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

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

Less than significant impact with mitigation. The county is located within the Coast Ranges geomorphic province. The geologic units that underlie the area consist of thick Mesozoic and Cenozoic sedimentary strata (CGS 2002).

Paleontological resources include continental and marine sediments, located along the county's rivers and creeks and within valleys, which have moderate paleontological sensitivity (Napa County 2007). Thus, measures that involve ground-disturbing activities could be implemented in areas underlain by potentially unique paleontological resources. Measures to be implemented as part of the RCAAP would include minor grading, excavation, and other ground disturbance during construction. For example, minor grading, excavation, and other ground disturbance would occur during the installation of new EV charging infrastructure (Actions OF-2-A and OF-2-C), construction of a hydrogen fueling station (Action TR-4-C), development of transportation infrastructure upgrades (Action TEMP-4.1), and maintaining and enhancing existing flood control, storm water, and sewage/solid-waste infrastructure (Actions FLOOD-2.3 and FLOOD-3.1). Projects involving excavation, grading, or soil removal in previously undisturbed areas have the greatest likelihood of encountering these resources. However, given the nature of the RCAAP, most construction activities associated with its implementation would occur in already disturbed, developed areas such as roadways, parking lots, and areas of existing critical infrastructure. EV charging stations would be installed in new and existing developments, and roadway improvements such as upgrades to transportation infrastructure would occur along existing developed roadways. Ground disturbance would generally be limited to shallow depths, comprised of artificial fill or previously disturbed soils, within developed roadways and urbanized areas; paleontological resources are unlikely to be encountered during the types of ground-disturbing activities that would occur during RCAAP implementation.

In general, potential impacts on paleontological or geologic resources would be similar to those identified for archaeological resources discussed in Section 3.5, "Cultural Resources." As project proponents, and in their discretionary approval role, the Napa County Jurisdictions would ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the PRC, and adopted county and city general plans, by adhering to and incorporating the performance standards and practices for the assessment and mitigation of adverse impacts on paleontological resources. The degree and extent of impacts would depend upon project location, and as such, project-specific analysis would be required to determine the precise area of impact and the importance of any paleontological or geologic resource identified within a proposed alignment or project area. This is a significant impact before mitigation.

Mitigation Measures

Mitigation Measure 3.7-2: For implementation of measures and actions requiring discretionary approval, the implementing agency or project sponsor shall implement the following measures where avoidance of parent material with the potential to yield unique paleontological resources is not feasible:

- ▶ All on-site construction personnel shall receive Worker Education and Awareness Program training before the commencement of excavation work to understand the regulatory framework that provides for protection of paleontological resources and become familiar with diagnostic characteristics of the materials that may be encountered.
- ▶ A qualified paleontologist shall prepare a paleontological resource management plan (PRMP) to guide the salvage, documentation, and repository of unique paleontological resources encountered during construction. If unique paleontological resources are encountered during construction, a qualified paleontologist shall oversee the implementation of the PRMP.
- ▶ Ground-disturbing activities in parent material with a moderate to high potential to yield unique paleontological resources shall be monitored using a qualified paleontological monitor to determine whether unique paleontological resources are encountered during such activities, consistent with the specified or comparable protocols.
- ▶ In the event of discovery, salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits; and cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database.

Implementing Agency: The Napa County Jurisdiction acting as lead agency for the future project shall be responsible for carrying out the provisions of the measure. Where the Napa County Jurisdiction implementing a project has adopted local regulations that require resource protection(s) that achieve the same or greater performance standard as the proposed mitigation, compliance with adopted regulations may be used as evidence to support fulfillment of the mitigation requirements. For paleontological resources, the local regulations must be at least as effective at avoiding substantial adverse effects as the measures above and any measure listed above not covered in the implementing agency's regulations shall be imposed on the project.

Significance after Mitigation

Future discretionary projects that implement the measures and actions in the RCAAP would comply with Mitigation Measure 3.7-2. Implementation of Mitigation Measure 3.7-2 would reduce impacts associated with paleontological resources by alerting construction workers to the possibility of encountering them and implementing professionally accepted, legally compliant procedures for the discovery of paleontological resources in the event of a find. The impact would be less than significant with mitigation.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that would otherwise have escaped back into space is instead "trapped," causing the atmosphere to warm. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution. According to the Intergovernmental Panel on Climate Change (IPCC), human influence has warmed the climate at a rate that is unprecedented in at least the last 2,000 years (IPCC 2023a). In addition, the IPCC reported with high confidence that in 2019, CO₂ concentrations were higher than at any time in at least 2 million years and reported with very high confidence that 2019 concentrations of CH₄ and nitrous oxide (N₂O) were higher than at any time in at least 800,000 years (IPCC 2023a). Rising atmospheric concentrations of GHGs in excess of natural levels enhance the greenhouse effect, which contributes to global warming of the earth's lower atmosphere. This warming induces large-scale changes in ocean circulation patterns, precipitation patterns, global ice cover, biological distributions, and other changes to the earth's system that are collectively referred to as climate change. The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years (IPCC 2023a). IPCC also reports that many changes in the climate system become larger in direct relation to increasing global warming, including increases in the frequency and intensity of extreme heat events, marine heatwaves, and heavy precipitation, agricultural and ecological droughts in some regions, and proportion of intense tropical cyclones, as well as reductions in Arctic sea ice, snow cover, and permafrost (IPCC 2023a). In addition, low-likelihood outcomes, such as ice-sheet collapse, abrupt changes in ocean circulation, some compound extreme events, and warming substantially greater than the assessed very likely range of future warming, cannot be ruled out (IPCC 2023a).

According to the IPCC, the global mean surface temperature increase by the end of the 21st century (2081–2100), relative to 1986–2005, could range from 0.5 to 8.7 degrees Fahrenheit (°F). Additionally, IPCC projects that global mean sea level rise will continue during the 21st century, very likely at a faster rate than observed from 1901 to 2015. By 2100, the rise is likely to range from 18 to 33 inches (0.43 to 0.84 meters) relative to 1986–2005 (IPCC 2023b). According to *California's Fourth Climate Change Assessment*, with global GHGs reduced at a moderate rate California will experience average daily high temperatures that are warmer than the historic average by 2.5 °F from 2006 to 2039, by 4.4 °F from 2040 to 2069, and by 5.6 °F from 2070 to 2100; and if GHG emissions continue at current rates then California will experience average daily high temperatures that are warmer than the historic

average by 2.7 °F from 2006 to 2039, by 5.8 °F from 2040 to 2069, and by 8.8 °F from 2070 to 2100 (LCI [formerly known as OPR] et al. 2018).

Since its previous climate change assessment in 2012, California has experienced several of the most extreme natural events in its recorded history: a severe drought from 2012 to 2016, an almost nonexistent Sierra Nevada winter snowpack in 2014/2015, increasingly large and severe wildfires, and back-to-back years of the warmest average temperatures (LCI [formerly known as OPR] et al. 2018). According to the California Natural Resources Agency's *Safeguarding California Plan: 2018 Update*, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018). The year 2024 was the warmest year since global records began in 1850, at 1.29°C (2.32°F) above the 20th-century average of 13.9°C (57.0°F). This value is 0.10°C (0.18°F) more than the previous record set in 2023. The 10 warmest years in the 174-year record have all occurred during the last decade (2014–2024) (NOAA 2025). In contrast, the northern Sierra Nevada experienced one of its wettest years on record during the 2016/2017 water year (CNRA 2018). The changes in precipitation exacerbate wildfires throughout California through a cycle of high vegetative growth coupled with dry, hot periods, which lowers the moisture content of fuel loads. As a result, the frequency, size, and devastation of forest fires have increased.

Temperature increases and changes to historical precipitation patterns will likely affect ecological productivity and stability. Existing habitats may migrate in response to climatic changes where possible, and those habitats and species that lack the ability to retreat will be severely threatened. Altered climate conditions will also facilitate the movement of invasive species to new habitats, thus outcompeting native species. Altered climatic conditions dramatically endanger the survival of arthropods (e.g., insects, spiders), with cascading effects throughout ecosystems (Lister and Garcia 2018). Conversely, a warming climate may support the populations of other insects, such as ticks and mosquitoes, which transmit diseases harmful to human health, including the Zika virus, West Nile virus, and Lyme disease (António et al. 2018).

Changes in temperature, precipitation patterns, extreme weather events, wildfires, and sea level rise have the potential to threaten transportation and energy infrastructure, crop production, forests and rangelands, and public health (CNRA 2018; LCI [formerly known as OPR] et al. 2018). The effects of climate change will also have an indirect adverse impact on the economy as more severe natural disasters cause expensive, physical damage to communities and the state.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs). Criteria air pollutants and TACs occur locally or regionally, and local concentrations respond to locally implemented control measures. However, the long atmospheric lifetimes of GHGs allow them to be transported great distances from their original emission sources. GHGs and global climate change, therefore, represent cumulative impacts; that is, GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change.

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is considered to be enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

GREENHOUSE GAS EMISSION SOURCES IN NAPA COUNTY

The RCAAP is based on a 2019 inventory of GHG emissions for the Napa County region. When development and scoping of the RCAAP and associated technical analyses (including inventory preparation) began in 2022, the update year of 2019 was selected because (1) this was the latest year for which data were most complete, and (2) it excluded data anomalies (i.e., high level of telecommuting) due to the COVID-19 pandemic starting in 2020. The regional inventory relies on the best available data and calculation methodologies to provide a foundation upon which the Napa County Jurisdictions can plan and act to reduce regional GHG emissions. Quantification of the 2019 regional GHG inventory update is based on the International Council for Local Environmental Initiatives methodologies, specifically, the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions Version 1.2 (Community Protocol) supplemented with additional protocols to refine certain sectors (e.g., agriculture, off-road

equipment) and provide locally relevant emissions. Because the 2019 inventory represents the best available data at the time that environmental analysis commenced, it provides an appropriate baseline for this analysis (see State CEQA Guidelines 15125).

The 2019 GHG emissions inventory results, as summarized in Table 3.8-1 below, show that total countywide emissions were 1,221,861 metric tons of carbon dioxide equivalent. When broken down by sector, the three largest were on-road transportation, building energy, and solid waste, representing 39, 23, and 16 percent of total emissions, respectively. The four remaining sectors (i.e., off-road equipment, agriculture, wastewater, and imported water) together accounted for about 22 percent of countywide emissions. When broken down by jurisdiction, the City of Napa accounted for the largest percentage of countywide emissions at 43 percent, followed by the unincorporated county at 31 percent, American Canyon at 16 percent, and each of St. Helena, Calistoga, and Yountville at 5 percent or less.

Table 3.8-1 Napa County Regional 2019 Greenhouse Gas Emissions Inventory by Sector and Jurisdiction

Sector or Jurisdiction	2019 GHG Emissions (MTCO ₂ e)	Percent of Total GHG Emissions
Sector		
On-Road Transportation	472,677	39
Building Energy	279,592	23
Solid Waste	198,862	16
Off-Road Equipment	115,548	9
Agriculture	103,381	8
Wastewater	45,858	4
Imported Water	5,943	<1
Total	1,221,861	100
Jurisdiction		
Napa	522,363	43
Unincorporated County	377,731	31
American Canyon	189,156	16
St. Helena	64,575	5
Calistoga	41,990	3
Yountville	26,047	2
Total	1,221,861	100

Notes: Individual percentages displayed in this table have been rounded to the nearest whole percent and were conducted independently after all calculations were made; thus, the total sum of individual percentages may not equate exactly to 100 percent. % = percent; GHG = greenhouse gas; MTCO₂e = metric tons of carbon dioxide equivalent.

Source: Analysis conducted by Ascent in 2022.

Federal Clean Air Act

The CAA, as amended, is the primary federal law that governs air quality nationwide. The CAA was enacted in 1963 and has been amended numerous times in subsequent years (1967, 1970, 1977, and 1990). On April 2, 2007, in *Massachusetts et al. v. Environmental Protection Agency*, 549 US 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the CAA. The court held that the EPA administrator must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow Section 202(a) of the CAA (EPA 2025a). Section 202(a) of the CAA requires the EPA administrator to set standards for air pollutant emissions from new motor vehicles or engines that, in the administrator's judgment, cause or contribute to air pollution that may endanger public health or

welfare (42 US Code [USC] Section 7521). On December 7, 2009, the administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA (40 Code of Federal Regulations [CFR] 1):

- ▶ **Endangerment Finding:** The administrator found that the current and projected concentrations of the six key well-mixed GHGs in the atmosphere threaten the public health and welfare of current and future generations.
- ▶ **Cause or Contribute Finding:** The administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings are not intended to act as requirements for the industry or other entities. However, this action was a prerequisite for implementing GHG emissions standards for vehicles and other sectors.

In July 2025, EPA initiated a process for “formal reconsideration of the 2009 Endangerment Finding in collaboration with the Office of Management and Budget and other relevant agencies.” As part of this review, EPA also intends to reconsider prior regulations and actions that rely on the Endangerment Finding. On April 21st, the EPA Administrator stated that he “anticipate[s]” that “there will be a rulemaking process” with “public comment” for reconsidering the 2009 Endangerment Finding (EPA 2025b). At this time, EPA has not formally rescinded the Endangerment Finding.

California Legislative GHG Reduction Targets

The state has passed legislation establishing a broad framework for long-term GHG reduction and climate change adaptation programs. The following bills are the primary laws related to GHG reduction targets that are also relevant to California’s energy goals.

- ▶ **Assembly Bill (AB) 32, Health and Safety Code Section 38500 et seq.** AB 32 codified the 2020 reduction target of EO S-03-05 (i.e., by 2020, reach the GHG emissions levels of 1990). AB 32 also gave CARB authority to develop a scoping plan that describes the approach California will take to achieve GHG reduction targets.
- ▶ **Senate Bill (SB) 32, Health and Safety Code Section 38566.** SB 32 codified the 2030 reduction target of EO B-30-15 (i.e., by 2030, reach statewide GHG emission levels of 40 percent below 1990 levels). As part of SB 32, AB 197 of 2016 (Chapter 250, Statutes of 2016) required CARB, in implementing SB 32’s 2030 GHG reduction target, to (1) prioritize emissions reductions to consider the “social costs” of GHG emissions and (2) prioritize “direct emission reductions” at large stationary sources and at mobile sources. In 2017, CARB updated the Scoping Plan to achieve the 2030 reduction target.
- ▶ **AB 1279, The California Climate Crisis Act, Health and Safety Code Section 38562.2.** On September 16, 2022, the State legislature passed AB 1279, which codified stringent emissions targets for the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, while also ensuring that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels (Health and Safety Code [HSC] Section 38562.2)
- ▶ **SB 375, Chapter 728, Statutes of 2008.** SB 375 provides for a new planning process that integrates regional transportation, land use, GHG reduction, and housing planning. SB 375 requires regional transportation plans (RTPs) to incorporate a sustainable communities strategy (SCS) that demonstrates how the region would achieve regional GHG emission reduction targets for passenger vehicles set by CARB. In the *2022 Progress Report California’s Sustainable Communities and Climate Protection Act*, CARB states that an RTP/SCS that meets the applicable SB 375 targets alone will not result in the GHG emission reductions necessary to meet state climate goals in 2030 nor 2050 (CARB 2022b). CARB has also noted that greater reductions in VMT will be required to make up the 6 percent gap in GHG. Further, CARB states that California is still not reducing GHG emissions from personal vehicle travel as needed to meet climate commitments and as targeted under SB 375 (CARB 2022b).

State Agency GHG Reduction Plans

- ▶ **2022 Scoping Plan for Achieving Carbon Neutrality.** CARB adopted the *Final 2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 16, 2022. The 2022 Scoping Plan traces the state’s pathway to achieve its goals of carbon neutrality and an 85 percent reduction in 1990 emissions by 2045, as codified by

AB 1279 in September 2022 (CARB 2022). These targets are in line with scientifically established levels to limit the rise in global temperature to no more than 2 degrees Celsius (°C), the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5°C. The 2022 Scoping Plan identifies the reductions needed by each GHG emission sector (e.g., transportation [including off-road mobile-source emissions], industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste) to achieve these goals. The 2022 Scoping Plan details a multitude of strategies for reducing GHG emissions in each of these sectors. Examples of strategies include achieving a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 to reduce GHGs from the transportation sector, achieving three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed statewide by 2030 to reduce GHG emissions in the commercial and residential building sector, and using long-term planning processes to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment to reduce energy sector GHG emissions. The 2022 Scoping Plan is the most current scoping plan.

- ▶ **California State Priority Climate Action Plan.** California's State Priority Climate Action Plan (PCAP) was developed to achieve GHG reductions across the geographic extent of California from nearly every economic sector. The PCAP includes several elements: a 2021 statewide GHG emissions inventory, the state's overarching GHG targets codified by AB 32 and AB 1279, an overview of the state's approach to low-income and disadvantaged community benefits analysis, workforce considerations, and GHG reduction measures that target reduction in the transportation, industrial, energy, high global warming potential, agriculture, natural and working lands, and waste sectors. The PCAP supports statewide GHG reduction targets through the implementation of the following reduction measures:
 - **Transportation measures:**
 - Create a holistic, heavy-duty zero-emissions vehicle buydown program.
 - Install truck charging to support zero-emissions goods movement at California ports and warehouse districts.
 - Advance the deployment of clean off-road equipment.
 - Bolster investments in the state's sustainable port and freight infrastructure.
 - Support mobility projects uplifted by communities.
 - Allow for local deployment of ZEV infrastructure and low-income ZEV support.
 - **Industrial measure:**
 - Accelerate industrial decarbonization by expanding the existing Industrial Decarbonization and Improvement to Grid Operations Program.
 - **Energy measures:**
 - Expand decarbonization through the Energy Conservation Assistance Act.
 - Create a funding program to upgrade the capacity of distribution systems.
 - Expand the success of California's Self-Generation Incentive Program for behind the meter energy storage.
 - Bolster healthy landscapes and resilient communities through expanding the Biomass to Carbon Negative Biofuels Program.
 - Deploy equitable building decarbonization.
 - Implement bioenergy projects.
 - Enable renewable microgrids for rural communities and tribes.

- **High global warming potential gases measure:**
 - Expand F-gas Reduction Incentive Program.
- **Agriculture measures:**
 - Expand California's healthy soils practices.
 - Reduce methane emissions by expanding California's existing Dairy Digester Research and Development Program.
- **Natural and working lands measures:**
 - Bolster California's Forest Health Program.
 - Expand urban and community forest projects.
 - Expand the state's Wetland Restoration Program.
- **Waste measures:**
 - Food Waste Prevention and Edible Food Recovery Program.
 - Bolster organics recycling infrastructure.

Fuel Economy Standards and Electric Vehicles

The National Highway Traffic Safety Administration (NHTSA) and EPA set the Corporate Average Fuel Economy Standards (CAFE) standards to improve the average fuel economy and reduce GHGs generated by cars and light-duty trucks. The most recent update was in 2024, and the CAFE standards were finalized for MYs 2027 through 2031. The final rule establishes standards that require an industry-wide fleet average of approximately 49 miles per gallon (mpg) for passenger cars and light trucks. The final rule establishes standards that would require an industry-wide fleet average of approximately 50.4 mpg in MY 2031 for passenger cars and light trucks and an industry fleet-wide average for heavy-duty pickup trucks and vans (HDPUVs) of roughly 2.851 gallons per 100 miles in MY 2035. The final CAFE standards increase at a rate of 2 percent per year for passenger cars in MYs 2027–2031 and 2 percent per year for light trucks in model years 2029–2031. The final HDPUV fuel efficiency standards increase at a rate of 10 percent per year in MYs 2030–2032 and 8 percent per year in MYs 2033–2035 (NHTSA 2024).

- ▶ **EO N-79-20.** Signed by Governor Newsom on September 23, 2020, EO N-79-20 requires that 100 percent of in-state sales of passenger cars and trucks are ZEVs by 2035; 100 percent of operating medium- and heavy-duty vehicles are ZEVs by 2045; and 100 percent of drayage trucks and off-road vehicles and equipment are ZEVs by 2035. The order also tasks CEC with providing an updated assessment of the infrastructure needed to support this level of ZEV adoption (CARB 2021). The Governor's Interagency Working Group on ZEVs developed the ZEV Action Plan, issued in 2013 and subsequently updated in 2016 and 2018, to identify actions that support the State's ZEV goals.
- ▶ **Advanced Clean Cars Program (passenger vehicles).** The ACC Program also includes the Zero Emission Vehicle Program and the Clean Fuels Outlet Regulation. The Zero Emission Vehicle Program is designed to achieve California's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of ZEVs, which include battery electric, fuel cell, and plug-in hybrid EVs. The Clean Fuels Outlet regulation is intended to ensure that fuels, such as electricity and hydrogen, are available to meet the fueling needs of new advanced technology vehicles as they come to market. CARB adopted the ACC II Program in August 2022 and provides the regulatory framework for ensuring the sales requirement goal of EO N-79-20 to ultimately reach 100 percent ZEV sales in the state by 2035. EPA granted CARB its California's CAA waiver request on December 18, 2024. As stated above, P.L. No. 119-16 revoked California's waiver to implement ACC II's fuel economy standards. The implications of this law on the State's ability to enforce its independent fuel economy standards are uncertain at this time, as the California Attorney General is pursuing legal action challenging P.L. No. 119-16. Whether this action will be successful is unknown, as is the possibility that a federal judge will issue a stay to halt the

implementation of the ACC II regulation during the legal process. Given the pending litigation, it is assumed CARB will continue to enforce these programs for the purpose of the legislative-adjusted forecasts in RCAAP.

- ▶ **Medium- and heavy-duty vehicles.** In 2008, CARB approved the Phase 1 Tractor-Trailer Greenhouse Gas Regulation to reduce GHG emissions by requiring the use of aerodynamic tractors and trailers that are also equipped with low-rolling-resistance tires (13 CCR Section 2020 et seq.). The regulation applies to certain Class 8 tractors manufactured for use in California and is harmonized with the parallel EPA and NHTSA Phase 1 heavy-duty truck standards. CARB amended the Tractor-Trailer Greenhouse Gas Regulation in 2019 (Phase 2 standards) to align with EPA and NHTSA Phase 2 heavy-duty truck standards.
- ▶ **Advanced Clean Trucks.** The Advanced Clean Trucks regulation was adopted by CARB on April 28, 2023. The Advanced Clean Trucks regulation sets requirements for the transition of diesel trucks and vans to zero-emission trucks, which began in 2024. Per the Advanced Clean Trucks Regulation, manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales are required to be 55 percent of Class 2b-3 truck sales, 75 percent of Class 4-8 straight truck sales, and 40 percent of truck tractor sales (EPA 2024). Adopted regulations are also expected to continue to reduce formaldehyde emissions emitted by cars and light-duty trucks. As emissions are reduced, CARB expects that risks associated with exposure to the emissions will also be reduced. EPA granted the waiver request for the Advanced Clean Trucks Regulation on April 6, 2023. However, as stated above, P. L. 119-15, enacting House Joint Resolution 87, was signed into law to nullify EPA's rule that had granted California a waiver to enforce stricter emissions standards for heavy-duty vehicles under the Clean Air Act. Thus, at this time, California is effectively blocked from enforcing these specific vehicle emission and warranty regulations.
- ▶ **Advanced Clean Fleets.** CARB's 2022 Advanced Clean Fleets regulation was developed to reduce diesel particulate matter through the transition of medium- and heavy-duty trucks to become fully electric by 2045. In January 2025, California withdrew its request for a waiver and authorization for the addition of the Advanced Clean Fleets regulation to its emissions control program (CARB 2025). CARB is not enforcing the existing portions of the Advanced Clean Fleets regulation that requires a federal waiver or authorization, such as the portions of the Advanced Clean Fleet regulation that apply to high-priority and drayage fleets. However, not all elements of the Advanced Clean Fleets regulation require a federal waiver or authorization (CARB 2025). State and local government fleets will still be required to be fully electric by 2045. Similar to the ACC II regulation discussed above, the GHG forecast prepared for the RCAAP included emissions reductions attributable to the ACF regulation.

Renewable Energy

- ▶ **Renewables Portfolio Standard.** SB 1078 (Sher 2002) established California's Renewables Portfolio Standard (RPS). The program sets continuously escalating renewable energy procurement requirements for the state's load-serving entities. Generation must be procured from RPS-certified facilities. SB 2 (1X) of 2011 obligated all California electricity providers to obtain at least 33 percent of their energy from renewable resources by 2020. CPUC and CEC are jointly responsible for implementing the program. All electricity retail sellers had an interim target between compliance periods to serve at least 38.5 percent of their load with RPS-eligible resources by December 31, 2022. In general, retail sellers either met or exceeded the interim 38.5 percent target and are on track to achieve their compliance requirements. In 2018, SB 100 (Public Utilities Code Sections 399.11, 399.15, 399.30 and, Section 454.53) was signed into law, which again increases the RPS to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.
- ▶ **SB 350 (Chapter 547, Statutes of 2015).** SB 350 established the 2030 targets for the RPS: (1) an RPS of 50 percent and (2) a doubling of efficiency for existing buildings. In addition, SB 350 requires CPUC to establish an integrated resource planning (IRP) process to require that load-serving entities in the state develop their future energy portfolios to align with California's clean energy goals.
- ▶ **SB 100 (Chapter 312, Statutes of 2018).** This bill establishes a new RPS target of 50 percent by 2026, increases the RPS target in 2030 from 50 to 60 percent, and establishes a goal of 100 percent zero-carbon energy sources by 2045.

- ▶ **SB 1020 (Chapter 361, Statutes of 2022).** This bill superseded the goals of SB 100 by requiring that 90 percent of all retail sales of electricity to California end-use customers are procured from renewable energy and zero-carbon resources by December 31, 2035. The requirement increases to 95 percent by December 31, 2040, and to 100 percent by December 31, 2045. Under SB 1020, state agency facilities must use 100 percent renewable and zero-carbon energy resources by December 31, 2035.
- ▶ **Integrated Energy Policy Report.** SB 1389 (Chapter 568, Statutes of 2002) required CEC to “conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state’s economy, and protect public health and safety” (PRC Section 25301[a]). This work culminated in the Integrated Energy Policy Report (IEPR). CEC adopts an IEPR every 2 years and an update every other year. The 2024 IEPR Update the most recent IEPR and, provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the State’s goal of ensuring reliable, affordable, and environmentally responsible energy sources. The report contains an assessment of major energy trends and issues in California’s electricity, natural gas, and transportation fuel sectors. The report provides policy recommendations to conserve resources, protect the environment, ensure reliable, secure, and diverse energy supplies, enhance the state’s economy, and protect public health and safety. Topics covered in the 2023 IEPR include the accelerated connection of clean energy, the California Energy Demand Forecast, the potential growth of hydrogen in the state, and updates to issues such as energy efficiency, gas utility decarbonization, and the Clean Transportation Program (CEC 2024).
- ▶ **California Building Energy Efficiency Standards.** The energy consumption of new residential and nonresidential buildings in California is regulated by the California Energy Code’s Building Energy Efficiency Standards (California Energy Code) (24 CCR Part 6). CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption. The 2022 California Energy Code went into effect on January 1, 2023. The 2022 California Energy Code advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photovoltaic (PV) system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. The 2025 Building Energy Efficiency Standards (2025 California Energy Code) were adopted on September 11, 2024, and will go into effect on January 1, 2026. According to CEC, the 2025 California Energy Code puts particular emphasis on encouraging efficient electric heat pump technology for space and water heating in newly constructed single-family, multi-family, and select nonresidential building types; replacing end-of-life rooftop heating, ventilation, and air-conditioning units of a certain size with high efficiency systems; establishing electric-ready requirements for commercial kitchens and some multi-family buildings; updating solar and storage standards for assembly buildings to make clean energy available for on-site use while minimizing exports to the electrical grid; and increasing ventilation standards to improve indoor air quality in multi-family buildings.
- ▶ **California Green Building Standards Code.** California has adopted the Green Building Standards Code (CALGreen) (24 CCR Part 11), which identifies both mandatory and voluntary aggressive energy efficiency standards for new residential and nonresidential buildings. The standards are updated every 3 years. The current version is the 2022 CALGreen Code. The 2022 CALGreen Code advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. The 2025 CALGreen Code was adopted on September 11, 2024, and will go into effect on January 1, 2026. The 2025 version proposes increased requirements for EV charging infrastructure (i.e., a higher percentage of parking spaces that must be equipped with EV chargers and more stringent requirements for the types of chargers that must be installed) in both residential and nonresidential buildings. The 2025 CALGreen Code also includes required analysis of embodied carbon in building materials, which was not required under the 2022 CALGreen Code. Lastly, the 2025 CALGreen Code includes updates to energy efficiency standards aimed at further reducing energy consumption in buildings and promoting the use of renewable energy sources (CEC 2024e). As discussed above, AB 130 freezes the residential building

code, including the CALGreen Code, until 2031; however, the requirements of the 2025 nonresidential CALGreen Code will be applied to new nonresidential development effective January 1, 2026.

- ▶ **AB 130:** AB 130 of 2025 imposes a moratorium on changes to California building codes affecting residential units, including both state and local amendments, through 2031, with limited exemptions. AB 130 prohibits CEC or any other adopting agency from considering, approving, or adopting any proposed building standards affecting residential units, unless a certain condition is met, including that the CEC deems those changes necessary as emergency standards to protect health and safety. The 2025 Energy Code will proceed as planned with an effective date of January 1, 2026, and the 2031 Energy Code cycle is anticipated to be unaffected.

Short-Lived Climate Pollutant Reduction Strategy

Pursuant to SB 1383 of 2016, CARB adopted the *Short-Lived Climate Pollutant (SLCP) Reduction Strategy*, which is part of CARB's 2017 Scoping Plan and is California's plan for reducing emissions of high global-warming potential gases with short atmospheric lifetimes, including methane. As one of its measures, the strategy strives to reduce GHG emissions and displace fossil-based natural gas (CARB 2017). It calls for the use of anaerobic digestion facilities at wastewater treatment plants to produce methane and the use of this methane to generate electricity (CARB 2017: 77–78).

Bay Area Air District

The Bay Area Air District (formerly the Bay Area Air Quality Management District or BAAQMD) is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area. Its role is discussed further in Section 3.3, "Air Quality." The Bay Area Air District also recommends methods for analyzing project-related GHG emissions in CEQA analyses and recommends multiple GHG reduction measures for land use development projects. The Bay Area Air District's *2022 CEQA Guidelines* (CEQA Guide) provides a qualitative approach to assessing a project's cumulative contribution to climate change in CEQA analyses (BAAQMD 2022). The CEQA Guide is intended to be used to uniformly evaluate the significance of operation-related emissions from land use development projects. For land use development projects, the Bay Area Air District recommends that, either as a project design feature or recommended mitigation, projects include the following measures:

- ▶ elimination of on-site natural gas infrastructure to power appliances;
- ▶ installation of EV charging stations meeting the Tier 2 requirements of the most recent version of Part 6 of the Title 24 California Building Code, CalGreen;
- ▶ avoid impacts from the unnecessary, wasteful, or inefficient use of energy resources; and
- ▶ achieve VMT reductions of 15 percent from a regional average for residential (and commercial, and no net increase from a regional average for retail projects).

The CEQA Guide also provides guidance for assessing the significance of climate change impacts through a climate action plan (CAP) or greenhouse gas reduction plan (GHGRP) consistency analysis using a qualified CAP or GHGRP. The Bay Area Air District makes the direct connection between these two qualitative, performance-based options to a project's ability to demonstrate that it is doing its "fair share" in assisting the state in meeting the long-term GHG emissions reduction target of achieving carbon neutrality by 2045, as mandated by AB 1279.

Napa County Jurisdictions

In 2021 and 2022, several local agencies in the county adopted ambitious goals of reaching carbon neutrality by 2030. On May 20, 2025, the City of American Canyon adopted a General Plan Policy ENV-3.2 that discusses support for comprehensive, immediate, and sustained action to achieve its goal of net zero climate pollution by 2030. However, no analysis was done prior to adoption of these goals that demonstrated how these ambitious goals would be achieved. Additionally, these goals were set prior to the passage of Assembly Bill (AB) 1279 and adoption of CARB's 2022 Scoping Plan. The RCAAP would update and supersede local goals and existing climate action plans adopted by the Napa County Jurisdictions. The RCAAP provides a detailed, quantified set of strategies, measures, and implementing actions for achieving GHG reduction and carbon neutrality for 2045, consistent with AB 1279 and the State's 2022 Scoping Plan. See additional discussion related to targets in Chapter 3 and Appendix F of the RCAAP.

3.8.2 Discussion

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

and

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

Less than significant impact. The RCAAP is a policy document that does not include any land use or zoning changes, site-specific development, designs, or proposals; nor does it grant any entitlements for development that would result in environmental impacts. Instead, the RCAAP would commit the County to more sustainably develop projects that could already occur within the Napa County Jurisdictions. As a policy document, the RCAAP includes measures to reduce GHG emissions from most sectors evaluated in the 2019 inventory and forecasts, including on-road transportation, building energy use, off-road equipment, agriculture, solid waste, and water and wastewater. Once adopted, implementation of the RCAAP's measures and actions could require construction and/or operational activities, which could have the potential to directly or indirectly emit GHG emissions.

The RCAAP focuses on achieving GHG emissions reduction targets for the years 2030 and 2045. The RCAAP's 2045 carbon neutrality goal also sets the region on a trend to achieve California's 2045 net zero emissions target. Therefore, pursuant to CEQA Guidelines Section 15064.4(b)(3), the RCAAP's 2045 target represents the level below which GHG emissions would not be cumulatively considerable through the year 2045. Finally, the RCAAP's 2045 aspirational goal of carbon neutrality aligns with the statewide 2045 target of net zero emissions stipulated in AB 1279. With respect to GHG emissions, State CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The State CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (Section 15064.4[a]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (Section 15064.4[c]). The State CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (Section 15064.4[b]):

- ▶ the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting,
- ▶ whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and
- ▶ the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Courts have ruled that although there are various potential thresholds and methodologies for evaluating project-level GHG emissions consistent with CEQA, use of statewide emission reduction goals is a permissible criterion of significance, so long as substantial evidence and reasoned explanation are provided to close the analytical gap (i.e., providing a reasoned explanation for how a GHG reduction at the project level contributes to statewide reduction goals). The RCAAP is additionally consistent with direction provided by the California Supreme Court in the *Center for Biological Diversity v. California Department of Fish and Wildlife* (Newhall Ranch Case), which rejected an approach to apply a statewide inventory at the local level, suggesting that local inventories are necessary to assess a project's "fair share" contribution of emissions reductions to meet statewide GHG reduction targets. The RCAAP provides a local emissions inventory for participating entities and uses that inventory to establish localized targets that meet the legislative statewide GHG reductions of SB 32 and AB 1279. Therefore, the RCAAP is inherently a GHG reducing project and is aligned with the goals of the 2022 Scoping Plan, which is the plan to achieve these statewide emission reduction goals is the 2022 Scoping Plan. Thus, comparing a project to the 2022 Scoping Plan can demonstrate whether it is consistent with or conflicts with statewide reduction targets and goals. Thus, consistency with the 2022

Scoping Plan and the State's legislative GHG emissions reduction targets is an appropriate metric for determining the significance of the RCAAP's GHG emissions.

Construction

As described in Chapter 2, "Project Description," of this checklist, it is reasonably foreseeable that implementation of some measures and actions in the RCAAP would result in physical ground disturbance and construction. These projects would occur primarily in existing urban environments but may also result in ground disturbance in undeveloped or rural areas. The RCAAP strategies and actions that may require construction activities and as such, have the potential to directly or indirectly emit GHG emissions, include expanding EV charging infrastructure (Action TR-3-B); leveraging new development to support ZE vehicles (Action TR-4-C); implementing ZE loading docks (Actions OF-2-A and OF-2-C); reducing fossil fuel use in agricultural equipment through irrigation pump replacements (Actions AG-1-D and AG-1-G); wildfire risk reduction requirements for new and existing residential and commercial developments (Action ALL-3.2); upgrading communications, energy, public services, and transportation infrastructure to improve extreme heat resilience (Action TEMP-4.1); and maintaining and enhancing flood control, storm water, and sewage/solid-waste infrastructure (Actions FLOOD-2.3, FLOOD-3.1).

Construction efforts anticipated to support these activities would generally be small in scale, use hand tools and small machinery, and require minimal numbers of construction workers and associated worker vehicle trips. However, new construction could require the use of heavy equipment and involve more intense construction phases to construct new or relocated infrastructure (Actions FLOOD-5.1 and ENERGY-2.1), build a new hydrogen fueling station (Action TR-4-C), and establish new parks and trails (Action TEMP-2.1). GHG emissions associated with construction activities, including those required to implement the RCAAP, are captured in the RCAAP GHG forecasts.

In addition, some RCAAP measures and actions would reduce GHG emissions generated during construction activities. These measures may result in fewer GHG emissions from all future projects in the Napa County Jurisdictions, including those required to implement the RCAAP. For example, Action OF-4-A encourages the use of electric construction equipment to reduce GHG emissions from the combustion of fossil fuels during construction. Action SW-2-A involves developing a unified Construction Waste Management Plan that requires and achieves recycling or reuse of at least 70 percent of construction waste from every project starting in 2035, thereby reducing GHG emissions associated with producing new construction materials. In addition to RCAAP measures and actions, all future construction activities under the RCAAP would be required to comply with applicable local regulations pertaining to construction GHG emissions.

Therefore, because construction-generated GHG emissions would be upfront, short-term emissions, and would be greatly offset by the emissions reductions achieved through implementing the measures of the RCAAP, construction activities to implement the RCAAP would not generate substantial GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Operations

The RCAAP includes measures and actions that could generate operational GHG emissions when implemented. Occasional operation and maintenance activities, such as vehicle use, equipment and facility repair and replacement, tree watering and trimming, landscaping and vegetation management, and irrigation and water-use inspections, would be required in response to the implementation of some actions included in the RCAAP (e.g., Actions TR-4-C and AG-5-B). These operations and maintenance activities would occur on an intermittent schedule, with minimal activities and anticipated completion with existing personnel in conjunction with existing maintenance activities. While these types of maintenance and operational activities would generate GHG emissions, the increase would be minimal, and overall operational GHG emissions would not substantially increase. Further, because the implementation of the RCAAP would reduce the county's total GHG emissions, it is foreseeable that any operational GHG emissions would be offset by the overall net benefit of GHG emissions reductions.

Despite some operational emissions occurring with the implementation of the RCAAP, the RCAAP would reduce overall GHG emissions from sources within the county. For example, several RCAAP actions could result in the construction of new facilities that could generate VMT. These include critical facilities that are currently exposed to

flood hazards (Action FLOOD-5.1), a new hydrogen fueling station (Action TR-4-C), and implementation of Action SW-2-A, which could indirectly result in expanded local capacity at recycling facilities to accommodate increased intake and processing of construction and demolition waste. Although these facilities have the potential to generate VMT, the VMT would be reallocated from existing operational trips within the county. The net effect on countywide VMT cannot be known at this time. The increase in recycling truck trips to support Action SW-2-A would be offset by the reduction in truck trips to landfills within and outside the county, for example. Further, if an increase in truck trips were to occur from the implementation of Action SW-2-A, the emissions associated with such trips would be offset by the emission reductions achieved through the avoidance of fugitive methane emissions, a more potent GHG as compared to CO₂, from the decomposition of organic matter at landfills.

In addition, the RCAAP's transportation-related strategies, measures, and subsequent actions would reduce mobile-source emissions generated within the county by encouraging reductions in VMT per capita and increased EV use, thereby reducing fossil-fuel consumption. Implementation of measures and subsequent actions such as Measure TR-1, "Reduce Vehicle Miles Traveled Countywide" (Actions TR-1-A through TR-1-D), Measure TR-3, "Expand Electric Vehicle Charging Infrastructure" (Actions TR-3-A through TR-3-D), Measure TR-10, "Implement the Active Transportation Plan" (Actions TR-10-A through TR-10-J), Measure TR-11, "Expand Commute Transportation Demand Management Programs" (Actions TR-11-A through TR-11-E), and Measure TR-14, "Empower Community to Choose Active Transportation Options" (Actions TR-14-A through TR-14-F) would reduce GHG emissions from the combustion of fossil fuel used for transportation by reducing VMT, encouraging ZEVs and EVs, incentivizing electrification of equipment, and increasing public awareness around public and alternative transportation programs and services. Examples of potential GHG reductions achieved by these actions include reduced fossil fuel consumption related to the implementation of VMT reduction strategies as part of discretionary land use and community development efforts, as included in Action TR-1-C, or reduced fossil fuel consumption related to the implementation of Action TR-7-A, which would support the continued statewide transition to EVs by facilitating a partnership with the Bay Area Air District and others to pursue EV funding/rebates for residents.

The RCAAP's energy-related strategies, measures, and subsequent actions also would reduce GHG emissions related to the generation and consumption of energy within the county through the implementation of measures and actions such as Measure BE-1: "Retrofit Existing Buildings to Zero Carbon" (Actions BE-1-A through BE-1-T), Measure BE-3, "Increase Renewable Energy Generation" (Actions BE-3-A through BE-3-C), and Measure BE-5, "Decarbonize New Buildings" (Actions BE-5-A through BE-5-D). For example, the implementation of BE-1-D would involve determining reach code compliance triggers for retrofits. Action BE-1-J would involve waiving or reducing permitting fees for building retrofit projects that convert mixed-fuel buildings into all-electric and cap natural gas lines. Action BE-3-A would involve collaboration with utilities and other partners to offer rebates and incentives for renewable energy and storage, while Action BE-3-B would prioritize outreach to non-residential and residential property owners by jurisdiction, based on their electricity use. Measures and actions such as these would reduce GHG emissions related to energy use in the built environment by reducing fossil fuel use and increasing energy efficiency, and by reducing emissions from energy generation by prioritizing renewable energy infrastructure.

Additionally, the RCAAP's solid-waste- and wastewater-related strategies, measures, and subsequent actions would reduce GHG emissions from the transportation and processing of solid waste and wastewater, as well as methane emissions generated as a byproduct of waste decomposition. These measures and actions include Measure WW-1, "Reduce Methane Emissions from Wastewater Treatment Plants" (Actions WW-1-A and WW-1-B), Measure WW-3, "Reduce Residential Water Use" (Actions WW-3-A through WW-3-H), Measure SW-1, "Increase Solid Waste Diversion" (Actions SW-1-A through SW-1-H), and Measure SW-4, "Increase Methane Capture Capacity at Local Landfills" (Actions SW-4-A through SW-4-D). Examples of GHG reductions achieved by these measures and actions include Action SW-4-B, which would involve conducting a feasibility study to determine solutions to restart methane capture and either flare, collect, or generate electricity from methane to reduce the intensity of emitted GHGs. Action WW-3-F would reduce GHG emissions related to the treatment and transportation of water by targeting average indoor residential water use of 42 gallons per capita per day or less for 2030 and beyond.

Lastly, the RCAAP's agriculture-related strategies, measures, and subsequent actions would reduce GHG emissions from equipment and livestock during agricultural operations and support carbon sequestration. This would be

accomplished through the implementation of measures and actions such as Measure AG-1, “Reduce Fossil Fuel Consumption in Field Equipment” (Actions AG-1-A through AG-1-G), Measure AG-5, “Expand the Urban Forest” (Actions AG-5-A through AG-5-E), and Measure AG-8, “Enhance Sustainable Livestock Practices” (Actions AG-8-A through AG-8-C). Examples of these actions and their potential to reduce GHG emissions include Actions AG-5-B, which targets a 20 percent expansion of the urban forest by 2035 from 2019 levels to increase carbon sequestration, Action AG-1-B, which would reduce GHG emissions from agricultural equipment by encouraging the retirement of fossil fuel-powered equipment and the use of fossil fuels, and Action AG-8-B, which would reduce methane emissions related to livestock by adopting ordinances that discourage or prohibit anaerobic manure management in favor of pasture-managed or composted manure.

Based on the modeling conducted in the RCAAP, the 17 quantified GHG reduction measures have the potential to help the region meet the 2030 and 2045 targets under the Scoping Plan Anthropogenic Targets pathway without the need for additional carbon sequestration measures. As shown in Figure ES.2 of the RCAAP, implementation of the measures would achieve greater reductions than the required locally adjusted Scoping Plan GHG reduction targets (i.e., 42 percent below 2019 levels by 2030, 57 percent below 2019 levels by 2035, and 85 percent below 2019 levels by 2045).

Appendix D of the 2022 Scoping Plan identifies three key priority areas for GHG reductions by local governments: VMT Reduction, Transportation Electrification, and Building Decarbonization. RCAAP measures related to VMT reduction, EVs, and increased energy efficiency and renewable energy use (e.g., Measures TR-1, TR-7, TR-10, BE-1, BE-3, and BE-5) are consistent with these priority areas. Table 3.8-2, below, summarizes the GHG reductions quantified in the RCAAP.

Table 3.8-2 RCAAP Emissions Reductions per Measure by Year

Measure ID	Measure Title	2030	2035	2045
Buildings				
BE-1	Retrofit Existing Buildings to Zero Carbon	38,703	57,957	36,412
BE-3	Increase Renewable Energy Generation	1,875	3,510	0
BE-5	Decarbonize New Buildings	19,418	18,428	21,963
Sector Total		59,996	79,895	58,375
Transportation				
TR-2	Reduce Winery Wastewater Hauling Emissions	520	415	215
TR-9	Expand Renewable Diesel Availability	17,830	36,228	43,785
TR-10	Implement the Active Transportation Plan	1,829	1,708	748
TR-11	Expand Commute Transportation Demand Management Programs	3,689	2,351	673
Sector Total		23,868	40,702	45,421
Offroad				
OF-1	Reduce Landscaping-Related Emissions	290	149	12
OF-2	Zero-Emission Loading Docks	271	541	820
OF-3	Zero Carbon Construction Equipment - Community	0	5,944	10,221
OF-4	Zero Carbon Construction Equipment - Municipal	236	472	472
Sector Total		797	7,106	11,525
Solid Waste and Wastewater				
SW-1	Increase Solid Waste Diversion	47,342	56,974	68,072
SW-4	Increase Methane Capture Capacity at Local Landfills	93,048	98,772	104,985
WW-1	Reduce Methane Emissions from Wastewater Treatment Plants	32,739	43,227	45,412
Sector Total		173,129	198,973	218,469

Measure ID	Measure Title	2030	2035	2045
Agriculture				
AG-1	Reduce Fossil Fuel Consumption in Field Equipment	25,316	49,020	52,862
AG-6	Restore Woodland and Forest Habitat	82,201	123,302	164,403
AG-7	Increase Sustainable Vineyard Certification [†]	20,778	63,556	167,444
Sector Total		128,295	235,878	384,709
Total Annual Reductions from human-caused sources only		283,105	375,696	386,653
Reductions Needed to Meet 2030 and 2045 Targets		189,219	227,410	368,542
On Track to Meet Target?		Yes	Yes	Yes
Total Annual Reductions from all sources		386,084	562,553	718,500
Reductions Needed to Meet the 2045 Carbon Neutrality Goal		189,219	227,410	547,378
On Track to Meet 2045 Carbon Neutrality Goal?		Yes	Yes	Yes

Notes: MTCO_{2e} = metric tons of carbon dioxide equivalent.

Source: Based on Table 3.1 of the RCAAP. Calculations performed by Ascent in 2024.

If the RCAAP is adopted, the Napa County Jurisdictions would be required to regularly monitor and report on the implementation status and effectiveness of all GHG reduction measures, as outlined in Chapter 6, "Implementation and Monitoring," of RCAAP. This includes both annual reporting to document progress toward the GHG emissions reduction goals and full updates to the plan, including new inventories and forecasts, every 5 years.

Summary

As discussed above, consistency with the 2022 Scoping Plan and the State's legislative GHG emissions reduction targets is an appropriate metric for determining the significance of the RCAAP's GHG emissions. Implementation of the RCAAP would achieve the County's 2030 and 2045 GHG emission reduction goals, consistent with statewide GHG reduction goals identified in the 2022 Scoping Plan, as directed by AB 1279. The RCAAP also includes measures that align with the VMT reduction, EV, and building decarbonization priority reduction areas identified for local governments, as outlined in Appendix D, "Local Actions," of the 2022 Scoping Plan. Therefore, while construction, operation, and maintenance activities associated with implementing specific RCAAP measures and actions could generate GHG emissions, these emissions would be relatively minimal and compensated for by the long-term GHG emissions reductions from the RCAAP itself. The RCAAP would be consistent with the 2022 Scoping Plan and impacts would be less than significant. No mitigation is required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 Environmental Setting

HAZARDOUS MATERIALS

California Health and Safety Code Section 25501 defines hazardous materials as specifically listed substances that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant hazard to human health and safety or to the environment if released.

Sites with the potential to contain soil and/or groundwater contamination are located throughout the county. According to the Hazardous Waste and Substances Site List (Cortese), there are two active hazardous materials sites included on a list compiled pursuant to Government Code Section 65962.5 in the county: Klass Cleaners (60002699)

located in St. Helena and 1525 Aetna Springs Road (60003205) located in the rural town of Pope Valley. Remediation of the Klass Cleaners site includes efforts focusing on the remediation of the polluted groundwater supply from a dry-cleaning business. 1525 Aetna Springs Road includes remediation of contaminated soil at a historical mercury mine. Each of these is an active cleanup site and is under a state-led response (DTSC 2025).

AIRPORTS

There are two public-use airports located in Napa County: Napa County Airport and Angwin-Parrett Field. The Napa Airport Industrial Area, which includes the Napa County Airport, is located at the southern end of Napa County between the Cities of Napa and American Canyon along Highway 29. Angwin-Parrett Field Airport is located approximately 1 mile east of the small rural town of Angwin. There are no commercial airports in Napa County. The Napa County Airport Land Use Compatibility Plan (ALUCP) establishes land use compatibility zones for areas located within the flight path surrounding Napa County airports. As required by State Aeronautics Law, the County's Airport Land Use Commission (ALUC) reviews land use compatibility issues for development within airport influence zones guided by the ALUCP. Airport compatibility issues include safety, noise, overflight, and airspace protection.

EMERGENCY RESPONSE AND EVACUATION PLANS

Emergency response and emergency evacuation plans are designed by the Office of Emergency Services for each county to respond to a possible emergency situation (e.g., fires, floods, earthquakes). These plans cover all of the land within the region, including both incorporated and unincorporated areas, and provide a process for evacuating people from danger and preventing or minimizing loss of life and property. In addition, the Bay Area Regional Emergency Coordination Plan provides a framework for collaboration and coordination during regional events, as well as critical linkages to ensure that existing Bay Area emergency response systems work together.

Each of the Napa County Jurisdictions has established policies related to emergency response and evaluation. As summarized in Appendix K to the RCAAP, these policies are contained in the Napa County Operational Area Hazard Mitigation Plan (2020), the City of Napa Hazard Mitigation Plan Update (2022), the Napa County General Plan Safety Element (2023), the City of American Canyon Safety Element (2025), the City of Calistoga General Plan Public Safety Element (2014), the City of Napa 2040 General Plan Safety and Noise Element (2022), the St. Helena General Plan Update 2040 Public Health, Safety, and Noise Element (2019), and the Yountville General Plan Safety + Hazards Element (2019). Napa County is also in the process of drafting a Multi-Jurisdiction Hazard Mitigation Plan Update to address response to natural disasters.

The Napa County Emergency Operations Plan (most recently updated in 2024) is the principal guide for Napa County's response to, management of, and recovery from real or potential emergencies and disasters occurring within all Napa County Jurisdictions. In the event of an evacuation, Napa County will use Alert Napa County to reach the public and coordinate evacuations.

WILDFIRE

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped Fire Hazard Severity Zones (FHSZs) for the entire State. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as: Moderate, High, and Very High. According to CAL FIRE's Fire Resource Assessment Program FHSZ Geographic Information System data, there are numerous areas throughout the county that are located within a Very High FHSZ (CAL FIRE 2025).

3.9.2 Discussion

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

Less than significant impact. The implementation of the RCAAP would involve the use of hazardous materials during construction and routine maintenance. Development activities associated with the implementation of the proposed plan would temporarily increase the regional transport, use, storage, and disposal of hazardous materials and petroleum products commonly used in construction (e.g., diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals). Once constructed, most RCAAP projects would not require the use of hazardous materials other than household hazardous materials, such as paints and cleaning supplies.

All future projects would be required to comply with relevant federal, State, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials, as well as the reduction of the potential for humans or the environment to be affected by accidental release of hazardous materials. Regulations that set requirements for those transporting, using, or disposing of hazardous materials include the Resource Conservation and Recovery Act (CCR Title 22); the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Transportation Act; Title 22; CCR Title 27, and the California Fire Code.

If small spills occur during construction, they would have a negligible impact on public health due to the properties of these materials and because they would be discrete, localized releases. Spills would be resolved in accordance with applicable regulations so that there would not be long-term exposure or potential for contaminant migration. Hazardous materials spills or releases, including petroleum products, such as gasoline, diesel, and hydraulic fluid, regardless of quantity spilled, must be immediately reported if the spill has entered or threatens to enter a water of the state, including a stream, lake, wetland, or storm drain, or has caused injury to a person or threatens injury to public health. Immediate notification must be made to the local emergency response agency, or 911, and the Governor's Office of Emergency Services Warning Center. For nonpetroleum products, additional reporting may be required if the release exceeds federal reportable quantity thresholds over a release period of 24 hours, as detailed in HSC Section 25359.4 and Title 40, Section 302.4 of the CFR.

Pursuant to Occupational Safety and Health Administration regulations (29 CFR Section 1910.120), standard accident training for cleaning small spills would be provided to all individuals prior to their work with hazardous substances, and the appropriate types and amounts of spill cleanup materials and personal protective equipment would be immediately available. Additional requirements regarding hazardous materials labeling, containment, and covering set forth by the State Water Resources Control Board (SWRCB) Construction General Permit (2009-009-DWQ) would also be implemented during construction.

The Resource Conservation and Recovery Act and the Hazardous Waste Control Law regulate the generation, transport, treatment, storage, and disposal of hazardous waste. These laws establish regulatory systems for handling hazardous waste to protect human health and the environment, including requirements for material classification, packaging, and hazard communication. CalEPA oversees the regulation and management of hazardous materials on a statewide level through the California Department of Toxic Substances Control (DTSC). Use of hazardous materials requires permits and monitoring to avoid hazardous waste release through the local Certified Unified Program Agency (here, Napa County). DTSC is responsible for enforcing and implementing hazardous waste laws and regulations, codified in Title 22 of the CCR. Additionally, businesses that generate hazardous waste are required to have an EPA identification number to monitor and track hazardous waste activities. Because these regulations are law and binding on responsible agencies and project sponsors, it is reasonable to expect they would be implemented. The California Division of Occupational Safety and Health (Cal/OSHA) also has regulations concerning the use of hazardous materials, including requirements for safety training, the availability of safety equipment, hazardous materials exposure warnings, and the preparation of emergency action and fire prevention plans. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs.

This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to reduce hazards that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. For all the foregoing reasons, implementation of the RCAAP would not create a significant hazard through the routine transport, use, or disposal of hazardous materials. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. As discussed in criterion “a” above, all future projects would be required to comply with relevant federal, state, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials. Other reasonably foreseeable events that could result in exposure to potentially hazardous materials include hazards associated with structure demolition, grading, and construction in areas with naturally occurring asbestos.

Modification of existing structures could expose construction personnel and the public to airborne lead-based paint dust, asbestos fibers, and other contaminants. Asbestos and lead abatement must be performed and monitored by contractors with appropriate Cal/OSHA certifications. Demolition that could result in the release of lead and/or asbestos must be conducted in accordance with Cal/OSHA standards. Prior to demolition, all structures would be tested for the presence of lead and asbestos-containing materials, in accordance with 15 US Code Section 2601 et seq. and 40 CFR Part 763, Subpart G. Any asbestos would be removed and disposed of by an accredited contractor in compliance with federal, state, and local regulations (including the Toxic Substances Control Act and the National Emission Standard for Hazardous Air Pollutants). For the purposes of compliance with Cal/OSHA regulations, all coated surfaces would be assumed to potentially contain lead. Spent fluorescent light bulbs and ballasts, thermostats, and other electrical equipment may contain heavy metals, such as mercury, or polychlorinated biphenyls. If concentrations of these materials exceed regulatory standards, they would be handled as hazardous waste in accordance with hazardous waste regulations. Construction could also occur in areas where asbestos occurs naturally. Naturally occurring asbestos is a carcinogen that is associated with ultramafic rock formations found throughout the county. In July 2001, CARB adopted an ATCM for construction, grading, quarrying, and surface mining operations in areas with serpentine or ultramafic rocks. These regulations are codified in Title 17, Section 93105 of the CCR and enforced by the Bay Area Air District. The regulations require preparation and implementation of an Asbestos Dust Mitigation Plan for construction or grading activities on sites greater than 1 acre in size on soils known to contain naturally occurring asbestos, as determined through the geotechnical investigations discussed in Section 3.7, “Geology and Soils.” The asbestos dust mitigation plan would incorporate the recommendations of the geotechnical investigation to avoid effects on nearby populations. Typical aspects of the mitigation plan would include provisions for sampling soils imported to the project site during construction, a prohibition on rock crushing when materials may contain asbestos, standard track-out control measures, and limits on fugitive dust. In addition, HSC Section 19827.5 requires that local agencies not to issue demolition or alteration permits until an applicant has demonstrated compliance with the notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. Napa County General Plan Policy CON-84 reinforces these regulations for projects in the unincorporated county. It requires that the County prepare and disseminate maps showing areas where soils are known to contain naturally occurring asbestos and that it require enhanced dust suppression measures for grading and construction projects in these areas, consistent with Bay Area Air District requirements.

As described above, this evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to address hazards that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. Enforcement of these regulatory standards would ensure that projects necessary for RCAAP implementation would not create a significant hazard through reasonably foreseeable upset and/or accident

conditions that could result in the release of hazardous materials into the environment. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. The RCAAP would establish a program that requires some discrete projects to support implementation. The precise location of these projects within the county is not prescribed in the plan, and the proximity to existing or proposed schools cannot be determined. However, the RCAAP does not include measures or actions that would result in the construction of facilities that emit substantial hazardous emissions or handle large quantities of hazardous materials during operation. The incidental use of hazardous materials during construction and operation would be subject to established regulations regarding the safe use, transportation, and disposal of hazardous materials. Compliance with applicable regulations is sufficient to ensure that any hazardous materials used during RCAAP implementation would not result in hazardous emissions near an existing or proposed school. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. Sites with the potential to contain soil and/or groundwater contamination are located throughout the county. Implementation of the RCAAP would involve ground-disturbing activities, including grading and excavation, which could release contaminants into the environment if they are present in the underlying soils and/or groundwater. According to the Hazardous Waste and Substances Site List (Cortese), the County contains two active hazardous materials sites included on a list compiled pursuant to Government Code Section 65962.5: Klass Cleaners (60002699) located in St. Helena and 1525 Aetna Springs Road (60003205) located in the rural town of Pope Valley. Remediation of the Klass Cleaners site includes efforts to address polluted groundwater from a dry-cleaning business. 1525 Aetna Springs Road includes remediation of contaminated soil at a historical mercury mine. Each of these is an active cleanup site and is under a state-led response (DTSC 2025). Implementation of the RCAAP would not result in any ground-disturbing activities on these sites before their cleanup and remediation activities are completed. Therefore, the implementation of the RCAAP would not result in a significant hazard to the public or the environment, as it is located on a hazardous materials site. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. Generally, the RCAAP does not include actions that would result in projects near a public use airport with the potential to introduce safety hazards or excessive noise, nor would the RCAAP result in the construction of tall structures that directly impede the navigable airspace. In addition, as described above, the ALUC or their designee would review all proposed projects within the airport influence zones of the two public-use airports in the county for land-use compatibility concerns.

In implementing the RCAAP, the Napa County Jurisdictions would comply with applicable ALUCP requirements and any Federal Aviation Administration requirements (14 CFR Part 77). Where existing regulatory requirements or permitting requirements exist that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. Because existing regulations and laws related to development near a public airport prohibit the approval of incompatible projects, unless the local jurisdiction overrules the determination of incompatibility with a supermajority vote, these existing regulations and permitting requirements of the independent regulatory agencies can be relied upon to address potential project effects. Therefore, implementation of the RCAAP would not significantly expose residents or workers to safety hazard or excessive noise levels. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. As described above and summarized in Appendix K to the RCAAP, each of the Napa County Jurisdictions has established policies related to emergency response and evaluation. These plans generally identify hazards, outline response procedures, and set mandatory requirements for new development. GHG reduction measures and actions would generally result in discrete projects that do not have the potential to substantially change the fundamental assumptions of these plans related to areas of known hazards, population centers, and effective response and evaluation procedures.

In addition, because a core purpose of the RCAAP is to aid the Napa County Jurisdictions in proactive response to natural hazards that are anticipated to result from climate change, RCAAP measures and actions may support the goals of these plans. For example, Measure ALL-8 includes several actions to integrate climate change into emergency management planning and response. Emergency response and evacuation plans are regularly updated to reflect current conditions. If RCAAP implementation affects the assumptions in the Napa County Jurisdictions' emergency response and evacuation documents, the necessary adjustments would be incorporated into the next update without impairing implementation.

Construction activities for RCAAP projects could occur within roadway rights-of-way and may require temporary lane closures or result in other traffic disruptions. Depending on the roadway, encroachment permits from Caltrans and the Napa County Jurisdictions would be required for all work within public rights-of-way. As a requirement of encroachment permit approval, project proponents would be required to develop a traffic control plan that meets the requirements of the most current California Manual on Uniform Traffic Control Devices (Caltrans 2025b) and the latest edition of the Standard Specifications for Public Works Construction. Compliance with the encroachment permit and traffic control plan would ensure adequate access for fire and emergency responders throughout construction.

Future roadway improvements would also be required to comply with the California Fire Code. The California Fire Code requires the width of an unobstructed roadway to measure no less than 24 feet in order to provide adequate access for fire and emergency responders. Additionally, improvements within roadway rights-of-way in the unincorporated county would be required to comply with Napa County General Plan Policy SAF-10.8, which requires that all new development, including roads, parks, and trails, be designed and constructed to allow immediate access for emergency personnel (Napa County 2023).

This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory or permitting requirements exist to maintain emergency access that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. Implementation of construction traffic management plans and associated coordination with service providers would typically address potential interference with emergency response or evacuation plans. There is no attribute of the proposed plan that would obstruct the implementation of this process.

Individual RCAAP projects would be evaluated for consistency with applicable emergency evacuation and response plans and other relevant local plans to minimize any potential for conflict. Compliance with applicable codes and design standards would ensure that implementation of the RCAAP does not physically interfere with adequate emergency access.

At the program level, there is no evidence to suggest that any particular action would impair or interfere with adopted emergency response or evacuation plans. Future projects undertaken by the Napa County Jurisdictions to implement the measures and actions in the RCAAP would need to be reviewed in the context of this Initial Study to determine if additional environmental review is needed. If a future discretionary project, once sufficiently identified and described, is determined to have a potentially significant impact due to unique features or site conditions that is not analyzed and mitigated in this Initial Study, additional environmental review would be required. At the program level, however, it is reasonably foreseeable that all projects undertaken by the Napa County Jurisdictions would result in a less-than-significant impact. No mitigation is required.

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

Less than significant impact. Lands designated as Very High FHSZ exist throughout the county. Implementation of the RCAAP would involve ground-disturbing activities, including grading and excavation, that require the temporary and periodic use of construction vehicles and equipment.

Development of areas susceptible to wildfire could exacerbate fire risk by introducing anthropogenic influence into fire-prone open space. Human-caused wildfires tend to be generated by activities such as debris and brush-clearing fires, electrical equipment malfunctions, campfire escapes, smoking, fire play (e.g., fireworks), vehicles, and arson. Power lines also pose a risk of spark as a result of downed lines, direct contact with vegetation, and line faults and equipment failures. Power lines would continue to be constructed and operated by utility companies, subject to the oversight of the California Public Utilities Commission and associated regulations (e.g., General Orders 95 and 166) that obligate these companies to manage and maintain the lines to reduce the potential for wildfire. This includes clearing vegetation near the power lines and may include operating provisions to temporarily stop power during high winds where the fire danger is high. Relocation and operation of utilities for climate resilience is not anticipated to substantially exacerbate fire hazards.

Throughout the region, new construction would be subject to Title 24 of the CCR, which includes safety measures to minimize the threat of fire. The provisions of the fire code would apply to all construction, alteration, replacement, and removal. The risk of accidental ignition of a wildland fire during construction in forested areas would be addressed through standard construction practices, which address the potential for sparks generated by construction equipment, the potential for spills of ignitable materials, and emergency procedures to immediately respond to these conditions. In addition, Title 14 of the CCR sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent damage to structures or people by reducing wildfire hazards within SRAs.

Specific to the future hydrogen fueling station, California has adopted the National Fire Protection Association 2 (NFPA 2) Hydrogen Technologies Code, which is a science-based code that provides fundamental safeguards for the generation, installation, storage, piping, use, and handling of hydrogen in compressed gas or liquid form, into the CFC and CBC. NFPA has undergone intense industry scrutiny and engineering peer review through the rigorous NFPA adoption process. Hydrogen station designs must comply with California's Fire Code, California Code of Regulations, Title 24, Part 9 California Fire Code, and/or local ordinances. These codes establish proper setback distances, equipment and mitigation measures for fueling, infrastructure construction, and storage.

The Napa County Jurisdictions' general plan policies and building codes enforce and expand on these requirements at the local level. All jurisdictions are required to review and update their safety element in conjunction with the next housing element revision to address the risk of fire in SRAs and Very High FHSZs and the provisions outlined in "Fire Hazard Planning" by the Governor's Office of Land Use and Climate Innovation. Future projects developed to implement the RCAAP would not be approved by the Napa County Jurisdictions implementing the project until project design plans demonstrate compliance with applicable fire safety requirements.

Given the nature of the RCAAP, construction activities associated with implementation would occur primarily in already disturbed, developed areas such as roadways and parking lots, where wildfire risk is low. All new construction would be subject to safety measures that minimize the threat of fire, as stated in Title 24 of the CCR, and would comply with CCR Title 14 to minimize the exposure of people and structures to loss, injury, or death and damage. Therefore, although there could be an elevated risk of accidental ignition of a wildland fire during construction in vegetated areas, the potential for standard construction practices to result in wildland fire would not be substantially increased because of the implementing actions identified in the RCAAP. During operation, the projects would not result in new infrastructure that would exacerbate fire risk and would not provide increased access into wildfire-prone areas.

The RCAAP also includes adaptation actions that would reduce the potential for people to be directly exposed to significant risks due to wildfire by requiring residential and commercial owners/developers to create and maintain defensible space and fire breaks and harden structures with fire-resistant materials (Action ALL-3.2), and design new development to avoid or minimize risk in High or Very High FHSZs throughout the county (Action FIRE-4.1); thereby

reducing fire risk to habitable structures. Implementation of the RCAAP would not directly or indirectly expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, the impact would be less than significant. No mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 Environmental Setting

REGIONAL HYDROLOGY

The topography of Napa County consists of a series of parallel northwest-trending mountain ridges and intervening valleys of varying sizes. These parallel northwest-trending mountain ridges subdivide the county into three principal watersheds: the Napa River watershed, the Putah Creek/Lake Berryessa watershed, and the Suisun Creek watershed. A portion of another major basin, the Napa-Sonoma Marshes, are also located in the southwestern corner of the County; however, this is not considered one of the three principal watersheds.

Napa County has a Mediterranean climate, with distinct wet and dry seasons. Approximately 90 percent of the precipitation occurs between November and April, and precipitation varies throughout the county, both in a north-south direction and with elevation. In general, precipitation increases from south to north and with increasing

elevation, and average annual precipitation varies by more than a factor of three throughout the county, from 22.5 to 75 inches/year (Napa County 2007). The average annual precipitation is approximately 25 inches (City of Napa 2022).

DRAINAGE

Tributaries to major drainages typically form canyons in their steeper upstream reaches, where they flow over the more resistant bedrock of the mountainous areas. County streams typically descend from steep headwater reaches onto alluvial fan surfaces and then onto a valley floor setting. As described above, most tributaries drain into one of the three major waterways in the county: the Napa River, Putah Creek, and Suisun Creek (Napa County 2007).

FLOODING

The Mediterranean climate of the Napa County region, combined with the ridge-valley topography, drainage network, and constricted river channel, has historically resulted in flooding along the Napa River. Much of the flooding within the county occurs within the Napa Valley floor. The City of Napa and the areas surrounding the Napa-Sonoma Marshes are the most heavily affected by flooding; however, Yountville, St. Helena, American Canyon, and Calistoga all experience flooding during the 100-year flood event. Tidal conditions along the Napa River can also increase flooding in the City of Napa (Napa County 2007).

Flooding in Napa County routinely develops from north to south. The locations of flood hazard zones in Napa County are primarily along the Napa River and the San Francisco Bay, but also along the tributaries of Suisun and Putah Creeks. Although the Napa River is the main drainage for the surrounding watershed, and the Napa River/Napa Creek Flood Protection Project prevents catastrophic flooding along the river's banks, there remains a significant threat of flooding along the Napa River and many feeder streams in the watershed (Napa County 2020). Regardless of the Napa River/Napa Creek Flood Protection Project, the Napa River and its adjoining areas are still designated as 100-year flood hazard zones.

Both 100-year floodplains and 500-year floodplains exist in the county. A 100-year floodplain is one that has a 1 percent chance (i.e., a 1-in-100 chance) of experiencing a flood in any given year, whereas a 500-year floodplain has a 0.2 percent chance (i.e., a 1-in-500 chance) of experiencing a flood in any given year. The County's 2023 General Plan Safety Element also profiles flood hazards. Figure SAF-3 of the Safety Element shows the locations of 100-year floodplains and 500-year floodplains in the county (Napa County 2023). Flooding hazards within the county are located along the Napa River.

GROUNDWATER

The DWR has identified the major groundwater basins and subbasins in and around Napa County, including the Napa-Sonoma Valley, Berryessa Valley, Pope Valley, and a small part of the Suisun-Fairfield Valley Groundwater Basins (Napa County 2025c). These groundwater basins, defined by DWR, are not confined within county boundaries, and DWR-designated "basin" or "subbasin" designations do not cover all of Napa County.

The Napa-Sonoma Valley - Napa Valley (2-002.01) groundwater basin is a high-priority basin under SGMA, primarily due to the importance of groundwater to the region's economy and welfare (Napa County GSA 2022). The subbasin covers approximately 45,900 acres and includes urban and developed areas, agriculture, and native vegetation. A groundwater management sustainability plan for the basin was approved by DWR in 2023. Pursuant to SGMA, sustainable groundwater management is the management and use of groundwater in a manner that can be maintained during a 50-year planning and implementation horizon without causing undesirable results.

WATER QUALITY

The Water Quality Control Plan for the Napa Valley Subbasin (Basin Plan), adopted by the San Francisco Bay RWQCB, establishes water quality objectives for ground and surface waters in the San Francisco Bay region. The purpose of

the Basin Plan is to preserve and enhance water quality and protect the beneficial uses of regional waters. The San Francisco Bay RWQCB also issues waste discharge requirements to ensure that wastewater is not discharged in a manner that would cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan.

Surface Water

Currently, the Napa River and its tributaries are listed under Section 303(d) of the Clean Water Act (CWA) as water quality impaired for sediment and pathogens, and a portion of the river is listed as impaired for nutrients (WICC 2025). The Putah Creek Watershed/Lake Berryessa is listed as water quality impaired for mercury. San Pablo Bay, into which the Napa River drains, has been listed as impaired for chlordane, DDT, diazinon, dieldrin, dioxins and furans, invasive species, mercury, PCBs, and toxaphene (SWRCB 2024).

Groundwater Quality

In general, groundwater quality throughout most of the region is suitable for most urban and agricultural uses, with only local impairments in the northern and southern parts of the county. The primary constituents of concern are high total dissolved solids, nitrate, boron, and organic compounds (Napa County 2007). Areas near Calistoga exhibit geothermal influences, and the county's southern lowlands exhibit elevated levels of naturally occurring dissolved solids and chlorides, likely due to their proximity to San Pablo Bay (Napa County 2020).

WATER SUPPLY

The cities of Napa, American Canyon, Calistoga, St. Helena, and the Town of Yountville provide public water within their respective jurisdictional boundaries as well as deliver water to the unincorporated portions of the county. Other public water providers serving the county include: the Circle Oaks County Water District, Congress Valley Water District, Lake Berryessa Resort Improvement District, Napa-Berryessa Resort Improvement District, and the Spanish Flat Water District. There are also several private water purveyors that supply water to the smaller communities in the county (Napa County 2007, WICC 2025).

The primary source of water for the cities within Napa County is surface water, while the primary source of water for the unincorporated area is groundwater. The largest sources of groundwater for the county are the North Napa Valley Basin, MST Subbasin, and the Carneros Subbasin (Napa County 2007).

Estimated local municipal water supplies for cities within Napa County include the following:

- ▶ Napa - Lake Hennessey (31,000 af) and Milliken Reservoir (1,400 af)
- ▶ Yountville - Rector Reservoir (4,500 af) and groundwater
- ▶ St. Helena - Bell Canyon Reservoir (2,350 af)
- ▶ Calistoga - Kimball Reservoir (275 af)
- ▶ Other municipal supplies include imported water (State Water Project), groundwater, and recycled wastewater

3.10.2 Discussion

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

Less than significant impact. RCAAP-related projects would range from relatively minor construction projects in urbanized areas served by stormwater systems to adaptation measures with the potential to be constructed in or near areas prone to flooding (e.g., Action ENERGY-2.1, which could include installing barriers and floodgates to reduce flooding hazards). Construction would result in ground disturbance that could result in erosion and sedimentation with potential to adversely affect water quality.

The RCAAP measures involving construction activity would generally require minor grading, excavation, and other ground disturbance. Ground-disturbing activities, depending on their location, could cause soil erosion, which in turn can contaminate nearby surface water. Implementation of the RCAAP would be required to comply with established codes, such as NCMC Chapter 18.108 in the unincorporated county, which specifies grading and erosion control standards, and Section 14.28 of the American Canyon Code, which requires a SWPPP during construction, specially designed water quality detention and treatment basins for stormwater runoff from impervious surfaces, and onsite stormwater detention. The Town of Yountville is also committed, through General Plan Policy OS-6.4b, to ensuring NPDES compliance and avoiding substantial degradation of water quality.

For RCAAP measures that involve 1 or more acres of ground disturbance, applicants would be required to submit a Notice of Intent to SWRCB to obtain approval to carry out construction activities under the NPDES Construction General Permit (Order 2022-0057-DWQ). Compliance with the Construction General Permit requires the applicant to develop a project-specific SWPPP that identifies source control, site design, and treatment-control BMPs to reduce stormwater runoff volumes and pollutants leaving the site. The construction contractor's Qualified SWPPP Developer would prepare the SWPPP, which would identify stormwater BMPs that minimize erosion and sedimentation that may result from temporary changes in drainage patterns, including BMPs for temporary drainage systems and temporary stream diversion and dewatering. All Qualified SWPPP Developers must be trained to ensure that SWPPPs are prepared according to the requirements of the permit. The construction contractor's Qualified SWPPP Practitioner would be responsible for implementing the SWPPP. As part of that responsibility, the effectiveness of construction BMPs would be monitored before, during, and after storm events. Records of these inspections and monitoring results would be submitted to the RWQCBs as part of the annual report required by the permit. Erosion and sediment controls identified in the SWPPP would substantially reduce soil disturbance, erosion, and sediment transport into receiving waters, and the amount of pollutants in site runoff during construction. Because the NPDES permitting process requires compliance with TMDLs for 303(d)-listed waters, construction of projects in accordance with these permits would not be expected to contribute to violations of water quality standards.

In addition, all projects, including those that would disturb less than 1 acre, would be subject to the CALGreen requirements related to stormwater drainage that have been designed to prevent or reduce discharges of sediments, chemicals, and wastes through BMPs that include on-site retention and filtration. Smaller projects may also be subject to additional requirements, which vary by local jurisdiction. In many cases, stormwater drainage measures and compliance with RWQCB Municipal Regional Stormwater Permit Order No. 2011-0083 Provision C.3 may be required by local jurisdictions as standard conditions of approval for building permit applications. Typical BMPs used to meet regulatory standards, as required by CALGreen, are described below. These measures protect surface water and groundwater quality by removing or substantially lessening the amount of pollutants that flow off-site and into surface water or groundwater.

- ▶ Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day. For projects over 5 acres in size, soil moisture should be maintained at a minimum of 12 percent. Moisture content can be verified by lab samples or a moisture probe.
- ▶ Cover all haul trucks transporting soil, sand, or other loose material off-site.
- ▶ Cover on-site dirt piles or other stockpiled particulate matter, install wind breaks, and employ water and/or soil stabilizers to reduce wind-blown dust emissions. The use of approved nontoxic soil stabilizers shall be incorporated according to manufacturers' specifications to all inactive construction areas.
- ▶ Limit all vehicle speeds on unpaved roads and surfaces to 15 mph.
- ▶ Complete all roadway, driveway, and sidewalk paving as soon as possible. Building pads shall be paved as soon as possible after grading. ψ Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- ▶ Operate all transfer processes involving a free fall of soil or other particulate matter in such a manner as to minimize the free fall distance and fugitive dust emissions.

- ▶ Wash off all trucks and equipment, including their tires, before they leave the site.
- ▶ Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible, and water it appropriately until vegetation is established.
- ▶ Store hazardous materials used on the construction sites, such as fuels and solvents, in covered containers that are protected from rainfall, runoff, and vandalism. Construction activities associated with the proposed plan would not substantially degrade water quality in violation of water quality standards.

RCAAP measures to prepare the region for more frequent extreme precipitation and flooding events include Action FLOOD-2.3 to enhance the capacity of stormwater infrastructure and Action FLOOD-5.1 to upgrade or relocate infrastructure and critical infrastructure exposed to flooding hazards. Other actions could indirectly lead to projects; however, the nature and scope of the projects cannot be known at this time. For example, Action FLOOD-9.2 would result in the development of a regional sea-level rise adaptive management plan that would identify specific projects such as sea walls and levees. Individual projects would be required to demonstrate compliance with the applicable water quality or groundwater management plan in place at the time of the application through the permitting process. Therefore, although these types of projects are more frequently in proximity to, or in direct contact with, surface water than other projects included in the plan, potential effects on water quality would be addressed by complying with the applicable regulations described above. In addition, Section 404 of the CWA establishes a permit program, administered by USACE, to regulate the discharge of dredged or fill materials into waters of the United States. Projects within the San Francisco Bay would be completed under the oversight of BCDC, and the requirement of Section 66605 of the McAtteer-Petris Act that the Bay fill for a project be the minimum necessary to achieve the purpose of the fill. These regulations, which relate to the dredging and filling of waterways, provide an additional regulatory framework to address the potential for construction to disturb sediments in a manner that substantially degrades water quality.

This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to protect water quality that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented, including adopted regulatory provisions of Basin Plans. Consistency with these plans would be determined at the project level and enforced through the permitting process. There is no attribute of the proposed plan that would obstruct the implementation of this process. By complying with all applicable regulations and permits, implementing RCAAP measures would not violate any water quality standards or waste discharge requirements established by the San Francisco Bay RWQCB, nor would it otherwise substantially degrade surface or groundwater quality. This impact is less than significant. No mitigation is required.

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

Less than significant impact. Implementation of the RCAAP measures would primarily occur in areas developed with impervious surfaces that do not provide for substantial groundwater recharge. Many of the proposed infrastructure improvements would be located on or adjacent to existing development. Extensive storm drainage systems present in developed areas currently intercept rainfall and runoff waters, thus limiting the amount of groundwater recharge that occurs. Additionally, RCAAP measures could decrease the amount of impervious surface area, which would promote infiltration of precipitation. For example, Measure FLOOD-2 would encourage the Napa County Jurisdictions to invest in green infrastructure, such as rain gardens, stormwater tree trenches, and detention basins, to mitigate climate-change-associated flooding hazards, thereby increasing groundwater recharge.

Although water would be used during construction and for plant establishment; overall, the RCAAP includes measures to reduce water demand. Specifically, construction projects that involve grading and earth disturbance typically use water trucks for dust suppression. In addition, measures and actions that require tree establishment (e.g., Action AG-5-B, which would expand the urban forest canopy) would also generate relatively small water demand. However, these measures would also result in long-term carbon sequestration, natural cooling, and improved air

quality. The RCAAP also includes measures developed to reduce water demand. RCAAP Measure DROUGHT-1 would implement regional and local water conservation opportunities and reduce indoor and outdoor water use. Measure WW-4 is intended to increase commercial, industrial, and institutional adoption of water-efficient fixtures, appliances, equipment, and landscaping. Furthermore, the implementation of the RCAAP would not involve development or induce population growth in an area that would increase water demand. Therefore, implementation of the RCAAP would not decrease groundwater supplies or interfere with groundwater recharge. The impact would be less than significant. No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or offsite erosion or siltation;

Less than significant impact. The implementation of some RCAAP measures would require grading and excavation, as described in Chapter 2 of this checklist, which could result in soil erosion. Construction and grading activities associated with development of projects under the RCAAP could require temporary disturbance of underlying soils through excavation, soil stockpiling, boring, and grading activities that strip existing vegetation or pavement before commencing construction of proposed improvements. These activities could result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment and contaminants in the runoff. The extent of the impacts is dependent on soil erosion potential, type of construction practice, extent of disturbed area, timing of precipitation events, topography, and proximity to drainage channels. For example, minor grading, excavation, and other ground disturbances would occur during installation of EV charging infrastructure (Actions OF-2-A and OF-2-C) and urban forest expansion (Action AG-5-B). However, given the nature of future projects, it is likely that construction activities would occur in already disturbed areas that are developed with impervious surfaces. EV charging stations would be installed in new and existing developments, and roadway improvements, such as upgrades to transportation infrastructure, would occur along existing developed roadways. In addition, tree planting may occur within County and City parks and public rights-of-way.

As described above under criterion a, erosion and sedimentation in the watershed are controlled through compliance with applicable NPDES permits and local drainage and erosion design and standards. All development within the region that would disturb 1 acre or more would be required to prepare and implement a SWPPP, in accordance with the NPDES Construction General Permit. The SWPPP would include BMP erosion control measures, such as those listed above. Projects that would disturb less than 1 acre would be subject to the CALGreen requirements related to stormwater drainage that have been designed to prevent or reduce discharges of sediments through BMPs that include on-site retention and filtration. Generally, earthwork and ground-disturbing activities also require a grading permit, compliance with which minimizes erosion, and local grading ordinances ensure that construction practices include measures to protect exposed soils. Additional reports, such as a soil engineering report, engineering geology report, or plans and specifications for grading, may be required by local building or engineering departments, depending on the proposal. The application, plans, and specifications (if any) would be checked by the appropriate building official or engineer and may be reviewed by other departments of the county or city to ensure compliance with the laws and ordinances under their jurisdiction. Earthwork recommendations for improved erosion controls, based on site conditions, would be incorporated into the project construction documents.

The RCAAP also includes Measure FLOOD-6 to improve climate resilience and reduce the potential for erosion. The Napa County Jurisdictions would replant areas with bare soil or significant disturbance due to natural hazards and/or human factors by implementing this measure. The restoration of such bare or disturbed areas stabilizes soil, reduces erosion, and increases water absorption, which helps mitigate flood risks and enhances ecosystem resilience. In this way, the RCAAP would reduce the potential for erosion and siltation in the county.

Existing regulations establish permitting and oversight responsibilities for federal, State, and local agencies that are intended to ensure that such alteration does not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or polluted runoff. State and federal agencies (including EPA, SWRCB, and RWQCBs) have established basin plans, water quality standards, and waste discharge requirements to prevent the degradation of water quality pursuant to the CWA. Further, future construction projects associated with RCAAP implementation would be required to comply with applicable local standards and codes designed to reduce excessive erosion. For example, in the City of Calistoga, new development is required, through compliance with General Plan Policy P4.3-3, is required to incorporate appropriate measures to minimize the effects of stormwater runoff on the Napa River. For all of the foregoing reasons, implementation of RCAAP measures would not substantially alter the existing drainage pattern of a site or area in a manner that would result in substantial soil erosion. The impact would be less than significant. No mitigation is required.

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

Less than significant impact. Generally, the projects resulting from the implementation of the RCAAP would be discrete improvements without the potential to substantially alter the site's or area's existing drainage pattern. Given the nature of future projects, it is likely that construction activities would occur in already disturbed areas developed with impervious surfaces. EV charging stations, for instance, would be installed in new and existing developments, and roadway improvements such as upgrades to transportation infrastructure would occur along existing developed roadways. Implementation of RCAAP measures would not substantially increase the amount of impervious surfaces in the county.

Where ground disturbance would occur, NPDES Provision C.3 includes postconstruction drainage control requirements that address the volume of off-site flows. Under Provision C.3, the San Francisco Bay RWQCB requires designs that prevent increases in runoff flows from new development and redevelopment projects. Project proponents would be required to plan, design, and develop sites to limit both increases in the extent of impervious areas and disturbance of natural drainage features. In some cases, adherence to NPDES Provision C.3 requirements may result in improved retention of stormwater rates and volumes, compared to existing conditions, through implementation of low-impact development (LID) drainage control measures. Drainage plans would be consistent with the San Francisco Bay RWQCB MS4 NPDES permit or any applicable local drainage control requirements that exceed or reasonably replace any of these measures to control the rate of stormwater runoff.

Construction and post-construction activities would be required to comply with various federal, state, and regional water quality standards, including the Municipal Permit and the Construction General Permit. As such, runoff volumes and pollutants leaving sites during construction and post-construction operations would be substantially reduced through source control, site design, and/or treatment-control BMPs mandated by these permits. Erosion and sediment controls identified in project-specific SWPPPs would substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters, and pollutants in site runoff during construction. In addition, implementation of the RCAAP would reduce the potential for flooding in the county, for example, by investing in green infrastructure, such as building flood control detention basins to address flooding from anticipated future extreme precipitation events (Measure FLOOD-2) and enhancing the capacity of stormwater infrastructure to manage high-intensity rainfall events and reduce local flooding (Action FLOOD-2.3). The design of any future in-water structures, such as sea walls and levees, would be subject to permitting from agencies, including the California Coastal Commission and the San Francisco Bay RWQCB, that require projects to demonstrate that there would not be a substantial increase in off-site runoff and that off-site flooding would not occur. For all the foregoing reasons, implementation of RCAAP measures would not increase the rate or amount of surface runoff. The impact would be less than significant. No mitigation is required.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than significant impact. As described above, the implementation of the RCAAP would not substantially increase impervious surface area throughout the county, nor would it increase the quantity of runoff water or create additional sources of polluted runoff. Therefore, the implementation of RCAAP measures would not create or contribute to runoff that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. This impact would be less than significant. No mitigation is required.

iv) Impede or redirect flood flows?

Less than significant impact. As described above, at the countywide scale, the RCAAP would not result in a substantial amount of new impervious surface; new development resulting from RCAAP implementation would not alter the county's hydrology in a manner that would affect the potential for flooding; and projects would be required to comply with established federal, state, and local regulations that would limit the potential for projects to impede or redirect flood flows. For instance, FEMA delineates the regulatory floodplain to assist local governments with land use and floodplain management decisions to avoid flood-related hazards. Structures that impede flood flows can cause a backwater effect by potentially raising flood levels, causing more severe flooding impacts on existing vulnerable areas, or exposing new areas that would not have previously flooded to flooding impacts. To avoid flooding, FEMA and the local agencies require that an encroachment into a floodplain not increase the water surface elevation of the 100-year flood by more than 1 foot in floodplains and 0.1 foot in floodways. In addition, any projects constructed within areas subject to flooding because of levee failure, as mapped by FEMA, must be built in compliance with standard building codes and federal, State, and local regulations. Development (including construction, reconstruction, renovation, repair, expansion, or alteration of buildings, bridges, streets, and other paving and installation of utilities) within a floodplain requires a local floodplain development permit. The specific requirements for a project depend on the flood zone and the type of development. The basic standards that must be met by any floodplain development are that the proposed development must be reasonably safe from flood damage (which for most buildings means elevated above the height of floodwaters) and must not result in physical damage to any other property.

To ensure that floodplain development is reasonably safe from flood hazards and damage, developments proposed within the 100-year flood zone would be required to meet local, State, and federal flood control design requirements. Implementing agencies would conduct or require project-specific hydrology studies for projects proposed to be constructed within floodplains to demonstrate compliance with Executive Order 11988 (for federally funded projects), the NFIP, the National Flood Insurance Act, and the Cobey-Alquist Floodplain Management Act, as well as any further FEMA or State requirements that are adopted at the local level. These studies would identify project design features that reduce impacts on either floodplains or flood flows that would be required through the permitting process.

In addition, the RCAAP includes a suite of measures and actions intended to reduce hazards related to flooding. Although some of the projects that result from implementing these measures and actions could alter existing drainage patterns, they would be developed with the explicit intent of avoiding or minimizing flood hazards. Therefore, a less-than-significant impact would occur. No mitigation is required.

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

Less than significant impact. Tsunamis are ocean waves generated by certain undersea earthquakes, volcanic eruptions, or landslides, and seiches are waves created in closed bodies of water, such as lakes, by geologic instability. The potential for damage from tsunamis is low because the county is not directly exposed to the open ocean and lacks bay frontage. Seiches would be limited to the larger reservoirs in the county (e.g., Lake Berryessa, Bell Canyon Reservoir, Lake Hennessey, Rector Reservoir, and Milliken Reservoir) (Napa County 2007).

Implementation of the RCAAP would not risk substantial release of pollutants due to inundation during a flood, tsunami, or seiche. Most projects would not be located in areas near the bay or lakes with the potential to experience tsunamis or seiches. Development is largely restricted immediately along the shorelines of these reservoirs, given their use as municipal water supply sources, and County General Plan land use designations and zoning. However, it is possible that projects could be located in these areas, as well as within the 100 and 500-year floodplains. As described above in Section 3.9, "Hazards and Hazardous Materials," use of potentially hazardous materials would be limited during construction, and projects would not be expected to use or store substantial amounts of pollutants during operation.

In addition, the RCAAP would improve the region's resilience to flooding. Action ALL-3.1 would require owners/developers of existing and new residential and commercial developments in Federal Emergency Management Agency (FEMA) 100-year and 500-year floodplains to waterproof structures and foundations, use flood-resistant materials, retrofit existing structures with flood-resistant features, or other appropriate flooding mitigation measures. This action builds on the County's floodplain management ordinance codified in Section 16.04.690. Napa County Jurisdictions would consider the implementation of LID techniques through Measure FLOOD-1 to reduce local flooding. LID techniques absorb and slow down stormwater, reducing runoff. By capturing water where it falls, LID also decreases the volume and speed of water reaching drainage systems to reduce peak flows. Moreover, LID can support the restoration of natural hydrology, which helps prevent water from overwhelming local infrastructure. In addition, natural filtration processes in LID systems help remove pollutants from stormwater before it enters waterways and can then improve water quality. In addition, the relocation of utilities and critical facilities out of areas exposed to flooding hazards under Action 5.1 could reduce the potential for release of hazardous materials during flooding relative to existing conditions. Therefore, implementation of the RCAAP would not create a substantial risk of pollutant release due to inundation during a flood. This impact is less than significant. No mitigation is required.

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

Less than significant impact. As described in the discussion provided under criterion a above, construction projects that disturb 1 or more acres would be required to prepare a SWPPP that demonstrates conformance with applicable best management practices that would be implemented to reduce the amount of surface runoff. Further, implementation of RCAAP measures would not involve the development of residential communities or other similar types of development or induce population growth in an area that would increase water demand. Therefore, implementation of RCAAP measures would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The impact would be less than significant. No mitigation is required.

3.11 LAND USE AND PLANNING

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

3.11.1 Environmental Setting

Napa County is located north of the San Francisco Bay Area. The county is bound on the north and northeast by Yolo County, on the south and southeast by Solano County, on the west and northwest by Lake County, and on the west by Sonoma County. Dense urban centers are generally associated with the cities along Interstate 80. Open space, natural resources (wetlands, grasslands, forests, and mountain terrain), and agricultural activities are the dominant land uses. Non-urban land uses make up the majority of land within the county. Land uses within the county primarily consist of cultivated agriculture, mainly concentrated in the Napa Valley and Carneros areas, rural lands (typically large parcels greater than 10 acres used for vineyards or grazing, and residential uses), grazing lands, and parks and open space (Napa County 2007).

Approximately 479,000 acres (95 percent) of the county is within the unincorporated area (Napa County 2007). The remaining area is distributed among the five incorporated areas in the county: City of American Canyon, City of Calistoga, City of Napa, City of St. Helena, and the Town of Yountville. Scattered unincorporated rural residential communities are located primarily in the Lake Berryessa and Napa Valley areas. The unincorporated communities of Angwin and Deer Park are located just east of the northern portion of Napa Valley.

3.11.2 Discussion

a) Physically divide an established community?

Less than significant impact. Typically, physical division of an established community could result from the construction of a physical feature, such as a wall, interstate highway, airport, roadway, or railroad tracks. Additionally, the division of an established community could result from the removal of a means of access, such as a local road or bridge, that could impair mobility or constrain travel within the community or between the community and outlying areas.

Implementation of the RCAAP would not result in development that could physically divide a community. Rather, the RCAAP includes measures intended to improve, rather than impair, community connectivity and access throughout the county. For example, the establishment of new and accessible urban parks and trails (Action TEMP-2.1) would reduce vehicle congestion and encourage bicycle and pedestrian trips, which would increase community connectivity and access. Further, all future improvements to roadways and parks would be required to comply with City and County design standards and review under the jurisdictional municipal code prior to implementation. Therefore, implementation of the RCAAP would not result in the construction of physical barriers that would change the connectivity between developed areas or physically divide an established community. The impact would be less than significant. No mitigation is required.

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

Less than significant impact. The RCAAP is intended to serve as a comprehensive roadmap for Napa County Jurisdictions to reduce their GHG emissions, adapt to climate change, and create more sustainable and resilient communities. It builds upon existing efforts, sets ambitious GHG reduction targets aligned with state goals, and outlines a clear path forward. The County of Napa may lead and coordinate overall RCAAP implementation efforts as the designated "Administering Agency" per the Joint Powers Agreement in close collaboration with each of the incorporated jurisdictions. In some instances, an individual jurisdiction may assume sole responsibility for implementing a measure and its associated actions, especially if a specific measure applies only to a particular jurisdiction (e.g., measures in the agricultural sector will apply only to the unincorporated county).

Through the adoption and implementation process, each Napa County Jurisdiction would tailor the specific actions required to implement the RCAAP to be consistent with the region's land use plans, policies, and regulations intended to address environmental effects. As documented throughout this checklist, there is substantial evidence that significant and unavoidable environmental effects would not occur from RCAAP implementation. All projects would be required to adhere to applicable plans, policies, and regulations intended to avoid or minimize environmental effects. Therefore, the implementation of RCAAP measures would result in a less-than-significant environmental impact because it conflicts with any land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect. No mitigation is required.

3.12 MINERAL RESOURCES

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

3.12.1 Environmental Setting

Historically, the two most valuable mineral commodities in the county have been mercury or quicksilver and mineral water. The minerals produced in the 1940s included quicksilver, mineral water, pumice, sandstone, and miscellaneous stone. More recently, building stone and aggregate produced from hard-rock quarries have been the most valuable mineral commodity in the county. Other mineral products that have been mined historically in Napa County include asbestos, chromite, clay, copper, gold, lead, limestone, magnesite, manganese, onyx, paving blocks, sand and gravel, and petroleum (Napa County 2005).

There is one active mining operation and three which are no longer active within the county—Vulcan Quarry (formerly Syar and American Canyon Quarry), Pope Creek Quarry (in reclamation), Homestake Mining Company (in reclamation) and Oat Hill Quarry. As noted, the Vulcan Quarry is currently the only major mining operation, which generates approximately 500,000 tons of basalt rock each year for use as concrete aggregate. The quarry is located immediately south of the Napa State Hospital and extends east of the industrially zoned area into agriculturally designated lands. Despite some historic mining activities, the geologic opportunities for future mineral extraction in Napa County are not well known, and state mineral resource zone (MRZ) maps, which show areas with known mineral resources, do not exist for the bulk of the county. No known mineral resource recovery sites of local importance are identified in the Napa County General Plan (Napa County 2009).

3.12.2 Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

and

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less than significant impact. The State has not designated mineral resource zones in most of the county, and there is only one known locally important mineral resource recovery site in the county (Napa County 2007). Local jurisdictions have general plan policies to manage mineral resources and are required under the Surface Mining and Reclamation Act of 1975 (SMARA) to consider significant mineral deposits identified by CGS, and future discretionary projects would be evaluated for consistency with these policies. For example, future projects in the unincorporated county would be required to comply with General Plan Policy CON-37, which directs the County to protect known mineral resources, prevent the unnecessary loss of mineral resources, and comply with State of California requirements for

mineral resources contained in the SMARA. In the City of St Helena, a future project would be required to comply with General Plan Policy OS2.2, through which the city ensures compliance with State requirements in the preservation of known locations of mineral resources

The RCAAP would not result in the development of previously undeveloped land in a manner that could limit access to mineral resources. Given the nature of the RCAAP, construction activities associated with its implementation would primarily occur in already disturbed and developed areas such as roadways, parking lots, and areas of existing critical infrastructure where known mineral resources are not present. The physical development required to implement the measures and actions in the RCAAP is unlikely to result in the loss of a known mineral resource. Development of land that contains known mineral resources may be consistent with SMARA if it does not result in a loss of availability of the resources, as with many infrastructure projects that could result from the RCAAP. Moreover, many projects would be located in existing population centers. If there are mineral resources in these areas, access for extraction is already limited by existing development, and the RCAAP would not change the existing lack of access. For all these foregoing reasons, implementation of the RCAAP would result in a less-than-significant impact related to the loss of availability of a known mineral resource. No mitigation is required.

3.13 NOISE

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

3.13.1 Environmental Setting

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

Table 3.13-1 Acoustic Term Definitions

Term	Definition
Noise	Noise is generally defined as sound that is loud, disagreeable, unexpected, or unwanted.
Decibel (dB)	Sound levels are measured using the decibel scale, developed to relate to the range of human hearing. A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly summed. For example, a 65-dB source of sound, such as a truck, when joined by another 65-dB source, results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). A sound level increase of 10 dB corresponds to 10 times the acoustical energy, and an increase of 20 dB equates to a 100-fold increase in acoustical energy.
Equivalent Noise Level (Leq)	The average noise level during a specified time period; that is, the equivalent steady-state noise level in a stated period of time that would contain the same acoustic energy as the time-varying noise level during the same period (i.e., average noise level).
Maximum Noise Level (Lmax)	The highest instantaneous noise level during a specified time period.

Source: Caltrans 2013.

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

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

The existing noise environment within the RCAAP area is generally influenced by surface transportation noise emanating from vehicular traffic on the roadway system (i.e., SR 128, SR 29, SR 12, and SR 121), agricultural equipment operations, and aircraft overflights. In urban areas, such as the City of Napa, noise levels are higher due to increased traffic, commercial and industrial uses, stationary sources, and the human population.

CONSTRUCTION NOISE STANDARDS

Federal Transit Administration

The Federal Transit Administration (FTA) has established construction noise criteria that specify noise levels that may result in an adverse community reaction. The FTA criteria are as follows:

- ▶ Residential: 90 dBA L_{eq} (day) and 80 dBA L_{eq} (night)
- ▶ Commercial/Industrial: 100 dBA L_{eq} (day and night)
- ▶ While individual projects under the RCAAP would be evaluated based on the standards of the implementing agency, as described below, the following discussion applies FTA guidance at a program level, given the multi-jurisdictional nature of the analysis.

Napa County

Code of Ordinances Section 8.16.080

- ▶ Daytime construction noise limits (7:00 a.m. to 7:00 p.m.): residential 75 dBA, commercial 80 dBA, industrial 85 dBA (County Code of Ordinances Table 8.16.080)
- ▶ Nighttime construction noise limits (7:00 p.m. to 7:00 a.m.): residential 60 dBA, commercial 65 dBA, industrial 70 dBA (County Code of Ordinances Table 8.16.080)
- ▶ Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between the hours of 7:00 p.m. and 7:00 a.m., such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the appropriate authority.

General Plan

- ▶ **Policy CC-49:** Consistent with the County's Noise Ordinance, ensure that reasonable measures are taken such that temporary and intermittent noise associated with construction and other activities does not become intolerable to those in the area. Construction hours shall be limited per the requirements of the Noise Ordinance. Maximum acceptable noise limits at the sensitive receptor are defined in Policies CC-35, CC-36, and CC-37.

City of American Canyon

Code of Ordinances Section 8.12.080

- ▶ Daytime construction noise limits (7:00 a.m. to 7:00 p.m.): residential 75 dBA, commercial 80 dBA, industrial 85 dBA (County Code of Ordinances Table 8.12.080)

- ▶ Nighttime construction noise limits (7:00 p.m. to 7:00 a.m.): residential 60 dBA, commercial 65 dBA, industrial 70 dBA (County Code of Ordinances Table 8.12.080)
- ▶ Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 7:00 p.m. and 7:00 a.m., such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the appropriate authority.

General Plan

- ▶ **Policy 11.7.1:** Limit non-emergency construction activities adjacent to existing noise-sensitive uses to daylight hours between 6:30 a.m. and 8:00 p.m.
- ▶ **Policy 11.7.2:** Require construction activities to employ practical techniques and practices that minimize the generation of adverse and/or excessive noise impacts on adjacent land uses.

City of Calistoga

Municipal Code Section 8.20.025

- ▶ It shall be unlawful for professional construction activity to occur on Sunday or between 7:00 p.m. and 7:00 a.m., any time during the week.

General Plan

- ▶ No City of Calistoga General Plan policies are specific to construction noise.

City of Napa

Municipal Code Section 8.08.025

- ▶ Construction activities throughout the entire duration of the project shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday. There will be no start up of machines nor equipment prior to 8:00 a.m., Monday through Friday; no delivery of materials nor equipment prior to 7:30 a.m. nor past 5:00 p.m., Monday through Friday; no cleaning of machines nor equipment past 6:00 p.m., Monday through Friday; no servicing of equipment past 6:45 p.m., Monday through Friday; and construction on weekends or legal holidays shall be limited to the hours of 8:00 a.m. to 4:00 p.m., unless a permit shall first have been secured from the City Manager, or designee, pursuant to Section 8.08.050 of this code. The City Manager, or designee, shall grant such permit:
- ▶ All muffler systems on construction equipment shall be properly maintained.
- ▶ All construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding.
- ▶ All construction and grading equipment shall be shut down when not actively in use.
- ▶ Construction activity by or on behalf of a public agency, which is necessary to avoid a disruption of a public project or to protect the public health, safety, and welfare, shall be exempt from the time limitations of this section.

General Plan

- ▶ **Policy SN 4-7:** Address appropriate construction noise and vibration control measures, standards, and monitoring procedures for future development in the City's Municipal Code to reduce impacts to nearby uses.
- ▶ **Policy SN 4-8:** Require all construction within 1,000 feet of noise-sensitive uses to undertake measures to reduce noise impacts. Within 100 feet of pile driving locations and 25 feet of construction sites using other non-impact equipment (dozers, excavators, etc.), require all construction to undertake measures to prevent possible exposure of vibration-sensitive buildings and receptors to substantial ground borne vibration levels.

City of St. Helena

Municipal Code Section 8.24.010

- ▶ Between the hours of 10:00 p.m. and 7:00 a.m. next ensuing, no commercial or other activity shall be conducted upon any privately owned real property within the city which activity creates noise which can be heard at the property line of any parcel of real property within the city, unless a permit shall first have been secured from the chief of police.
- ▶ Notwithstanding the provisions of subsection B of this section, activities associated with commercial and residential construction projects by contracted services shall be regulated as follows:
 - Monday through Saturday. Construction activities which generate noise that can be heard at the property line of any parcel of real property within the city limits shall be limited to eight a.m. to five p.m. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to seven a.m. to six p.m. Exceptions to these time restrictions may be granted by the public works director for one of the following reasons: (a) inclement weather affecting work; (b) emergency work; or (c) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The city engineer must be notified and give approval in advance of such work.
 - Sundays and Holidays (Federal and Local). No construction activities allowed which generate noise that can be heard at the property line of any parcel of real property within the city limits.

General Plan

- ▶ **Policy PS2.F:** Require construction operations to use noise suppression devices and techniques and limit noisy construction activities that can be heard at the property line to the least noise-sensitive times, as per the City's noise ordinance.

Town of Yountville

Code of Ordinances Section 8.04.030

- ▶ **Contracted Services.** No person engaged in work as a contracted service shall operate or cause the operation of any tools or equipment, including petroleum or electrically powered equipment such that the sound therefrom creates intrusive noise across a residential or commercial real property boundary, except: (1) between the hours of 9:00 a.m. and 6:00 p.m., Monday through Friday (excluding holidays); (2) between the hours of 9:00 a.m. and 12:00 p.m. on Saturdays on the condition that a property owner or tenant is present; or (3) except by permit issued pursuant to Section 8.04.040(E).

General Plan

- ▶ **Policy NS-1.2f:** Construction Best Practices. During review of development, infrastructure, and other projects involving construction activities, determine if proposed construction projects could exceed the Town's Noise Ordinance standards at nearby residences and sensitive receptors and, if necessary, require mitigation measures in addition to the standard best practice controls.

3.13.2 Discussion

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

Less than significant impact. The RCAAP is a policy-level document that does not include any site-specific designs or proposals or grant any entitlements for development. However, as described in Chapter 2 of this checklist, there are several measures and actions in the RCAAP, including Measures TR-3, TR-4, OF-2, AG-1, TEMP-2, TEMP-4, FLOOD-3,

and FLOOD-5, that could result in the construction and physical changes to the environment. On average, construction activities for projects under the RCAAP would be short-term. Implementation of the RCAAP measures could result in temporary increases in ambient noise levels from construction vehicle trips. Construction-related vehicle trips would travel along multiple roads throughout the region and therefore would not expose any individual sensitive receptor to substantial noise levels for a sustained period. Additionally, the minor and temporary increase in construction-related vehicle trips would not result in a substantial increase in ambient noise levels along roadways in the region, because a doubling of traffic volume on a roadway would be required before an increase in noise levels would be detectable to a person.

The use of heavy equipment would also result in temporary increases in ambient noise. Construction noise levels that could result from implementing projects associated with the RCAAP would fluctuate depending on the type, number, size, and duration of use of the equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity.

To assess noise levels associated with the various equipment types and operations, construction equipment can be considered to operate in two modes: mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner (e.g., loaders, graders, dozers). Stationary equipment operates in a location for an extended period to perform continuous or periodic operations. Operational characteristics of heavy construction equipment are typified by short periods of full-power operation followed by extended periods of lower-power operation, idling, or powered-off conditions. The site preparation phase typically generates the highest noise levels because of on-site equipment associated with grading, compacting, and excavation, which uses the noisiest types of construction equipment. Site preparation equipment and activities include backhoes, bulldozers, loaders, and excavation equipment (e.g., graders and scrapers). It is not anticipated that the types of projects that could be implemented under the RCAAP would involve the construction of large structures; however, the construction of structural elements and mechanical systems would generate noise. It is expected that the primary sources of noise would include backhoes, bulldozers, and excavators. Noise levels from typical types of construction equipment can range from approximately 74 to 94 dBA at 50 feet. Construction activities would not involve particularly noisy equipment or activities, such as blasting or pile driving. Additionally, when evaluating construction-related noise levels, activities occurring during the more noise-sensitive evening and nighttime hours are of greater concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as traffic volumes and commercial activities decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for nearby residential uses.

Based on this information and accounting for typical usage factors for individual pieces of equipment and activity types, on-site construction could result in average hourly noise levels of 87 dBA L_{eq} at 50 feet and maximum noise levels of 90 dBA L_{max} at 50 feet from the simultaneous operation of heavy-duty equipment. However, a substantial increase in noise itself does not necessarily constitute a significant noise impact, so long as overall noise exposure is below an acceptable level and does not result in excessive exposure for extended periods of time (FTA 2018).

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

FTA provides general and detailed guidance for assessing construction noise impacts. Because this analysis evaluates a multi-jurisdictional program, it is largely based on the general guidance. In addition, FTA recognizes the greater potential for noise impacts when construction activities result in noise exposure for extended periods, which FTA has identified as 30 days, and recommends the use of lower noise standards that account for the sensitive time of day. Because the construction activities associated with the implementation of the RCAAP would likely occur during daytime hours and each individual phase would be relatively short, it is appropriate to only consider the hourly noise

levels at each construction location, assessing construction noise as a temporary and intermittent source rather than a source that occurs for an extended period of time.

Future projects would be regulated by the applicable jurisdiction's noise ordinance and/or general plan requirements, including construction-hour limitations and requirements to minimize construction noise, as outlined above.

Construction noise levels are not anticipated to exceed FTA's construction noise criteria of 90 dBA L_{eq} in residential areas and 100 dBA L_{eq} in commercial and industrial areas because the type of construction activity associated with implementation of RCAAP actions would result in relatively small and discrete projects, including the use of less noise-intensive equipment compared to large-scale development. Construction noise is typically highest at the source and attenuates rapidly with distance, and the use of multiple pieces of equipment would occur intermittently rather than continuously. Because the sources of noise would be mobile and shifting as the work is performed, the exposure of individual residents, households, and other sensitive receptors to excessive construction noise would be limited. Therefore, construction activities would not result in an adverse effect.

During operation, these types of projects would not introduce any new stationary sources of noise (e.g., machinery, pumps, fans, compressors, or other equipment) and would not generate new vehicle trips that would result in transportation-related noise. Therefore, the operation of these projects would not result in any increases in permanent noise sources. Based on the above discussion, implementation of the RCAAP would not generate substantial temporary or permanent increases in ambient noise levels in the vicinity of a given project in excess of standards established in the six Napa County Jurisdictions' local general plans or noise ordinances, or applicable standards of other agencies, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. The RCAAP is a policy-level document that does not include any site-specific designs or locations for future improvements. However, as described in Chapter 2 of this checklist, implementation of the RCAAP, including Measures TR-3, TR-4, OF-2, AG-1, TEMP-2, TEMP-4, FLOOD-2, FLOOD-3, FLOOD-5, could result in construction that could result in the generation of groundborne vibration or noise. Operation of these projects would not introduce stationary or transportation-related sources of groundborne vibration or noise. Therefore, the operation of these projects would not generate excessive groundborne vibration or noise levels.

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

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

Construction activities for each project generally would be short-term. For many projects, construction equipment would move linearly along a roadway or corridor and through a given area. Because the sources of groundborne vibration and noise would be mobile and shifting as the work is performed, the exposure of individual residents, households, and other sensitive receptors to excessive groundborne vibration and noise would be intermittent. Furthermore, construction activities that generate groundborne vibration and noise would most likely be limited to daytime hours when people are less likely to be disturbed or awakened. Such brief, intermittent periods of exposure to increases in groundborne vibration and noise would not result in the kinds of adverse health effects to humans

that are associated with prolonged exposure to sustained substantial groundborne vibration and noise levels over long periods of time (e.g., weeks or months) or to substantial noise level increases that disrupt sleep. Furthermore, construction activities associated with implementation of the RCAAP would generally occur within public rights-of-way, utility corridors, or other previously disturbed areas that are separated from adjacent structures by required building setbacks, sidewalks, and landscaped buffers. Therefore, construction activities would typically be located at distances greater than 25 feet from the nearest structures and vibration levels would dissipate rapidly at increasing distance from the vibration source. Finally, it is extremely rare for structural damage to occur from equipment other than pile driving. Thus, the potential for structural damage from the proposed construction activities would not be a concern. For all the foregoing reasons, implementation of the RCAAP would not generate excessive groundborne vibration or groundborne noise levels. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. The Angwin Airport – Parrett Field and Napa County Airport are located in Napa County, with their airport influence areas encompassing land within unincorporated Napa County and the cities of Napa and American Canyon. However, the RCAAP does not propose the development or siting of any new sensitive receptors (e.g., residences, schools) that could be adversely impacted by noise associated with aircraft flyovers. Although the locations of projects associated with RCAAP implementation are unknown, it is reasonable to assume that development would be consistent with the policies identified in the Countywide Airport Land Use Compatibility Plan and would be subject to compliance with applicable general plan policies depending on where each project is located. Further, there is no aspect of the RCAAP that would change the potential for people working or residing near airports to be exposed to excessive noise levels. Thus, implementation of the RCAAP would not expose people residing or working near an airport to excessive airport and/or aircraft noise. This impact would be less than significant. No mitigation is required.

3.14 POPULATION AND HOUSING

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

3.14.1 Environmental Setting

The County has a total population of approximately 138,572 people (U.S. Census Bureau 2020). Between 1990 and 2000, the county’s population increased from 110,765 people to 124,270 people, or by approximately 12 percent, and, between 2010 and 2019, the county experienced a much slower influx of new residents, which resulted in a population increase of approximately 0.9 percent (U.S. Census Bureau 2023). The 2020 Census reported a total of 51,167 households, with an average household size of approximately three people. Approximately 51 percent of households were family households, and approximately 63 percent were owner-occupied (U.S. Census Bureau 2023). There are several constraints on the County’s ability to support high-density housing, which has contributed to the County’s recent slow growth. These constraints include the lack of water delivery and sewage treatment infrastructure, rugged topography, and incompatible neighboring land uses (Napa County 2007).

3.14.2 Discussion

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

No impact. RCAAP measures that would be implemented would include improvements to the County’s existing transit network and recycled water infrastructure. These projects would not induce population growth directly or indirectly because the projects do not propose new housing or growth-inducing infrastructure, or changes to policies or regulations related to land use or residential zoning. As described in Chapter 2, there are a limited number of actions with potential to result in construction. These construction projects would not require a large construction crew, and workers would likely be sourced from the Napa County region. Permanent, substantial relocation of workers would not be required. Therefore, implementation of these measures would not result in substantial population growth or employment growth in the County. No impact would occur. No mitigation is required.

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

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

3.15 PUBLIC SERVICES

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

3.15.1 Environmental Setting

Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) and the Napa County Fire Department (NCFD) provide fire protection and emergency medical response to nearly 30,000 residents covering 728 square miles of unincorporated Napa County, except for 83 parcels that are served by the American Canyon Fire Protection District (ACFPD). The Napa County branch of CAL FIRE serves six northern Bay Area counties and several municipalities. The Sonoma-Lake-Napa CAL FIRE Unit Chief also serves as the County's Fire Chief, coordinating fire protection services for all County fire agencies. The NCFD also provides fire protection and related services to smaller communities and various agencies in the unincorporated portion of the County. The NCFD owns the fire protection stations and equipment but contracts with CAL FIRE for the staffing and management of the facilities (Napa County 2007: 4.13-1).

There are five local fire departments and several volunteer fire departments providing fire protection to various portions of the county. The ACFPD, Napa Fire Department, St. Helena Fire Department, Calistoga Fire Department, and the Napa State Hospital Fire Department provide services through contracts and aid agreements. The Schnell-Vista Fire Protection District, the Knights Valley Volunteer Fire Department, and the Mountain Volunteer Fire Department are located outside the county but provide limited services to the county under necessary circumstances (Napa County 2007: 4.13-1).

Law Enforcement

The Napa County Sheriff's Department (NCSD) provides law enforcement services to the unincorporated portions of the county and, through mutual aid agreements with the Napa City Police Department, the Vallejo City Police Department, and the California Highway Patrol (CHP). The NCSD provides contract law enforcement services through mutual aid agreements to the St. Helena Police Department, the City of Calistoga Police Department, the City of Napa Police Department, and the City of St. Helena Police Department. The NCSD also provides contract law enforcement services to the City of American Canyon and the Town of Yountville. There are no established service

standards for the County's local police departments. However, the departments respond to priority incidents within the city limits within 2 minutes or less 80 percent of the time (Napa County 2007).

Schools

Napa County is made up of seven school districts, including: Napa Valley Unified School District, St. Helena Unified School District, Calistoga Joint Unified School District, Howell Mountain Elementary School District, Pope Valley Union Elementary School District, Napa County Office of Education, and the Fairfield-Suisun Joint Unified School District. There are 13 high schools, 15 middle schools, 29 elementary schools, and two charter schools. In total, there are 41 schools within the county, and approximately 18,585 enrolled students (CDE 2025).

Other Facilities

Other public facilities located throughout the county include government buildings, libraries, parks, and recreational facilities. There are four libraries in Napa County, including American Canyon Library, Calistoga Library, Napa Library, and Yountville Library (Napa County 2025b). See Section 3.16.1, below, for a description of the County's existing parks and recreational facilities.

3.15.2 Discussion

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

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

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

3.16 RECREATION

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

3.16.1 Environmental Setting

Each of the Napa County Jurisdictions has a parks and recreation department. The Napa County Regional Park and Open Space District has the primary responsibility for providing and maintaining recreational facilities in the county. The district is authorized to protect and preserve natural areas, wildlife habitat, and other open space resources, and to plan, improve, and operate a system of public parks, trails, outdoor recreational facilities, and outdoor science and conservation education programs. The district manages the day-to-day operations of 10 locations throughout the county. The district has protected more than 6,000 acres of watersheds, forests, and other open spaces, constructed and operates Ecocamp Berryessa as a youth outdoor education camp, and constructed and/or operates over 75 miles of recreational trails. The district also manages and provides recreational access to another 9,000 acres of open space owned by other agencies, including three State Parks, within Napa County (Napa County 2025c).

3.16.2 Discussion

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No impact. The implementation of the RCAAP would not increase the use of recreational facilities to the extent that substantial deterioration would occur. Typically, this impact occurs when a project induces population growth, such as new development or a business that would generate a large number of new employees who would use existing parks or other recreational facilities. Implementation of the RCAAP would not include construction of new housing or employment-generating uses that would result in new long-term users of parks and recreational facilities. Furthermore, the number of construction workers needed to install future projects would be minimal and would not substantially increase the temporary use of existing recreational facilities. Therefore, implementation of the RCAAP would not increase the use of recreational facilities to the extent that substantial deterioration would occur. No impact would occur. No mitigation is required.

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

No impact. RCAAP measures and actions would not include development of recreational facilities and would not induce population growth that would require the construction or expansion of recreational facilities. Therefore, no impact would occur. No mitigation is required.

3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

The county's transportation system consists of highways, streets, pedestrian pathways, transit routes, and bikeways. The circulation system is connected to the larger regional network, which includes SR 128, SR 29, SR 12, and SR 121. SR 128 is a northwest-southeast two-lane rural highway that runs through Napa County to the Navarro River Bridge near Albion, where it connects with SR 1 to the west and Winters to the east, which intersects with Interstate 505. SR 29 is a north-south highway that traverses the western portion of Napa County through Calistoga, St. Helena, Yountville, and Napa. SR 20 travels south of the City of Napa from Interstate 80 in Vallejo to SR 20 in Upper Lake. SR 12 is a west-east highway that connects Sonoma County and Calaveras County. SR 121 is a southwest-northeast freeway that traverses Napa County from SR 37 at Sears Point to SR 128 near Lake Berryessa.

Bus service is provided throughout the county via Vine Transit, operated by the Napa Valley Transportation Authority. On demand service is also provided by American Canyon Transit, Yountville Trolley, St. Helena Shuttle, Calistoga Shuttle and VineGo. Additionally, Amtrak provides bus service in the City of Napa at the Soscol Gateway Transit Center. As of 2019, the City of American Canyon had 13.1 miles of bicycle facilities, the City of Calistoga had 6 miles of bicycle facilities, the City of Napa had 49 miles of bicycle facilities, the City of St. Helena had 2.5 miles of bicycle facilities, the Town of Yountville had 4.1 miles of bicycle facilities, and the unincorporated County had 67.5 miles of bicycle facilities, totaling 142.2 miles of bicycle facilities countywide (Napa Valley Transportation Authority 2019). Downtown areas and historic commercial centers provide pedestrian facilities in the incorporated areas of the county, while the unincorporated county is predominantly rural, having limited pedestrian infrastructure, including sidewalks and marked crosswalks (Napa Valley Transportation Authority 2016). The Napa Valley Transportation Authority is currently in the process of developing the Napa Countywide Active Transportation Plan, which is anticipated to be adopted in 2026.

3.17.2 Discussion

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

Less than significant impact. The implementation of the RCAAP would not result in long-term operational increases in vehicular trips along roadways in the county. The GHG reduction and adaptation actions would improve the

operation of the circulation system by reducing vehicle trips on roadways and highways and increasing the number of transit riders, bicyclists, and pedestrians. For example, implementation of the RCAAP would include coordination with NVTa to develop and adopt "transit first" policies for all jurisdictions (Action TR-1-A) and implement VMT reduction strategies as part of discretionary land use and community development efforts (Action TR-1-C). Through Actions TR-10-A and TR-10-B, the RCAAP would support NVTa's adoption and implementation of the forthcoming NVTa Countywide Active Transportation Plan and NVTa's efforts to secure funding for and consider opportunities to implement projects, programs, and policies of the Countywide Vision Zero Plan, Local Roadway Safety Plans, and other documents that address multimodal safety improvements. The plan also includes actions to update municipal codes within the Napa County Jurisdictions to incorporate comprehensive bicycle, e-bike, and micromobility parking and charging standards (Action TR-10-D); encourage cross-agency collaboration between Caltrans, MTC-ABAG, NVTa, and local jurisdictions in the county to identify, prioritize, and secure funding for active transportation projects consistent with local and regional plans (Action TR-10-H); support NVTa's efforts to secure additional funding to support existing active transportation mobility incentives and rebate programs (Action TR-11-A); consider increasing funding support to expand current TDM programs (Action TR-11-B); develop and adopt local TDM ordinances in all jurisdictions by 2028 (Action TR-11-C); support NVTa in developing a visitor TDM program that targets recreational trips (TR-12-A); and, market existing transit/transportation options to support mode shift (Action TR-14-A).

Subsequent projects associated with the RCAAP would be consistent with the applicable jurisdictions' general plan policies, which generally promote the increased use of alternative modes of transportation. Implementation of the RCAAP would not conflict with any policies included in local general plans or active transportation plans. Therefore, implementation of GHG reduction and adaptation measures would not conflict with any applicable transportation plans, ordinances, or policies. This impact would be less than significant. No mitigation is required.

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

Less than significant impact. Senate Bill 743, passed in 2013, required the Governor's Office of Land Use and Climate Innovation (LCI), formerly named the Office of Planning and Research (OPR), to develop new CEQA guidelines that address transportation metrics under CEQA. The Office of Administrative Law approved (on December 28, 2018) comprehensive updates to the CEQA Guidelines (including at Section 15064.3[b]) that removed level-of-service as a measure of transportation impacts under CEQA and replaced it with VMT. Pursuant to State CEQA Guidelines Section 15064.3(c), this change in analysis has been required since July 1, 2020. According to OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, projects that generate or attract fewer than 110 vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). The County of Napa and City of Napa have adopted VMT thresholds of significance. The County of Napa Traffic Impact Study Guidelines identifies screening criteria for projects that generate fewer than 110 net new daily trips consistent with State guidance.

Implementation of RCAAP measures and actions could result in relatively small construction projects, which would not require large construction crews, and therefore, would result in a small number of construction worker-related trips to and from future project sites. In addition, construction worker trips would be sporadic throughout the implementation of RCAAP measures. Implementation of RCAAP measures and actions would not generate 110 new construction trips per day.

As described in Section 3.14, "Population and Housing," implementation of RCAAP measures and actions would not induce substantial population or employment growth in the region; therefore, it would not generate additional VMT over the long term. Although some projects resulting from the RCAAP could move facilities, thereby redistributing trips throughout the county, a net increase of 110 new trips per day is not anticipated. Further, implementing the RCAAP would involve policies and programs to increase the use of alternative modes of transportation and reduce overall VMT in the region. The RCAAP includes the following actions that would directly or indirectly reduce VMT in the region over the long term.

Measure TR-1: Reduce Vehicle Miles Traveled Countywide

- ▶ **Action TR-1-A:** Support NVTa in developing a set of Transit First policies for all jurisdictions. These policies are intended to address mobility needs along key corridors served by transit, and may be incorporated into updates

of relevant general plans or specific plans. In land use project planning, a “Transit First” policy prioritizes the enhancement of quality access to nearby transit amenities to encourage visitors, workers, and residents to utilize transit as a means of travel to and from a location. This may include project-level improvements such as and/or jurisdiction-level improvements outside the project area, such as lighting design criteria, bus pull-outs, sidewalk gap closures, shelters, and planning for future transit signal priority (TSP) implementation.

- ▶ **Action TR-1-B:** Support expanded analysis of VMT for passenger and commercial vehicle trips in NVTa Travel Behavior Study.
- ▶ **Action TR-1-C:** Work with NVTa to implement VMT reduction strategies as part of the development review process.
- ▶ **TR-1-D:** Work with NVTa to develop travel behavior studies regularly (every two to five years), requesting that NVTa identify the greatest sources of VMT (such as between specific locations or by trip purpose) develop strategies to mitigate those sources of VMT.

Measure TR-2: Reduce Winery Wastewater Hauling Emissions

- ▶ **Action TR-2-D:** Continue to monitor winery wastewater treatment trends to identify opportunities to reduce hauling VMT.

Measure TR-10: Implement the Active Transportation Plan

- ▶ **Action TR-10-A:** Support NVTa's adoption and implementation of the forthcoming NVTa Countywide Active Transportation Plan (est. 2026) and adopt and implement the plan's locally relevant policies or guidance.
- ▶ **Action TR-10-B:** Support NVTa and local jurisdictions efforts into securing funding to implement projects, programs, and policies of the Countywide Vision Zero Plan, Local Roadway Safety Plans, and other documents that address multimodal safety improvements.
- ▶ **Action TR-10-C:** Support NVTa's efforts to report biennial jurisdiction-level progress toward targets for active transportation infrastructure and policies to advance mode shift.
- ▶ **Action TR-10-D:** Update municipal codes to incorporate bicycle, e-bike, and micromobility parking and charging standards. Identify opportunities to expand supportive facilities, such as secure parking and charging for bicycles, e-bikes, cargo bikes, and other micromobility devices, particularly at transit centers and other high-activity locations.
- ▶ **Action TR-10-E:** Support NVTa's efforts to evaluate opportunities and deploy secure bicycle parking in downtowns and key retail and employment destinations where large-scale redevelopment is unlikely in the medium-term.
- ▶ **Action TR-10-F:** Establish and/or update and implement policies addressing active transportation facility maintenance and access.
- ▶ **Action TR-10-G:** Support and coordinate with NVTa efforts to develop the Active Transportation Plan, ensure consistency with the Active Transportation Plan in local planning efforts, and avoid unnecessary or duplicative work.
- ▶ **Action TR-10-H:** Encourage cross-agency collaboration between State/regional entities, and local jurisdictions in the county to identify, prioritize, and secure funding for active transportation projects consistent with local and regional plans.
- ▶ **Action TR-10-I:** Continue updating the plans and evaluating the effectiveness of previous strategies and measures in reducing VMT and increasing the shift to active transportation modes.
- ▶ **Action TR-10-J:** Evaluate progress and effectiveness of requirements and modify as necessary to meet policy goals and priorities.

Measure TR-11: Expand Commute Transportation Demand Management Programs

- ▶ **Action TR-11-A:** Support local and regional partners' efforts to expand and secure additional funding to provide active transportation mobility incentives and rebate programs.
- ▶ **Action TR-11-B:** Support local and regional partners' efforts to expand and secure additional funding to expand current TDM programs (e.g., V-Commute) through increased and regular outreach to employers and existing participants about program benefits and updates.
- ▶ **Action TR-11-C:** Develop and adopt local TDM ordinances in all jurisdictions by 2028. Ordinance should further the VMT and GHG reduction goals of the Countywide Transportation Plan, local General Plans, the Bay Area Clean Air Plan, and the RCAAP. Ordinances should require that TDM programs report annual metrics, some of which may already be tracked (e.g., participation, VMT reduction, mode shift, funding). Consider Sonoma County and Contra Costa County ordinances as examples.
- ▶ **Action TR-11-D:** Support feasibility analysis for MAAS (e.g., e-bike sharing), particularly in urban areas. Identify policies and programs that would help spur adoption and use of these services (e.g., parking rules and allowances, safety requirements). See the City of Davis's parking policy for micromobility solutions as an example.
- ▶ **Action TR-11-E:** Evaluate the progress and effectiveness of TDM programs and modify, as necessary to meet policy goals & priorities, including renewing or amending agreements & partnerships (e.g., City of Davis agreement with Spin Bikes).

Measure TR-12: Reduce Vehicle Miles Traveled of Visitors to Napa County

- ▶ **Action TR-12-A:** Support NVTa in developing a visitor TDM program that targets recreational trips.

Measure TR-13: Reduce Minimum Parking Requirements

- ▶ **Action TR-13-A:** Consider the feasibility of reducing minimum parking standards or establishing maximum parking standards, along with complementary strategies such as increasing bicycle parking and supporting improved transit access. If feasible and appropriate, develop and adopt ordinances amending parking standards in local zoning codes.
- ▶ **Action TR-13-B:** Consider modifying the jurisdictions' zoning codes to unbundle parking from rent for all new multi-family residential developments with 16 or more units located within ¼ mile of arterials or collectors with fixed route service.
- ▶ **Action TR-13-C:** Manage the parking supply by implementing measures such as permit parking, parking time limits, and metered parking.

Measure TR-14: Empower Community to Choose Active Transportation Options

- ▶ **Action TR-14-A:** Market existing transit/transportation options (Vine Transit, V-Commute) to support mode shift and GHG reduction goals.
- ▶ **Action TR-14-B:** Consider bike delivery pilot programs to demonstrate the effectiveness of zero-emission local deliveries.
- ▶ **Action TR-14-C:** Continue supporting local and regional partners to pursue Safe Routes to Schools funding and support bicycle and pedestrian safety education programs for K–12 students.
- ▶ **Action TR-14-D:** Support local and regional organizations to provide free bicycle safety education and skills training for youth and adults.
- ▶ **Action TR-14-E:** Continue to expand awareness, education, and community action.
- ▶ **Action TR-14-F:** Explore opportunities to support ongoing Safe Routes to Schools funding and work toward establishing a countywide bicycle and pedestrian safety education program in partnership with local and regional partners. Integrate education into long-term active transportation initiatives and other county programs.

GHG emission reductions were estimated for each of the proposed RCAAP measures and included an analysis of VMT reductions associated with the implementation of RCAAP Measures TR-2, TR-10, and TR-11. Table 3.17-1 shows the potential VMT reductions associated with the implementation of RCAAP Measures TR-2, TR-10, and TR-11 over time.

Table 3.17-1 Annual Change in VMT Due to Implementation of RCAAP Measures TR-2, TR-10, and TR-11

RCAAP Measure	2030	2035	2045
TR-2: Reduce Winery Wastewater Hauling Emissions	-11,333 miles annually	-22,667 miles annually	-45,333 miles annually
TR-10: Implement the Active Transportation Plan	-7,507,365 miles annually	-10,871,743 miles annually	-16,253,964 miles annually
TR-11: Expand Commute Transportation Demand Management Programs	-15,143,035 miles annually	-14,963,870 miles annually	-14,628,080 miles annually

Notes: VMT = vehicle miles traveled

Source: Prepared by Ascent in 2025.

Because implementation of RCAAP measures and actions would help reduce VMT in the region by expanding bicycle and pedestrian facilities, reducing parking requirements, and implementing TDM programs and educational initiatives to encourage increased alternative transportation use in the unincorporated county, RCAAP implementation would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b), and the impact would be less than significant. No mitigation is required.

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

Less than significant impact. Construction activities associated with RCAAP implementation, including development of infrastructure upgrades, could result in temporary road closures, which could temporarily disrupt traffic operations including pedestrian and bicycle travel; however, any construction activity within public right-of-way would be subject to local encroachment permit requirements and accompanying requirements to prepare traffic control plans that demonstrate how construction traffic and local traffic, including automobile and bicycle and pedestrian traffic, would be safely accommodated in the vicinity of the project site. Future contractors would be required to prepare the traffic control plans and submit them for approval to the applicable local agency prior to encroachment and/or building permit approval. Therefore, contractors would be responsible for public safety and traffic control within the project limits and on the approaches to the project.

All future roadway improvements would be required to comply with the design standards established for the Napa County Jurisdictions, which provide roadway design and engineering standards. Additionally, individual project plans would be subject to review and approval by applicable jurisdiction staff to ensure transportation safety standards are met. Because future construction of projects associated with the implementation of the RCAAP would comply with the relevant transportation-related regulations during construction and operations, implementation of RCAAP GHG reduction and adaptation measures would not substantially increase hazards due to a geometric design feature, and the impact would be less than significant. No mitigation is required.

d) Result in inadequate emergency access?

Less than significant impact. Any future roadway improvements that result from RCAAP implementation would be required to comply with the California Fire Code, adopted by reference by the six Napa County Jurisdictions. The California Fire Code includes design standards for fire apparatus access (e.g., turning radii, minimum widths), standards for emergency access during construction, and other general and specialized fire-safety requirements. For example, Section 3311.1 of the 2022 California Fire Code identifies minimum requirements to provide required emergency access during construction activities. Adherence to the California Fire Code would ensure that implementation of the RCAAP would provide adequate emergency access during the construction and operation of RCAAP-related projects. Additionally, project plans would be subject to review and approval by applicable jurisdiction staff and emergency service agencies to ensure emergency access is maintained.

This evaluation assumes that construction and development under the proposed plan would adhere to applicable federal, State, and local regulations and would conform to appropriate standards in the industry, as relevant for individual projects. Where existing regulatory requirements or permitting requirements exist to maintain emergency access that are law and binding on responsible agencies and project sponsors, it is reasonable to assume that they would be implemented. There is no attribute of the proposed plan that would obstruct the implementation of this process. Therefore, RCAAP implementation would not result in inadequate emergency access, and the impact would be less than significant. No mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Environmental Setting

This section focuses on contemporary tribal communities and tribal cultural resources as they pertain to AB 52. This section analyzes and evaluates the potential impacts of the project on tribal cultural resources, both identified and undiscovered. Tribal cultural resources, as defined by AB 52, Statutes of 2014, in PRC Section 21074, are sites, features, places, cultural landscapes, sacred places, and objects, with cultural value to a tribe. A tribal cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: “tribal cultural resources,” defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration.

On January 6, 2026, the County sent notification letters that the project was being addressed under CEQA, as required by PRC 21080.3.1, to the Native American tribes that had previously requested such notifications. Notifications were sent to the Middletown Rancheria, Mishewal-Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation tribes. The Yocha Dehe Wintun Nation requested consultation, and a meeting was held on February 12, 2026.

ETHNOGRAPHIC SETTING

The first settlers arrived in the county approximately 10,000 to 12,000 years ago. Among the early inhabitants were the Southern Patwin, a branch of the Wintun (or Wintu) people whose name derives from their word *pat-win*, meaning “people.” They occupied much of the land surrounding Suisun, Vacaville, and Putah Creek (NCHC 2025).

The Wappo, whose name comes from an Americanized version of the Spanish *guapo* (“brave”) in reference to their resistance against Mexican conquest, inhabited the southern and central Napa Valley. They spoke a unique dialect of the Yukian language, having separated from other Yukian groups roughly 500 years before European contact. Like the Patwin, the Wappo were hunter-gatherers who relied on local seafood, game, acorns, and roots. Renowned for their intricate basketry, they lived in villages typically situated along creeks, with oval, grass-thatched houses. Leadership was held for life by a chief, either male or female, and the people were generally peaceful except during conflicts with Spanish forces (NCHC 2025).

The Patwin spoke a dialect of the Penutian language family. Their villages often consisted of a main settlement with smaller satellite communities. Common structures, including dwellings, sweathouses, and dance houses, were semi-subterranean and covered with earth. Patwin men generally went unclothed, while women wore aprons or skirts made from shredded bark, tule, or animal skin (NCHC 2025).

Many modern county place names have Native American origins. The Patwin villages of Suskol and Tulukai, both near the Napa River, became Soscol and Tulucay. The Wappo village of Kaimus evolved into George Yount’s Rancho Caymus, while *Maiya’kma* became *Cerro de los Mallacomes*, now known as the Mayacamas Mountains. Even the name “Napa” may derive from the Napatos Patwin village. Dr. Edward Bale’s Rancho Carne Humana (“Ranch of Human Flesh”) may have been a play on words linked to his profession as a physician. Alternatively, the name may have stemmed from a mistaken belief that the local Wappo practiced cannibalism or from a misrecording of the nearby Wappo settlement *Colijomanoc* or *Callajomanas* (NCHC 2025).

Before European settlement, Napa Valley was home to around 1,000 Wappo and more than 12,000 Wintu across California. By 1843, fewer than 3,000 Wappo and Patwin remained in the county, and by the 1970s, only about 50 Wappo were believed to survive statewide. Today the Mishewal Wappo Tribe of Alexander Valley, comprising over 300 members, remains the last recognized Wappo band in the region. Approximately 2,500 Wintun now live on rancherias in the north-central valley (NCHC 2025).

The county’s indigenous landscape was also home to the Lake Miwok in the Pope Valley and Clear Lake regions, the Pomo in the north and west, the Coast Miwok to the south, and the Patwin to the east and north. This proximity of distinct groups made the area one of remarkable cultural diversity (NCHC 2025).

3.18.2 Discussion

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

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

and

- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in

subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No impact. The County sent written requests for consultation to the Middletown Rancheria, Mishewal-Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation tribes on January 6, 2026. The Yocha Dehe Wintun Nation requested consultation, and a meeting was held on February 12, 2026. On March 19, 2026, Napa County received a letter from Yocha Dehe Wintun Nation acknowledging their review of the RCAAP and concurring with its contents. They did not request any specific mitigation measure language. The County also conducted an informal conversation with the Mishewal-Wappo Tribe of Alexander Valley on March 10, 2026, but the County did not conduct an official AB 52 consultation process with the tribe because they contacted the County well past the initial 30-day response period. The Mishewal-Wappo Tribe of Alexander Valley did not identify any TCRs or suggest mitigation during this informal conversation.

The details of specific implementing projects are unknown at this programmatic stage, but may involve ground-disturbing activities, including the potential for excavation near waterways. As stated above, no tribes culturally affiliated with Napa County identified tribal cultural resources, as defined by Public Resources Code 21074, through the AB 52 consultation process. However, if separate discretionary review is required for future projects, tribes may request consultation and tribal cultural resources could be identified during the implementation period of the RCAAP. Because no tribes have requested notification at this time and no potential tribal cultural resources have been identified, it is assumed that there is no potential for tribal cultural resources to be substantially affected by RCAAP implementation, and there would be no impact. No mitigation is required.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Environmental Setting

The setting for water resources includes the various public and private water purveyors in Napa County. The cities of Napa, American Canyon, Calistoga, St. Helena, and the Town of Yountville provide public water within their respective corporate boundaries and deliver water to the unincorporated portions of the county. Other public water providers serving the County include: the Circle Oaks County Water District, Congress Valley Water District, Lake Berryessa Resort Improvement District, Napa-Berryessa Resort Improvement District, and the Spanish Flat Water District. There are also several private water purveyors that supply water to the smaller communities in the county. The primary source of water for the cities within Napa County is surface water, while the primary source of water for the unincorporated area is groundwater (Napa County 2007).

The City of Napa is a major water supply source in Napa County, receiving its annual State Water Project (SWP) entitlement through the Napa County Flood Control and Water Conservation District, which is the contract administrator. The designated water service areas include most of the lower Napa Valley, encompassing all areas within the city limits of the City of Napa and extending up the foothills on the east and west sides of the valley. The city exports water to the Cities of American Canyon, St. Helena, and Calistoga; the Town of Yountville; and the California Veterans Home. The predominant use of land in the area is residential development. In 2020, the population served by the City of Napa Water Department was 86,906. In the City of Napa Urban Water Management

Plan, demand is met by water supplied from three major sources: Lake Hennessey, the Milliken Reservoir, and the SWP, delivered through the North Bay Aqueduct (City of Napa 2022).

There are several wastewater service providers in Napa County serving various portions of the county, including: the Napa Sanitation District (City of Napa and unincorporated area), City of American Canyon, City of Calistoga, City of St. Helena, and Town of Yountville. The Regional Water Quality Control Board issues countywide municipal stormwater permits to operators of municipal separate storm sewer systems (MS4s) serving populations over 100,000. The Napa County Jurisdictions operate under a General Permit for Discharge of Stormwater from small MS4s.

Napa County has a local enforcement agency (LEA) covering all solid waste facilities in the region. LEAs are responsible for ensuring the correct operation and closure of solid waste facilities in the state, as well as for guaranteeing the proper storage and transportation of solid waste. In concurrence with the California Department of Resources Recycling and Recovery (CalRecycle), LEAs issue operating permits to facilities, including landfills, transfer stations, material recovery, and composting facilities. Solid waste is the garbage, refuse, and other discarded solid materials generated by residential, commercial, and industrial activities. There are two landfills in Napa County: the American Canyon Landfill (now closed) and the Clover Flat Resource Recovery Park in Calistoga. The Clover Flat site includes a solid waste landfill and composting facility. As of July 2020, the landfill was estimated to have a remaining capacity of 2,240,000 cubic yards and a closure date of January 2047 (CalRecycle 2025). Landfills outside of the county also receive waste from Napa County.

Pacific Gas and Electric Company (PG&E), a regulated public utility company, supplies natural gas and electric services to the county.

3.19.2 Discussion

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

Less than significant impact. The RCAAP includes measures and actions that would result in the construction and modification of utilities and service systems. For example, Measure FLOOD-2 would require enhancing the capacity of existing stormwater infrastructure to manage high-intensity rainfall events and mitigate flooding hazards associated with climate change. Measure FLOOD-5 would require the Napa County Jurisdictions to upgrade and/or relocate infrastructure and critical facilities exposed to flooding hazards to make them more resilient to flooding. The physical effects of these activities are analyzed throughout this checklist. Any future utility and service system construction would undergo discretionary review at the state or local level to evaluate consistency with the conclusions of this checklist and applicable regulations.

The RCAAP also includes measures and actions that would increase the installation of EV charging stations and replace building natural gas end uses with electrical systems and appliances (e.g., electric-powered heat pumps and water heaters for space and water heating). Although these measures and actions could generate electrical demand, the RCAAP also includes measures and actions to reduce energy use, such as those that support the installation of onsite solar energy systems and improved building energy efficiency. Further, the demand generated by RCAAP programs would be spread throughout the day and would not be expected to substantially contribute to peak loads. Consumers with PG&E rate plans that have off-peak charging are expected to maximize off-peak use, and off-peak EV charging is expected to increase with the number of publicly available EV charging stations. In addition, replacing natural gas-powered building systems for space and water heating with electrical systems would primarily increase electricity consumption in the winter when ample grid capacity is available (relative to peak summer periods when demand is significantly higher). The incremental increases in electricity consumption would not indirectly result in new or expanded electric power infrastructure improvements.

Demand for other utilities would not increase to such an extent that new infrastructure would be required. The RCAAP's support for fuel switching from natural gas to electric and more efficient natural gas consumption would

reduce demand for natural gas infrastructure. In addition, per capita water demand and wastewater generation would be reduced through various measures that encourage efficiency. Similarly, measures that support open space and water conservation would limit stormwater runoff. Further, implementation of the RCAAP would not induce increased development or population growth directly or indirectly, because measures included do not propose new housing nor do they propose changes to policies or regulations related to land use or residential zoning. As a result, demand for new or expanded infrastructure, including water, wastewater treatment, stormwater drainage, natural gas, or telecommunication facilities, would not increase to serve a new population or development.

At this programmatic level of analysis, there is no evidence to suggest that the RCAAP would result in projects that require the relocation of water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities. Any such relocations would require project-level evaluation but are generally anticipated to occur within the county and would typically be within the scope of the environmental effects disclosed throughout this checklist. Therefore, implementation of the RCAAP would not result in the relocation or construction of new or expanded infrastructure systems that could cause significant environmental effects. The impact would be less than significant. No mitigation is required.

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

Less than significant impact.

Construction

Some nominal water demand would be associated with construction. The implementation of the RCAAP would involve ground-disturbing activities, including grading and excavation, which could require the use of water for dust abatement, as needed via a water truck. These activities would be temporary and intermittent and would not involve the substantial use of water supplies.

Operations

The RCAAP does not include measures or actions that would result in substantial water demand. A major component of water consumption throughout Napa County comes from residential water use. Implementation of the RCAAP would not directly or indirectly induce increased development or population growth, because the measures included do not propose new housing or other uses that would increase water demand. Through the RCAAP, the Napa County Jurisdictions would establish specific water use performance targets aligned with State standards of 47 gallons per capita per day (gpcd) by 2029 and 42 gpcd by 2030. The jurisdictions would also provide the tools and incentives needed to achieve these targets and ultimately reduce water use from both single-family and multi-family residential properties. The Napa County Jurisdictions would establish specific prohibitions against common wasteful practices that persist even outside of drought conditions, including daytime irrigation, post-rainfall irrigation, and uncontrolled runoff, among others. The Napa County Jurisdictions would also encourage reductions in commercial and agricultural water use through a suite of incentives, requirements, and educational initiatives.

RCAAP Action AG-5-B would increase the number of trees in the county, which would require water consumption for irrigation. However, landscaping would be limited to water-efficient varieties with limited water demand once established. The Napa County Jurisdictions would also transform public spaces across Napa County by prioritizing native, drought-tolerant plantings in landscaped areas at municipal facilities, in compliance with AB 1572, which requires eliminating non-functional turf at municipal properties by 2027. Through Measure WW-4, the RCAAP would support the transition to drought-tolerant plants in municipal landscaping.

Throughout the county, the Napa County Jurisdictions would offer rebates and incentives to the community for water-efficient solutions, establish water-efficient landscaping requirements, and establish a consistent, coordinated regional approach to water conservation awareness, education, and engagement through multiple modes, from digital platforms and media campaigns to hands-on workshops and educational programs.

Summary

Although some nominal water demand would be associated with construction and landscape establishment, the RCAAP would support a reduction in per capita water demand. Specifically, Measure WW-5 would reduce wasteful potable water use, Measure WW-6 would reduce water loss in the public distribution system, and Measure WW-7 would improve water efficiency and conservation. Therefore, implementation of the RCAAP would not result in insufficient water supplies being available to serve the County during normal, single-dry, or multiple dry years. The impact would be less than significant. No mitigation is required.

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

Less than significant impact. There are several wastewater service providers in Napa County and the RCAAP does not include measures or actions with potential to result in projects that substantially increase wastewater generation such that there would be inadequate wastewater treatment capacity. The implementation of the RCAAP would not involve development of residential communities or other non-residential development or induce population growth in an area that would increase demand for wastewater treatment. Therefore, implementation of the RCAAP would not exceed the capacity of any wastewater treatment provider. The impact would be less than significant. No mitigation is required.

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

and

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

Less than significant impact. Implementation of the RCAAP would not directly generate substantial solid waste, although waste could be a byproduct of programs intended to encourage energy efficiency, change fuel sources, and improve engine performance. Such waste would not be in excess of state or local standards or conflict with solid waste management and reduction statutes. Further, the RCAAP would not induce increased residential or non-residential development, or population growth directly or indirectly, and there would be no increase in solid waste production as a result of the RCAAP. Implementation of Action SW-2-A would require the development of a unified Construction Waste Management Plan that would achieve recycling or reuse of 70 percent of construction and demolition waste from every future project in the county, starting in 2035. This measure supports compliance with state regulations related to waste reduction. Adequate capacity at recycling facilities would be maintained through implementation of Measure SW-1, which would require coordination among all County jurisdictions to improve solid waste management infrastructure and provide the adequate capacity. Therefore, the impact would be less than significant. No mitigation is required.

3.20 WILDFIRE

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

3.20.1 Environmental Setting

Napa County faces some of the most acute wildfire risks in California due to its Mediterranean climate, steep terrain, and extensive Wildland Urban Interface (WUI). Recent events such as the 2017 Atlas Fire, the 2020 Glass Fire, and the 2020 LNU Lightning Complex illustrate the county's exposure to both fast-moving grassfires and high-intensity crown fires. CAL FIRE's recently updated FHSZ maps designate large areas of eastern, northern, and western Napa County as "Very High" hazard, underscoring the ongoing risk to communities with constrained evacuation routes and direct adjacency to dense vegetation (CAL FIRE 2025). Napa County has produced its own custom wildfire map, combining two fire modeling layers from the US Forest Service (USFS), Burn Probability and Conditional Risk to Potential Structures, and adjusting with local data input, such as aspect and slope. The main source of wildland fire within the county occurs where natural resource and habitat areas meet urbanized development, mainly along the Eastern Mountains and the eastern boundary of the Napa Valley Floor (Napa County 2007).

Each of the Napa County Jurisdictions have established policies related to wildfire. As summarized in Appendix K to the RCAAP, these policies are contained in the Napa County Operational Area Hazard Mitigation Plan (2020), the City of Napa Hazard Mitigation Plan Update (2022), the Napa County General Plan Safety Element (2023), the City of American Canyon Safety Element (2025), the City of Calistoga General Plan Public Safety Element (2014), the City of Napa 2040 General Plan Safety and Noise Element (2022), the St. Helena General Plan Update 2040 Public Health, Safety, and Noise Element (2019), and the Yountville General Plan Safety + Hazards Element (2019).

Napa County's fire risk reduction strategies are shaped by state regulations under Public Resources Code Sections 4290–4291, which establish requirements for defensible space, emergency access, and fire-safe development standards within both SRA and designated Very High FHSZs. In addition, the California Fire Plan, developed by CAL FIRE and the Board of Forestry, provides a statewide framework for prioritizing wildfire mitigation based on asset protection, service levels, and fire behavior modeling.

Wildfire prevention is a shared responsibility among federal, state, and local agencies, including local city and county fire departments, as well as landowners and residents. The National Fire Plan provides the necessary coordination between agencies in areas of federal lands. CAL FIRE and NCFD provide fire protection and prevention. The NCFD also provides fire protection and related services to smaller communities and various agencies in the unincorporated portion of the County (Napa County 2007). CAL FIRE identifies FHSZs at the local, state, and federal levels that cover all fire-prone areas in the state, regardless of land ownership or responsibility.

Moreover, the wildland-urban interface (WUI) is defined by the U.S. Fire Administration as the zone of transition between unoccupied land and human development. It is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. A few county communities, including Angwin and Calistoga, are located in WUI areas.

To help better refine areas of wildfire concern, CAL FIRE establishes and maps FHSZs, or areas of significant fire hazards, based on factors such as fuel, weather, terrain, and the number of days of moderate, high, and extreme fire hazard potential. FHSZs range from "Moderate," "High," and "Very High." Several agencies have responsibility for wildfire protection within any jurisdiction, ranging from local and tribal organizations to federal organizations. To address wildfire jurisdictional responsibilities, the State Legislature has designated Local Responsibility Areas (LRA), State Responsibility Areas (SRA), and Federal Responsibility Areas (FRA). FRAs encompass fire-prone wildland areas owned or managed by a federal agency responsible for wildfire response and safety on federal lands. SRAs include land under various ownership types in the state where CAL FIRE has legal and financial responsibility for wildfire protection, but does not include incorporated cities or federal lands. LRAs typically include lands in incorporated towns and cities, cultivated agricultural lands, and other lands that otherwise do not meet the criteria for SRA or FRA, inclusive of some land in unincorporated counties. Figure SAF-9 of the County's General Plan Safety Plan shows the locations of these areas, together with FHSZs in the county. As shown in Figure SAF-9, a substantial portion of the county is SRA and is also designated in the very high FHSZ (Napa County 2023).

The Napa County Jurisdictions have roughly one hundred existing wildfire-focused hazard mitigation actions and safety element measures, and other relevant local plans, such as community wildfire protection plans, also contribute to fire hazard mitigation and risk reduction. Napa County Office of Emergency Services (OES) is the primary local coordination agency for emergencies and disasters affecting residents, public infrastructure, and government operations within Napa County. Its operational area covers all cities, towns, special districts, and unincorporated areas of Napa County, and it works with local, state, and federal partners in emergency response, preparedness, mitigation, prevention, and recovery.

3.20.2 Discussion

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?**

Less than significant impact. There are SRAs in the county, and the FHSZ maps designate large areas of eastern, northern, and western Napa County as Very High Fire Hazard. Therefore, RCAAP implementation could result in specific projects that are in or near these areas. As described above in Section 3.9.2(f), there are no adopted emergency response or emergency evacuation plans that could be impaired by the RCAAP. The traffic control plans required to obtain encroachment permits for work in or near road rights-of-way would include a plan for adequate access for fire and emergency responders throughout construction activities for individual projects implemented under the RCAAP. Any future discretionary development would be required to conform to applicable development standards and guidelines, fire protection standards, and CFC requirements, including those that define standards for providing emergency access, including fire apparatus access. In addition, the RCAAP would result in a program of infrastructure improvement projects to enhance mobility, reduce demand for water and fossil fuels, and make the community more resilient to climate change. These types of projects would not impede emergency access.

As described above in Section 3.9, criterion f, implementation of construction traffic management plans and associated coordination with service providers would typically address potential interference with emergency response or evacuation plans. Compliance with applicable codes and design standards would ensure that implementation of the RCAAP does not physically interfere with adequate emergency access. At the program level, there is no evidence to suggest that any particular action would impair or interfere with adopted emergency response or evacuation plans. Future projects undertaken by the Napa County Jurisdictions to implement the measures and actions in the RCAAP would need to be reviewed in the context of this Initial Study to determine if additional environmental review is needed. If a future discretionary project, once sufficiently identified and described, is determined to have a potentially significant impact due to unique features or site conditions that is not analyzed and mitigated in this Initial Study, additional environmental review would be required. Therefore, implementation of measures under the RCAAP would not impair an adopted emergency response plan or emergency evacuation plan. Further, RCAAP includes programs that would support emergency response and evacuation during a fire, including programs that would reduce single-passenger vehicle travel (potentially reducing congestion). This impact is less than significant. No mitigation is required.

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

Less than significant impact. Measures in the RCAAP prepare Napa County Jurisdictions for more frequent and severe wildfire events, while also reducing risk in communities and recognizing the role that beneficial fire plays in the county's ecosystems. As discussed in Section 3.14, "Population and Housing," RCAAP measures would not include the construction of residential structures and would not introduce new occupants that could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

New construction resulting from RCAAP implementation would be subject to Title 24 of the CCR, which includes safety measures to minimize the risk of fire. The provisions of the fire code would apply to all construction, alteration, replacement, removal, and demolition. The risk of accidental ignition of a wildland fire during construction in forested areas would be addressed through standard construction practices that address the potential for sparks generated by construction equipment, the potential for spills of ignitable materials, and emergency procedures to respond immediately to these conditions. In addition, Title 14 of the CCR sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent damage to structures or people by reducing wildfire hazards within SRAs. Local jurisdictions' general plan policies and building codes enforce and expand on these requirements at the local level. All jurisdictions are required to review and update their safety element in conjunction with the next housing element revision to address the risk of fire in SRAs and Very High FHSZs and the provisions outlined in "Fire Hazard Planning" by LCI. Projects developed under the plan would not be approved by local agencies until the project design demonstrates compliance with applicable fire safety requirements. In addition, through Action ALL-3.2, the Napa County Jurisdictions would establish wildfire risk reduction requirements for new and existing residential and commercial developments. Measures FIRE-1 through FIRE-6 also establish methods for the region to prepare for, and adapt to, increased wildfire risk. While some new or relocated structures may be required to implement the RCAAP measures and actions, the program of infrastructure improvements includes measures and actions to reduce wildfire risk, including support for undergrounding power lines (Action Energy-2.1), and does not include projects that are anticipated to exacerbate wildfire risk. This impact is less than significant. No mitigation is required.

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

Less than significant impact. The RCAAP would not directly result in the installation of infrastructure with the potential to exacerbate wildfire risk. However, the community-wide switch from natural gas to electrical energy supported by the plan could increase electricity demand in a manner that requires additional infrastructure. Power lines that transmit electricity pose a risk of sparking as a result of downed lines, direct contact with vegetation, line faults,

and equipment failures. Action ENERGY-2.1 would harden energy infrastructure against various climate stressors, such as undergrounding overhead electrical transmission lines for wildfire events. As described above, electrical power is supplied to the six Napa County Jurisdictions by PG&E, a utility that is regulated by the CPUC and subject to oversight, rules, and orders established to reduce the potential for power infrastructure to result in wildland fire. This includes clearing vegetation near the power lines and implementing operating provisions to temporarily shut down power during high winds when the fire danger is great.

As described above, the RCAAP identifies infrastructure improvements to improve the region's ability to support changes in the built environment and transportation sectors that reduce GHG emissions and to adapt to climate change. These include infrastructure modifications, the environmental effects of which are evaluated throughout this checklist. The RCAAP is not anticipated to require the installation of additional infrastructure that would exacerbate wildfire risk or result in temporary or ongoing environmental impacts. This impact is less than significant. No mitigation is required.

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

Less than significant impact. Implementation of the RCAAP would not expose people or structures to substantial risks associated with post-fire instability, runoff, or drainage changes. As described above, the RCAAP would not exacerbate wildfire hazards because it would not introduce new people or ignition sources. Furthermore, many of the projects implemented through the RCAAP would be concentrated in the county's populated areas, which are generally not on steep slopes prone to landslides. Drainage would not be substantially affected by the projects required to implement RCAAP measures and actions.

Additionally, RCAAP measures involving disturbance of 1 or more acres would be required to comply with a SWPPP that complies with the NPDES Construction General Permit (Order 2022-0057-DWQ). The SWPPP would identify erosion and sediment controls to substantially reduce the amount of soil disturbance, erosion, and drainage during construction.

Through Measure FIRE-2, Napa County Jurisdictions would coordinate with State agencies or other partners to establish post-fire ecological recovery programs that rebuild and strengthen ecosystems damaged by wildfires, ensuring they can better withstand future climate stressors. Such post-fire ecological recovery programs can also promote vegetation recovery and soil health, thereby minimizing erosion, flooding, and subsequent fire hazard risks. Additionally, pursuant to Measure FLOOD-6, Napa County Jurisdictions would replant areas with bare soil or significant disturbance due to natural hazards and/or human factors. The restoration of such bare or disturbed areas is important because it stabilizes soil, reduces erosion, and increases water absorption, thereby mitigating flood risks and enhancing ecosystem resilience. Measure AG-6 would indirectly increase carbon storage and sequestration by creating a countywide watershed management and habitat restoration program.

Enforcement of City, County, and State regulatory standards would ensure that the implementation of the RCAAP would not result in substantial post-fire risks to people or structures from runoff, slope instability, or drainage changes. In addition, RCAAP adaptation measures would improve the county's resilience to flooding and other risks arising from runoff, post-fire slope instability, or drainage changes. The impact would be less than significant. No mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

3.21.1 Environmental Setting

The environmental setting for this section is presented above in the environmental settings for each of the checklist issue areas. No additional environmental setting is necessary.

3.21.2 Discussion

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

Less than significant impact with mitigation. Based on evaluations and discussions contained in Sections 3.1 through 3.20 of this checklist, the RCAAP is not anticipated to substantially degrade the quality of the environment. As discussed in Section 3.4, "Biological Resources," the project would implement Mitigation Measures 3.4-1 through 3.4-5, which would require a biological resources assessment, avoidance and minimization measures, and compensation for loss of wetlands. Therefore, the project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 3.5, "Cultural Resources," although unlikely, ground-disturbing activities during

project construction may result in the unanticipated discovery of archaeological resources. Implementation of Mitigation Measure 3.5-2 would reduce impacts to archaeological resources by requiring that steps be taken to avoid, record, or otherwise treat the archaeological resource appropriately, in accordance with pertinent laws and regulations. Therefore, the project would not eliminate important examples of the major periods of California history (both before and after European arrival).

b) Does the project have impacts that are individually limited, but cumulatively considerable?

Less than significant impact with mitigation. As described in Chapter 2 of this Initial Study, most of the measures and actions in the RCAAP would support GHG reduction and climate change adaptation through encouragement or support for behavior changes, scientific study, and policy direction. There is no evidence that these programs have a reasonably foreseeable potential to directly or indirectly result in adverse physical changes in the environment. There are some actions that would directly or indirectly result in physical changes to the environment. These projects would be spread throughout the county and the implementation timeframe for the RCAAP. When considered in conjunction with other development anticipated in the county through regional planning documents (including the Napa County Jurisdictions' general plans and MTC-ABAG's sustainable communities strategy), the RCAAP would not result in any cumulatively considerable contributions to regional environmental impacts.

Aesthetics

Reasonably foreseeable cumulative growth and development could have cumulative effects on the region's aesthetic character. Napa Valley is aesthetically characterized by historic downtowns, tree-lined streets, agricultural uses, and prominent natural features, such as the Napa River and surrounding hillsides. The Napa County Jurisdiction's design review processes and general plans would limit the effects of cumulative development on aesthetic resources. As described above, the discrete effects of projects that are anticipated to result from RCAAP implementation would be less than significant with consistency with local regulations. The RCAAP would not result in a cumulatively considerable contribution to impacts on aesthetics.

Agriculture and Forest Resources

There is agricultural land throughout Napa County, primarily in the unincorporated areas. Reasonably foreseeable cumulative growth could have cumulative effects related to the conversion of farmland for development. The RCAAP would not make a substantial contribution to the cumulative condition for agricultural and forest resources because it would not result in a substantial conversion of natural land. As described above, the discrete effects of projects that are anticipated to result from RCAAP implementation would be less than significant with consistency with local regulations and mitigation. The RCAAP would not result in a cumulatively considerable contribution to impacts on agriculture.

Air Quality

The air quality analysis above is inherently cumulative because it evaluates effects within the air basin. As described above, the RCAAP would not result in a cumulatively considerable contribution to impacts on air quality.

Biological Resources

Although impacts that result in the loss of natural lands would be minimized through general plan policies and other state and local regulations, some important habitats for wildlife development in the region could result in a cumulative contribution to the loss of special-status species and their habitats. The RCAAP would not make a substantial contribution to the cumulative condition for biological resources because it would not result in a substantial conversion of natural land. Mitigation measures developed to address the project-level impacts of the RCAAP on biological resources would reduce the RCAAP's contribution to the cumulative impact to a level that is not considerable.

Cultural Resources

There are known historical resources within the region, as well as the potential for unknown archaeological resources that could be affected by reasonable foreseeable cumulative growth and development. However, all development projects in the region would be required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties. Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5(f), which would apply to projects throughout the region, recognize that historical or unique archaeological resources may be accidentally discovered during project construction and guidelines recommend that if a potential resource has been discovered, that an immediate evaluation by a qualified archaeologist be included in mitigation measures. Further, the California Health and Safety Code Section 7050.5 includes specific provisions for the protection of human remains in the event of discovery, and Section 7052 makes the willful mutilation, disinterment, or removal of human remains a felony. The California Health and Safety Code is applicable to any project in the region where ground disturbance would occur. The RCAAP would not make a substantial contribution to the cumulative condition for cultural resources because it would not result in a substantial conversion of natural land. Mitigation measures developed to address the project-level impacts of the RCAAP on cultural resources would reduce the RCAAP's contribution to the cumulative impact to a level that is not considerable.

Energy

Cumulative projects in the surrounding region may increase overall energy demand. However, because the RCAAP includes several policies designed to reduce its energy use, as discussed above, the project's contribution to the cumulative impact would not be cumulatively considerable.

Geology and Soils

Geological impacts are confined to discrete spatial locations and do not generally combine to create an extensive cumulative impact condition. Conformance with the California Building Code would preserve building integrity during a seismic event, and other regulatory measures would reduce geohazards impacts to a less-than-significant level. The RCAAP would not result in a cumulatively considerable contribution to impacts on geology and soils.

Greenhouse Gas Emissions

The RCAAP is a regional plan to address global GHG emissions. The analysis above is inherently cumulative. The RCAAP would not result in a cumulatively considerable contribution to impacts on GHG emissions.

Hazards and Hazardous Materials

Projected population and employment growth in region would increase the number of people potentially exposed to impacts from hazardous material transportation; the increased use of hazardous household, commercial, and industrial materials; as well as a cumulative increase in exposure to risks associated with the accidental release of hazardous materials into the environment. However, compliance with local, state, and federal regulations pertaining to the production, use, and transportation of hazardous materials would apply to development throughout the region. The RCAAP would not result in a cumulatively considerable contribution to impacts on hazards and hazardous materials.

Hydrology and Water Quality

New development in the region has the potential to generate impacts related to the violation of water quality standards, erosion and sedimentation, flood hazards, and construction-related water quality impacts. Adherence to state and regional regulations would reduce the rate of runoff and filter out pollutants. Construction activities are required to comply with the State Water Resources Control Board's statewide National Pollutant Discharge Elimination System stormwater permit program, the Porter-Cologne Water Quality Control Act's requirements for site-specific waste discharge, as well as local agency public works construction standards. The RCAAP could indirectly increase impervious surfaces and change drainage patterns within the watershed; however, these projects would not substantially contribute to the cumulative condition for hydrology and water quality because the subsequent development would be designed to meet all applicable stormwater quality requirements. The RCAAP would not result in a cumulatively considerable contribution to impacts on hydrology and water quality.

Land Use

There is no significant cumulative impact associated with land use. Projects that could have the effect of physically dividing an established community—such as a major new road, highway, or similar infrastructure—tend to have a singular rather than cumulative impact. Future discretionary projects required to implement the RCAAP would be consistent with existing land use and zoning designations, and applicable design guidelines. In addition, the RCAAP would not contribute to population growth. Therefore, the RCAAP would not substantially contribute to the cumulative condition for land use.

Mineral Resources

There are no locally recognized mineral resources recovery sites in the region and regional growth is not anticipated to reduce access to mineral resources. The RCAAP would not make a substantial contribution to the cumulative condition for mineral resources because it would not result in a substantial conversion of natural land.

Noise

Noise from individual projects in the region does not have a substantial potential to combine in a manner that would result in adverse cumulative noise conditions. As described above, the RCAAP would not result in a cumulatively considerable contribution to impacts on noise.

Population and Housing

Future discretionary projects required to implement the RCAAP would be consistent with existing land use and zoning designations, and applicable design guidelines. In addition, the RCAAP would not contribute to population growth. Therefore, the RCAAP would not substantially contribute to the cumulative condition for population and housing.

Public Services

Public services are generally provided by local governments and/or special districts for areas within their jurisdiction and are not provided on a regional basis. Fire and police protection services are provided by local governments or fire protection districts for areas within their jurisdiction, although mutual aid agreements between agencies do help spread resources when needed. Public schools are provided by school districts to areas within their jurisdictions. While districts may have cross-jurisdictional boundaries, school services are still provided at the local, rather than regional, level. Regional effects to public services are not anticipated to result from regional growth. Future discretionary projects required to implement the RCAAP would be consistent with existing land use and zoning designations, and applicable design guidelines. In addition, the RCAAP would not contribute to population growth. Therefore, the RCAAP would not substantially contribute to the cumulative condition for public services.

Recreation

Several agencies provide park and recreation services in the region, including counties, cities, and special districts. Each of these areas has their own parkland ratios and standards and is responsible for providing parkland to meet the local demand. An increase in regional population may increase demand for parks and recreation facilities and services; however, these local jurisdictions have authority over land use, set and implement level of service standards, and determine the siting and timing of public service projects. Regional effects on parks are not anticipated to result from regional growth. Future discretionary projects required to implement the RCAAP would be consistent with existing land use and zoning designations, and applicable design guidelines. In addition, the RCAAP would not contribute to population growth. Therefore, the RCAAP would not substantially contribute to the cumulative condition for recreation.

Transportation

Consistency with local regulations would address the potential for projects in the region to generate hazardous traffic conditions or interfere with emergency response. Regional growth and development can have effects on regional VMT because it is a dynamic model based on a number of interrelated and regional factors. The RCAAP would not contribute to cumulative VMT impacts and has been designed to aid in regional VMT reduction. Like other projects in

the region, compliance with local regulations would ensure that development of RCAAP projects would not generate traffic hazards or impair implementation of emergency response plans. Therefore, the RCAAP would not substantially contribute to the cumulative condition for transportation.

Tribal Cultural Resources

There is a potential that regional growth and development could contribute to the historical loss of tribal cultural resources. The RCAAP would not make a substantial contribution to the cumulative condition for tribal cultural resources because it would not result in a substantial conversion of natural land.

Utilities and Services

There are a variety of utilities and services providers in the region. Future development in the region could increase future demand on the providers of utilities and service systems and the respective decision-making jurisdictions would be required to evaluate the need for any increased utilities and service systems or facilities expansions that may be needed. Regional growth and development may result in demand for new or expanded utilities, the environmental effects of which could be cumulatively significant. As described above, the RCAAP is anticipated to reduce per capita energy demand and would not result in a substantial contribution to cumulative demand for utilities and services.

Wildfire

Regional growth and development may exacerbate wildfire hazards and expose new people and structures to wildfire risk. As described above, the RCAAP would have a beneficial effect on the region's cumulative susceptibility to wildfire.

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

Less than significant impact. The RCAAP has been developed to address climate change by reducing emissions of the GHGs that contribute to global warming and by developing adaptive responses to the environmental hazards exacerbated by climate change. As described throughout this checklist, project-level changes are anticipated. For example, views could be modified, and construction noise could occur. However, these effects would not be substantial. At a program level, the RCAAP would improve the health and well-being of the residents in the Napa County Jurisdictions.

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2 Project Description

No references in this chapter.

3 Environmental Checklist

No references in this chapter.

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Appendix A

Potential Effects of Greenhouse Gas
Reduction and Adaptation Actions

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-1-A	Secure funding to support the implementation of energy efficiency and electrification actions.	► All	Securing Funding	2026	2027	none	none
BE-1-B	Create a pre-electrification program that provides affordable financing, rebates, or other incentives for electric panel upgrades.	► All	New Program	2026	2028	none	none
BE-1-C	Work with the CECSP to develop reach codes and associated cost effectiveness studies.	► All	Reach Code / Ordinance	2026	2045	none	none
BE-1-D	Determine reach code compliance triggers for retrofits.	► All	Reach Code / Ordinance	2026	2027	none	none
BE-1-E	Conduct stakeholder outreach with building industry members, contractors, residents, business, and others to present reach code options and solicit feedback.	► All	Education / Outreach	2026	2027	none	none
BE-1-F	Adopt ordinance(s) to implement and enforce new reach code(s) for existing buildings. Pursuant to new statewide residential building code update limitations in Assembly Bill (AB) 130 (signed into law on June 30, 2025), a residential reach code may not be adopted and enforced until in 2031; however, nonresidential reach code adoption and enforcement may proceed starting in 2026.	► All	Reach Code / Ordinance	2026	2031	none	none
BE-1-G	Conduct training for permitting staff to understand reach code requirements for existing buildings and how compliance will be demonstrated.	► All	Education / Outreach	2026	2027	none	none
BE-1-H	Develop a tracking system for measures related to energy efficiency upgrades, decarbonization, or pre-wiring completed by applicants pursuant to reach code requirements.	► All	New Program	2026	2028	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-1-I	Review existing permitting processes for building owners seeking to replace fossil fuel-powered equipment with electric equipment and modify as needed.	► All	Municipal Operations	2026	2027	none	none
BE-1-J	Waive or reduce permitting fees for building retrofit projects that convert mixed-fuel buildings to all-electric and cap natural gas lines	► All	Municipal Operations	2026	2045	none	none
BE-1-K	Develop a community outreach program to enable and encourage energy conservation and gas-to-electric conversions in residential and commercial buildings for space and water heating.	► All	Education / Outreach	2026	2028	none	none
BE-1-L	Develop a revolving loan fund to provide low-interest loans to cover time-of-replacement/emergency replacement of natural gas water heaters and/or HVAC units with electric options.	► All	Securing Funding	2026	2045	none	none
BE-1-M	Work with MCE to improve participation in various programs.	► All	Partnership	2026	2028	none	none
BE-1-N	Partner with regional energy agencies, workforce development organizations, and community colleges to support contractor training for electrification, HVAC, and building energy efficiency projects.	► All	Partnership	TBD	Ongoing	none	none
BE-1-O	Secure long-term funding to continue offering energy efficiency, electrification, and other net-zero carbon rebates.	► All	Securing Funding	TBD	Ongoing	none	none
BE-1-P	Provide a sliding scale of rebates that offers more rebates in the short-term and less in the long-term.	► All	New Program	TBD	Ongoing	none	none
BE-1-Q	Review existing building reach codes at the release of each triennial building code cycle to ensure they do not conflict with updates.	► All	Reach Code	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-1-R	Continue to streamline permitting and electrification program outreach.	► All	Municipal Operations	TBD	Ongoing	none	none
BE-1-S	Research opportunities to work with local financial institutions to offer zero or low percent financing for a limited time or on a sliding scale based on income.	► All	Securing Funding	TBD	Ongoing	none	none
BE-1-T	Collaborate with regional and State agencies to expand long-term workforce development programs and permitting support for electrification and energy efficiency upgrades.	► All	Partnership	TBD	Ongoing	none	none
BE-2-A	Require that at least 90 percent of municipal buildings undergo energy audits that meet industry-accepted reporting standards.	► All	Reach Code / Ordinance	TBD	Ongoing	none	none
BE-2-B	Work with partners to develop a regional countywide energy audit program that provides free or subsidized energy audits of existing buildings.	► All	New Program	TBD	Ongoing	none	none
BE-2-C	Partner with local workforce agencies to train and certify energy auditors and retrofit contractors.	► All	Partnership	TBD	Ongoing	none	none
BE-2-D	Require energy audits for municipal buildings every five years.	► All	Reach Code / Ordinance	TBD	Ongoing	none	none
BE-2-E	Secure long-term funding to continue offering energy audits until all existing buildings built before 2019 have been retrofitted.	► All	Securing Funding	TBD	Ongoing	none	none
BE-3-A	Collaborate with utilities and other partners to offer rebates and incentives for renewable energy and storage.	► All	Partnership	2028	2030	Indirect ground disturbance and utility installation	All
BE-3-B	Prioritize outreach to non-residential and residential property owners based on their electricity use by jurisdiction.	► All	Education / Outreach	2028	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-3-C	Continue to seek funding to sustain local programs in tandem with retrofit efforts under BE-1.	► All	Securing Funding	TBD	Ongoing	none	none
BE-4-A	Support sustainability certification of wineries to reach a target of 75 percent of wineries certified by 2030.	► All	Partnership	2026	2030	none	none
BE-4-B	Require new wineries, winery retrofits, and additions greater than 10 percent of existing square footage to attain sustainability certification.	► All	Ordinance	2026	2045	none	none
BE-4-C	Work with sustainability certification entities to quantify GHG reductions.	► All	Partnership	2026	2028	none	none
BE-4-D	Work with sustainability certification programs to determine funding needs for increased certification targets.	► All	Partnership	2026	2028	none	none
BE-4-E	Certify all new wineries by 2030. Target 90 percent of wineries in the County to become certified in sustainability by 2045.	► All	Partnership	2030	2045	none	none
BE-5-A	Adopt a regionally consistent energy efficiency and renewable energy building reach code for new construction of residential and non-residential buildings, including major additions. Pursuant to new statewide residential building code update limitations in AB 130 (signed into law on June 30, 2025), a residential reach code may not be adopted and enforced until 2031; however, nonresidential reach code adoption and enforcement may proceed starting in 2026.	► All	Ordinance	2026	2031	none	none
BE-5-B	Track progress of state codes and bills related to climate and energy to inform the region's reach code.	► All	Research	2027	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-5-C	Develop reach codes requiring low carbon concrete and materials with low embodied carbon. Pursuant to new statewide residential building code update limitations in AB 130 (signed into law on June 30, 2025), a residential reach code may not be adopted and enforced until 2031; however, nonresidential reach code adoption and enforcement may proceed starting in 2026.	► All	Ordinance	2027	2028	none	none
BE-5-D	Regularly update the reach code in accordance with the State's building energy code cycles and legislation.	► All	Monitoring and Updating	TBD	Ongoing	none	none
BE-6-A	Increase education, awareness, and access to available rebates and incentives for energy efficiency.	► All	Education / Outreach	2029	Ongoing	none	none
BE-6-B	Develop a dedicated website for electrification and renewable energy resources for residents and businesses.	► All	Education / Outreach	2029	2031	none	none
BE-6-C	Partner with contractors to promote the website at time-of-replacement or remodels.	► All	Partnership	2029	2031	none	none
BE-6-D	Use partnerships to promote appliance upgrades to energy efficient technologies and products.	► All	Partnership	2029	Ongoing	none	none
BE-6-E	Promote alternatives to natural gas in all commercial sectors.	► All	Education / Outreach	2029	Ongoing	none	none
BE-6-F	Promote use of electric cooking appliances in commercial kitchens.	► All	Education / Outreach	2029	Ongoing	none	none
BE-6-G	Create a pilot of a series of exhibitions for local restaurants to demonstrate the effectiveness and benefits of induction cooktops.	► All	New Program	2029	2031	none	none
BE-6-H	Evaluate the effectiveness of short-term outreach and adjust as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
BE-6-I	Evaluate countywide transition away from natural gas use and adjust outreach, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-1-A	Support NVTa in developing a set of “transit first” policies for all jurisdictions.	► All	Partnership	2030	2032	none	none
TR-1-B	Support expanded analysis of VMT for passenger and commercial vehicle trips.	► All	Partnership	2030	2032	none	none
TR-1-C	Work with NVTa to implement VMT reduction strategies as part of the development review process.	► All	Partnership	TBD	Ongoing	none	none
TR-1-D	Work with NVTa to develop travel behavior studies regularly.	► All	Partnership	TBD	Ongoing	none	none
TR-2-A	Identify funding to conduct a study on winery wastewater treatment demands.	► All	Securing Funding	2029	2030	none	none
TR-2-B	Partner with Napa Green, California Sustainable Winegrowing Alliance, SIP Certified, or other comparable programs to help gather data.	► All	Partnership	2029	2030	none	none
TR-2-C	Coordinate across jurisdictions to consider implementation options and/or seek funding for the solution(s) recommended by the study.	► All	Evaluate Options / Secure Funding	TBD	Ongoing	none	none
TR-2-D	Continue to monitor winery wastewater treatment trends to identify opportunities to reduce hauling VMT.	► All	Research	TBD	Ongoing	none	none
TR-3-A	Work with partners and local EV charging programs to identify areas and opportunities to install and maintain chargers for medium- and heavy-duty fleets.	► All	Partnership	2026	2028	none	none
TR-3-B	Analyze existing private parking lots and educate/incentivize owners to take advantage of funding opportunities such that at least 10 percent of their spaces have EVSE and at least an additional 10 percent are EV-ready.	► All	Research	2026	2027	Indirect ground disturbance and utility installation	All

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
TR-3-C	Identify opportunities to expand public electric vehicle charging infrastructure.	► All	Evaluate Options / Secure Funding	TBD	Ongoing	none	none
TR-3-D	Review requirements every 5 years and update the requirements to increase the percentage of parking lots with EV chargers.	► All	Research	TBD	Ongoing	none	none
TR-4-A	Work with partners to evaluate the need for stations based on the State's forecasted growth of hydrogen vehicles.	► All	New Program	2031	2035	none	none
TR-4-B	Identify locations where hydrogen fueling stations could be built.	► All	Research	2031	2032	none	none
TR-4-C	Install at least one hydrogen fueling station in the county by 2030.	► All	Partnership	2031	2035	Construction effects, including equipment use and ground disturbance. Potential effects to aesthetics, noise, geologic hazards, and other resources due to operation of new structure	All
TR-4-D	Adopt an ordinance that expedites scaled permitting of fuel stations that offer renewable fuels.	► All	Ordinance	2029	2030	none	none
TR-4-E	Require expedited EV charging permitting in all jurisdictions.	► All	Ordinance	2026	2027	none	none
TR-4-F	Require 50 percent of parking spaces in new development to be EV-capable by 2030.	► All	Ordinance	2026	2030	none	none
TR-4-G	Adopt an EV charging station reach code that establishes minimum EV charging standards for all new residential and non-residential development.	► All	Ordinance	2026	2027	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
TR-4-H	Provide incentives for new hydrogen fueling installations in the identified locations noted in the short-term actions.	► All	Incentives	TBD	Ongoing	none	none
TR-4-I	Evaluate the feasibility of the ordinance at least once every five years and update, as necessary.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-4-J	Review the requirements at least once every five years and make requirements more stringent, as feasible, in accordance with CALGreen voluntary recommendations.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-5-A	Adopt a policy to support the requirements of Advanced Clean Fleet regulations as they relate to municipal fleets.	► All	Ordinance	2028	2032	none	none
TR-5-B	Work with municipal fleet operators across the region to identify and mitigate any barriers that hinder ZEV adoption.	► All	Municipal Operations	2028	2029	none	none
TR-5-C	Work with partners to pursue funding for EV deployment projects in municipalities.	► All	Securing Funding	2027	2045	none	none
TR-5-D	Identify locations where infrastructure may be needed and develop strategies to meet the existing and projected needs of public medium- and heavy-duty ZEV fleet operations.	► All	Evaluate Options	TBD	Ongoing	none	none
TR-5-E	Review and address any barriers to achieving the 2030 targets and adjust the targets, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-6-A	Conduct outreach to local commercial fleet operators to provide information on existing incentives, support the retirement of older vehicles, and establish requirements to replace fossil fuel-powered vehicles or engines with ZEV or carbon neutral fuel alternatives.	► All	Education / Outreach	2027	2031	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
TR-6-B	Educate and provide resources to commercial fleet operators, vehicle manufacturers, or leasing companies regarding available funding for EV rebates from all available sources for both new and used EVs.	► All	Securing Funding	2028	2030	none	none
TR-6-C	Review and address any barriers to achieving the short-term actions and adjust, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-7-A	Partner with Bay Area Air District and others to pursue EV funding/rebates for residents.	► All	Securing Funding	2028	2030	none	none
TR-7-B	Evaluate income limits and consider providing additional incentives for residents	► All	Incentives	2028	2029	none	none
TR-7-C	Increase awareness of and access to available rebates and incentives.	► All	Incentives	TBD	Ongoing	none	none
TR-7-D	Continue short-term actions, and evaluate and adjust incentive programs as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-8-A	Adopt an ordinance in all jurisdictions that permanently bans or phases out the development of new and existing fossil fuel pumps.	► All	Ordinance	2034	2035	none	none
TR-8-B	Evaluate the feasibility of the ordinance at least once every five years and update, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-9-A	Incentivize the sale of renewable diesel countywide, targeting a minimum of five stations offering R99 or R100 by 2030.	► All	Incentives	2028	2032	none	none
TR-10-A	Support NVTAs adoption and implementation of the forthcoming NVTAs Countywide Active Transportation Plan.	► All	Partnership	2025	2025	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
TR-10-B	Support NVTAs efforts to secure funding for and consider opportunities to implement projects, programs, and policies of the Countywide Vision Zero Plan, Local Roadway Safety Plans, and other documents that address multimodal safety improvements.	► All	Securing Funding	2028	2029	none	none
TR-10-C	Support NVTAs efforts to report biennial jurisdiction-level progress toward targets for active transportation infrastructure and policies to advance mode shift.	► All	Partnership	2028	Ongoing	none	none
TR-10-D	Update municipal codes to incorporate comprehensive bicycle, e-bike, and micromobility parking and charging standards.	► All	Ordinance	2027	Ongoing	none	none
TR-10-E	Support NVTAs efforts to evaluate opportunities and deploy secure bicycle parking in downtowns and key retail and employment destinations.	► All	Research	2027	2028	none	none
TR-10-F	Establish (and/or update) and implement policies addressing active transportation facility maintenance and access.	► All	Ordinance	2027	2028	Minor effects of facility maintenance	none
TR-10-G	Support and coordinate with NVTAs efforts to develop the Active Transportation Plan, ensure consistency with the Active Transportation Plan in local planning efforts, and avoid unnecessary or duplicative work.	► All	Partnership	2025	2025	none	none
TR-10-H	Encourage cross-agency collaboration between State and regional entities, NVTAs, and local jurisdictions in the county to identify, prioritize, and secure funding for active transportation projects consistent with local and regional plans	► All	Partnership	Ongoing	Ongoing	none	none
TR-10-I	Continue updating the plans and evaluating the effectiveness of previous strategies and measures in reducing VMT and increasing the shift to active transportation modes.	► All	Monitoring and Updating	TBD	Ongoing	none	none

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TR-10-J	Evaluate progress and effectiveness of requirements and modify as necessary to meet policy goals and priorities.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-11-A	Support local and regional partners' efforts to expand and secure additional funding to provide active transportation mobility incentives and rebate programs.	► All	Securing Funding	2028	2029	none	none
TR-11-B	Support local and regional partners' efforts to expand and secure additional funding to expand current TDM programs.	► All	Securing Funding	2028	Ongoing	none	none
TR-11-C	Develop and adopt local TDM ordinances in all jurisdictions by 2028.	► All	Ordinance	2028	2030	none	none
TR-11-D	Support feasibility analysis for MAAS, particularly in urban areas.	► American Canyon ► Napa	Partnership	2028	2030	none	none
TR-11-E	Evaluate the progress and effectiveness of the ordinance and TDM program and modify, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
TR-12-A	Support NVTa in developing a visitor TDM program that targets recreational trips.	► All	Partnership	2027	2028	none	none
TR-13-A	Consider the feasibility of reducing minimum parking standards or establishing maximum parking standards, along with complementary strategies. If feasible and appropriate, develop and adopt ordinances amending parking standards in local zoning codes.	► All	Ordinance	2033	2035	none	none
TR-13-B	Consider modifying zoning codes to unbundle parking from rent for all new multi-family residential developments with 16 or more units located within ¼ mile of arterials or collectors with fixed route service.	► All	Ordinance	TBD	Ongoing	none	none

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TR-13-C	Implement parking supply-related measures.	► All	Ordinance	TBD	Ongoing	none	none
TR-14-A	Market existing transit/transportation options to support mode shift.	► All	Education / Outreach	2028	Ongoing	none	none
TR-14-B	Consider bike delivery pilot programs to demonstrate the effectiveness of zero-emission local deliveries.	► All	New Program	2028	2030	none	none
TR-14-C	Continue supporting local and regional partners to pursue Safe Routes to School funding and support bicycle and pedestrian safety education programs for K-12 students.	► All	Education / Outreach	TBD	Ongoing	none	none
TR-14-D	Support local and regional organizations to provide free bicycle safety education and skills training for youth and adults.	► All	Education / Outreach	TBD	Ongoing	none	none
TR-14-E	Continue to expand awareness, education, and community action.	► All	Education / Outreach	TBD	Ongoing	none	none
TR-14-F	Explore opportunities to support ongoing Safe Routes to Schools Funding and work toward establishing a countywide bicycle and pedestrian safety education program.	► All	Education / Outreach	TBD	Ongoing	none	none
OF-1-A	Promote incentive programs to encourage converting or replacing fossil fuel-powered gardening equipment with electric alternatives.	► All	Incentives	2029	Ongoing	none	none
OF-1-B	Implement a countywide ban on fossil fuel-powered landscape equipment under 25 horsepower by 2030.	► All	Ordinance	2029	2033	none	none
OF-1-C	Develop a “lawn and garden equipment trade-in program” to provide vouchers or rebates for purchasing electric landscape equipment to residents and businesses.	► All	New Program	2029	2031	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
OF-1-D	Explore opportunities to provide more funding through extending Bay Area Air District incentives or developing new incentives for electric off-road equipment.	► All	Securing Funding	2029	2030	none	none
OF-1-E	Continue short-term actions until all gardening equipment has been electrified (or uses zero-carbon alternatives).	► All	Monitoring and Updating	TBD	Ongoing	none	none
OF-1-F	Evaluate program progress and track implementation with CARB's OFFROAD model.	► All	Monitoring and Updating	TBD	Ongoing	none	none
OF-2-A	Electrify 33 percent of existing commercial loading docks to include electric charging ports for trucks and TRUs by 2030.	► All	Ordinance	2029	Ongoing	Minor construction activities	none
OF-2-B	Coordinate with Napa Green or other similar programs to include electrification of loading docks as a criterion for certification.	► All	Partnership	2029	2031	none	none
OF-2-C	Electrify 100 percent of existing commercial loading docks to include electric charging ports for trucks and TRUs.	► All	Ordinance	TBD	Ongoing	Minor construction activities	none
OF-2-D	Evaluate progress and effectiveness of requirements and modify as necessary to meet policy goals and priorities.	► All	Partnership	TBD	Ongoing	none	none
OF-3-A	Provide information about available incentives for electric construction and portable equipment to contractors at the building permit counter.	► All	Education / Outreach	2030	Ongoing	none	none
OF-4-A	Consider incorporating the use of electric construction and portable equipment in evaluation processes for capital improvement projects.	► All	Capital Improvement Program	2029	Ongoing	none	none
OF-4-B	Evaluate progress and effectiveness of requirements and modify as necessary to meet policy goals and priorities.	► All	Monitoring and Updating	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
SW-1-A	Expand the Residential Backyard Composting Program for single-family residences.	► All	Modified Program	2025	Ongoing	none	none
SW-1-B	Adopt and implement the draft Reusable Food Ware and Waste Reduction Ordinance.	► All	Ordinance	2025	2026	none	none
SW-1-C	Pursuant to SB 1383, implement an Edible Food Recovery Program.	► All	Partnership	2025	Ongoing	none	none
SW-1-D	Implement a Mandatory Commercial Food Waste Diversion Program.	► All	Ordinance	2025	2026	none	none
SW-1-E	Conduct random annual waste bin audits with local waste collection operators to check compliance.	► All	New Program	2025	2026	none	none
SW-1-F	Continue to implement the program and support backyard composting.	► All	Modified Program	TBD	Ongoing	none	none
SW-1-G	Monitor progress of ordinance implementation and enforcement.	► All	Monitoring and Updating	TBD	Ongoing	none	none
SW-1-H	Evaluate progress and effectiveness of requirements and modify, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
SW-2-A	Develop a unified Construction Waste Management Plan to require and achieve recycling or reuse of at least 70 percent of C&D waste from every project by 2035.	► All	Research	2033	2042	none	none
SW-2-B	Review the plan every 10 years to incorporate updated construction waste management practices.	► All	Monitoring and Updating	TBD	Ongoing	none	none
SW-3-A	Require jurisdictions to inform residents and businesses about available local programs and information of type of waste accepted as recyclable, solid waste, or compostable.	► All	Education / Outreach	2026	2027	none	none
SW-3-B	Update the Napa Countywide Waste Reduction and Recycling Curriculum.	► All	Education / Outreach	2030	2031	none	none

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SW-3-C	Partner with school districts to ensure that schools use the Napa Countywide Waste Reduction and Recycling Curriculum.	► All	Partnership	2030	2032	none	none
SW-3-D	Evaluate progress and effectiveness of requirements and modify, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
SW-3-E	Review the Napa Countywide Waste Reduction and Recycling Curriculum for its applicability to the whole community.	► All	Monitoring and Updating	TBD	Ongoing	none	none
SW-4-A	Work with American Canyon Landfill and Clover Flat Landfill to confirm current landfill gas collection efficiency.	► Unincorporated County	Partnership	2026	2027	none	none
SW-4-B	Conduct a feasibility study to determine solutions to restart CH ₄ capture and either flare, collect, or generate electricity from CH ₄ to reduce intensity of emitted GHGs.	► Unincorporated County	New Program	2026	2045	none	none
SW-4-C	Establish requirements that both landfills provide evidence to substantiate their collection efficiency improvements are being achieved.	► Unincorporated County	Ordinance	2026	2028	none	none
SW-4-D	Require that both landfills provide evidence to substantiate their collection efficiency in a report by the end of 2046.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
SW-5-A	Partner with landfills outside Napa County that receive waste from the county to increase CH ₄ capture.	► All	Partnership	2033	2045	none	none
SW-6-A	Support waste management providers and jurisdictions in installing waste-to-energy systems.	► Unincorporated County	Partnership	2034	2043	Upgrades at existing facilities could result in effects related to construction activities	3.3-1, 3.3-2, 3.5-1
SW-6-B	Review waste-to-energy systems every 5 years for feasibility.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
SW-6-C	Coordinate with other local agencies and jurisdictions to develop and implement decentralized waste-to-energy systems.	► Unincorporated County	Partnership	TBD	Ongoing	none	none
WW-1-A	Require public and private wastewater treatment plants to conduct a full evaluation and report on proposed solutions to reduce CH ₄ emissions not captured by existing waste-to-energy systems.	► All	Ordinance	2032	Ongoing	none	none
WW-1-B	Evaluate progress and effectiveness of requirements and modify, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-2-A	Encourage wastewater agencies to conduct a feasibility study to expand the supply of recycled water and infrastructure.	► All	Partnership	2030	2032	none	none
WW-2-B	Plan the expansion of recycled water pipelines to meet demand.	► All	Plan	TBD	Ongoing	none	none
WW-2-C	Reevaluate the feasibility of Purified Water based on updated cost estimates.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-3-A	Target average indoor residential water use of 47 gallons per capita per day or less for 2025-2029.	► All	Incentives	2029	Ongoing	none	none
WW-3-B	Offer a selection of rebate incentives for residential customers.	► All	Incentives	2029	Ongoing	none	none
WW-3-C	Consider increasing "Cash for Grass" rebate amounts to accelerate the conversion of residential lawns to water-efficient landscaping.	► All	Incentive	2029	2033	none	none
WW-3-D	Consider special direct installation programs to provide water efficiency upgrades for underserved community members.	► All	New Program	2029	2033	none	none
WW-3-E	Implement advanced metering infrastructure or offer smart home water monitor rebates.	► All	New Program	2029	2033	none	none
WW-3-F	Target average indoor residential water use of 42 gallons per capita per day or less for 2030 and beyond.	► All	Monitoring and Updating	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
WW-3-G	Reduce or eliminate rebates in the long-term based on available funding, changes in cost-effectiveness, or market saturation; and add new rebates as innovative, proven water-saving products arise.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-3-H	Continue to seek grant funding for residential water conservation rebates.	► All	Secure Funding	TBD	Ongoing	none	none
WW-4-A	Offer rebate incentives for non-residential customers.	► All	Incentives	2034	Ongoing	none	none
WW-4-B	Increase "Cash for Grass" rebate amounts to accelerate the conversion of non-functional, non-residential turf areas to water efficient landscaping.	► All	Incentive	2034	2035	none	none
WW-4-C	Identify priority municipal landscaping areas for replacement with native, drought-tolerant alternatives.	► All	Research	2034	2035	none	none
WW-4-D	Consider certification of at least one public works staff member from each jurisdiction to implement sustainable and climate-smart landscapes.	► All	New Program	2034	2035	none	none
WW-4-E	Adopt regionally consistent ordinances to implement and enforce AB 1572.	► All	Ordinance	2034	2037	none	none
WW-4-F	Study the feasibility of applying tiered water rates to non-residential customers for agencies that currently apply uniform volumetric rates for non-residential water consumption.	► All	Research	2034	2035	none	none
WW-4-G	Rank non-residential customers by annual water use and require top users to undergo periodic water audits to identify areas for improvement.	► All	New Program	2033	2034	none	none
WW-4-H	Enforce WELO for covered projects, ensuring the installation of climate-appropriate plants and efficient irrigation systems.	► All	Ordinance	2034	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
WW-4-I	Adopt regionally consistent local amendments that include more stringent water efficiency and conservation measures. Pursuant to new statewide residential building code update limitations in AB 130 (signed into law on June 30, 2025), a residential reach code may not be adopted and enforced until 2031; however, nonresidential reach code adoption and enforcement may proceed starting in 2026.	► All	Ordinance	2034	Ongoing	none	none
WW-4-J	Encourage growers to take advantage of Napa RCD water distribution uniformity testing.	► All	Education / Outreach	2034	Ongoing	none	none
WW-4-K	Reduce or eliminate rebates in the long term based on available funding, changes in cost-effectiveness, or market saturation.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-4-L	Add new customized rebates as innovative, proven water-saving products arise.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-4-M	Continue to seek funding for non-residential water conservation rebates.	► All	Secure Funding	TBD	Ongoing	none	none
WW-4-N	Maintain sustainable landscape training regimen for municipal staff.	► All	Municipal Operations	TBD	Ongoing	none	none
WW-4-O	Continue local enforcement of AB 1572 non-functional turf irrigation ban and encourage affected non-residential entities to certify their compliance with the State Water Board every three years.	► All	Local Enforcement	TBD	Ongoing	none	none
WW-4-P	Adopt tiered water rates for non-residential customers, if feasible.	► All	Ordinance	TBD	Ongoing	none	none
WW-4-Q	Offer free water audits to all non-residential customers.	► All	New Program	TBD	Ongoing	none	none
WW-4-R	Implement a formal water conservation program for the top 20 percent of non-residential water users.	► All	New Program	TBD	Ongoing	none	none

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WW-4-S	Work with sustainability programs to include the highest level of water efficiency measures as technology evolves.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-4-T	Consider establishing a Water Building Performance Standard.	► All	Ordinance	TBD	Ongoing	none	none
WW-5-A	Establish and enforce local regulations that prohibit certain wasteful uses of potable water permanently.	► All	Ordinance	2030	2031	none	none
WW-5-B	Adopt at minimum a core set of permanent water waste prohibitions with an aim to reduce the use of potable water for outdoor activities.	► All	Ordinance	2030	2031	none	none
WW-5-C	Expand core set of permanent water waste prohibitions, as needed.	► All	Ordinance	TBD	Ongoing	none	none
WW-6-A	Ensure Napa and American Canyon's compliance with SB 555 Maximum Real Loss Standards of 26.8 and 16.4 gallons per service connection per day, respectively, by January 1, 2028.	► American Canyon ► Napa	Ordinance	2031	2033	none	none
WW-6-B	Use a prioritization approach to asset management.	► All	Modified Program	2031	2032	none	none
WW-6-C	Evaluate progress and effectiveness of requirements and modify, as needed.	► All	Monitoring and Updating	TBD	Ongoing	none	none
WW-7-A	Increase both awareness of and access to available rebates and techniques for water use efficiency by taking a regional approach to public outreach.	► All	Education / Outreach	2027	Ongoing	none	none
WW-7-B	Develop a regional water conservation web page that links all residents and business owners to their water provider's conservation web page and rebate offerings.	► All	Education / Outreach	2027	2028	none	none

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WW-7-C	Partner with Napa RCD and UCCE Master Gardeners to expand free Water-Wise Landscaping Workshops countywide via webinar offerings and/or additional in-person sessions up valley and in American Canyon.	► All	Partnership	2027	2029	none	none
WW-7-D	Partner with Napa RCD and UCCE Master Gardeners to expand the Climate-Friendly Garden Tour to multiple days and jurisdictions.	► All	Partnership	2027	2029	none	none
WW-7-E	Train and certify 100 local QWEL professionals by 2030.	► All	New Program	2027	2031	none	none
WW-7-F	Train 60 local K-12 teachers in Project WET by 2030.	► All	New Program	2027	2031	none	none
WW-7-G	Partner with ZunZun program to expand Musical Water Education Assemblies.	► All	Partnership	2027	2029	none	none
WW-7-H	Leverage an annual video contest winner as a countywide public service announcement for water conservation.	► All	Education / Outreach	2027	Ongoing	none	none
WW-7-I	Evaluate the effectiveness of short-term actions, and adjust and continue as warranted.	► All	Monitoring and Updating	TBD	Ongoing	none	none
AG-1-A	Explore opportunities to provide more funding or develop a new incentive program for buying electric agricultural equipment.	► Unincorporated County	Securing Funding	2027	2030	none	none
AG-1-B	Encourage the retirement of fossil fuel-powered equipment and the use of fossil fuels.	► Unincorporated County	Education / Outreach	2027	Ongoing	none	none
AG-1-C	Include a list of available incentives to support purchase of electric agricultural equipment on various websites.	► Unincorporated County	Education / Outreach	2027	2028	none	none
AG-1-D	Develop an irrigation pump replacement program.	► Unincorporated County	New Program	2027	2029	Minor construction activities	none

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AG-1-E	Provide vouchers or rebates for the installation of solar electric irrigation pumps or the purchase of carbon-neutral fuels.	► Unincorporated County	Incentives	2027	2028	none	none
AG-1-F	Continue the funding program to achieve 100 percent transition of eligible equipment to electric or solar.	► Unincorporated County	Ongoing Program Implementation	TBD	Ongoing	none	none
AG-1-G	Continue the replacement program to achieve 100 percent of irrigation pumps transitioned to electric or renewable fuels.	► Unincorporated County	Ongoing Program Implementation	TBD	Ongoing	Minor construction activities	none
AG-2-A	Support the agricultural community in converting to alternatively fueled offroad equipment or renewable diesel.	► Unincorporated County	Partnership	2026	Ongoing	none	none
AG-2-B	Encourage maintenance and operations of field equipment.	► Unincorporated County	Education / Outreach	2026	Ongoing	none	none
AG-2-C	Work with Napa Green to provide education on and incentives for sustainable livestock grazing to reduce equipment usage.	► Unincorporated County	Education / Outreach	TBD	Ongoing	none	none
AG-2-D	Evaluate the effectiveness of short-term actions and adjusted, as needed.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
AG-3-A	Establish partnerships with entities that assist growers in implementing carbon farming practices.	► Unincorporated County	Partnership	2026	2027	none	none
AG-3-B	Work with community organizations to develop and distribute educational resources on increasing carbon sequestration.	► Unincorporated County	Education / Outreach	2026	Ongoing	none	none
AG-3-C	Support local partners as they deliver or develop carbon farming plans.	► Unincorporated County	Partnership	2026	2027	none	none
AG-3-D	Support local supply chain solutions that support carbon farming efforts.	► Unincorporated County	Partnership	2026	2027	none	none

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AG-3-E	Develop and offer multilingual training and educational materials for farmworkers who support the implementation of carbon farming practices.	► Unincorporated County	Education / Outreach	2026	Ongoing	none	none
AG-3-F	On the RCAAP website, develop a webpage dedicated to carbon farming and list the farmers, wineries, ranchers, and land managers who are currently practicing carbon farming.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
AG-3-G	Evaluate effectiveness of short-term actions, and adjust and continue actions as warranted	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
AG-4-A	Update the annual crop report to include carbon farming practices.	► Unincorporated County	Municipal Operations	2027	2028	none	none
AG-4-B	Work with Napa Green to provide education on and incentives for sustainable livestock grazing.	► Unincorporated County	Education / Outreach	TBD	Ongoing	none	none
AG-4-C	Review the crop reporting format after the Carbon Farming Program study is complete for any gaps.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
AG-5-A	Create, adopt, and implement urban forest management plans in all jurisdictions by 2030.	► American Canyon ► Calistoga ► Napa ► St. Helena ► Yountville	Research	2030	2033	none	none
AG-5-B	Target a 20 percent expansion of the urban forest by 2035 from 2019 levels.	► American Canyon ► Calistoga ► Napa ► St. Helena ► Yountville	Monitoring and Updating	2030	2039	Minor construction activities and water use for plant establishment	none

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AG-5-C	Consider having consistent replacement requirements for tree removals across all jurisdictions.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Calistoga ▶ Napa ▶ St. Helena ▶ Yountville 	Ordinance	2030	2032	none	none
AG-5-D	Encourage Napa Valley schools to increase tree planting for shade and carbon sequestration.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Calistoga ▶ Napa ▶ St. Helena ▶ Yountville 	Education / Outreach	TBD	Ongoing	none	none
AG-5-E	Evaluate the effectiveness of short-term actions and adjust, as needed.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Calistoga ▶ Napa ▶ St. Helena ▶ Yountville 	Monitoring and Updating	TBD	Ongoing	none	none
AG-6-A	Develop a dedicated countywide watershed management and habitat restoration program that coordinates with relevant stakeholders and departments to accelerate habitat restoration.	<ul style="list-style-type: none"> ▶ Unincorporated County 	New Program	2025	2027	Temporary construction effects in sensitive habitat	3.4-1 through 3.1-5
AG-6-B	Evaluate the effectiveness of short-term actions and adjust, as needed..	<ul style="list-style-type: none"> ▶ Unincorporated County 	Monitoring and Updating	TBD	Ongoing	none	none
AG-7-A	Encourage and incentivize all vineyards to apply for and achieve sustainable vineyard certification.	<ul style="list-style-type: none"> ▶ All 	Incentives	2025	Ongoing	none	none
AG-7-B	Support sustainability certification of vineyards to reach a target of 75 percent of vineyards certified by 2030.	<ul style="list-style-type: none"> ▶ All 	Partnership	2026	2030	none	none

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AG-7-C	Collaborate and incentivize sustainability certification programs to expand their reach and quantify the metrics they track for all participants.	► All	Incentives	2026	2028	none	none
AG-7-D	Work with sustainability certification program administrators to determine additional funding needs for increased certification targets.	► All	Partnership	2026	2027	none	none
AG-7-E	Review the short-term actions every five years to include more community groups in target audience list.	► All	Monitoring and Updating	TBD	Ongoing	none	none
AG-7-F	Certify all new vineyards by 2030. Target 90 percent of vineyards, countywide, to become certified in sustainability by 2045.	► All	Partnership	TBD	Ongoing	none	none
AG-8-A	Encourage livestock owners to include feed additives that reduce CH ₄ emissions from cattle.	► Unincorporated County	Education / Outreach	2029	Ongoing	none	none
AG-8-B	Adopt ordinances that discourage or prohibit anaerobic manure management in favor of pasture-managed or composted manure.	► Unincorporated County	Ordinance	2029	2030	none	none
AG-8-C	Review and update ordinances every five years to apply more stringent regulations.	► Unincorporated County	Monitoring and Updating	TBD	Ongoing	none	none
AG-9-A	The County will explore the potential benefits of establishing a mitigation program and update the Conservation Regulations in Chapter 18 of the County Code, if needed.	► Unincorporated County	Ordinance	2026	2026	none	none
AG-9-B	The County will apply the mitigation program to proposed land development projects subject to County review and approval.	► Unincorporated County	Development Review	2026	Ongoing	none	none
AG-9-C	Coordinate with NCGSA to support the development of an incentive program that encourages landowners to delay vineyard replanting.	► Unincorporated County	New Program	TBD	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Start	End	Potential Effects on the Environment	Applicable Mitigation ³
AG-9-D	The County will monitor replanting projects required as mitigation for proposed projects on an ongoing basis to ensure that carbon sequestration and storage benefits under this program are achieved over the long-term.	► Unincorporated County	Monitoring and Reporting	2026	Ongoing	none	none

Notes: AB = Assembly Bill; ABAG = Association of Bay Area Governments; BayREN = Bay Area Regional Energy Network; C&D = construction and demolition; CAC = Napa County Climate Action Committee; CARB = California Air Resources Board; CBO = community-based organization; CECSP = Certified Electric Safety Compliance Professional; CH₄ = methane; EV = electric vehicle; EVSE = electric vehicle supply equipment; MAAS = mobility as a service; MTC = Metropolitan Transportation Commission; N/A = not applicable; Napa RCD = Napa County Resource Conservation District; NRCS = Natural Resource Conservation Service; NVTa = Napa Valley Transportation Authority; PG&E = Pacific Gas & Electric Company; SB = Senate Bill; SIP = Sustainability in Practice; TBD = to be determined; TDM = transportation demand management; TRU = transport refrigeration unit; UC ANR = University of California Department of Agriculture and Natural Resources; UCCE = University of California Cooperative Extension; VMT = vehicle miles traveled; WELO = water efficient landscape ordinance; ZEV = zero-emission vehicle.

¹ The measure associated with each Action ID in this table can be found in Chapter 3 of the RCAAP.

² For sake of brevity, each Action Description included in this table may be a shortened or abbreviated version of the full action language found in Chapter 3 of the RCAAP.

³ Identification of applicable mitigation measures is preliminary. All determinations of applicable mitigation measures should be made by the Napa County Jurisdiction at the project level.

Source: **Compiled by Ascent in 2026.**

Potential Effects of Adaptation Actions

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
ALL-1.1	Collaborate among departments and jurisdictions to ensure progress on existing actions and measures in other plans	► All	Monitoring and Updating	Ongoing	none	none
ALL-1.2	Monitor and evaluate local hazard mitigation actions and update, as needed.	► All	Monitoring and Updating	1-5 Years (Near-Term)	none	none
ALL-2.1	Advocate for and implement countywide climate change adaptation-related initiatives.	► All	Partnership	Ongoing	none	none
ALL-3.1	Require owners/developers to waterproof structures and foundations in 100- and 500-year floodplains.	► All	Capital Improvement / Infrastructure Project	Ongoing	none	none
ALL-3.2	Establish wildfire risk reduction requirements for new and existing residential and commercial developments.	► All	Capital Improvement / Infrastructure Project	Ongoing	Effects associated with habitat loss	3.4-1 through 3.4-5
ALL-3.3	Encourage and incentivize the use of pervious and reflective paving surfaces and climate-smart landscaped surfaces in new and existing developments.	► All	Incentives	Ongoing	none	none
ALL-4.1	Adopt a "Health in All Policies" framework that integrates health considerations into regional policies and practices.	► All	Policy / Ordinance Adoption	1-5 years (Near-Term)	none	none
ALL-4.2	Ensure that public health initiatives serving vulnerable communities address the disproportionate impacts of climate stressors on these communities.	► All	Modified Program	Ongoing	none	none
ALL-4.3	Work with local medical providers and hospitals to ensure that medical facilities are prepared to meet increased demand because of more frequent hazardous events.	► All	New Program	Ongoing	none	none
ALL-5.1	Revise maintenance protocols for transportation systems to integrate climate vulnerability considerations.	► All	Modified Program	Ongoing	none	none
ALL-5.2	Coordinate with community members, transportation agencies, and others to identify climate vulnerable populations served by transportation, transit, and active transportation corridors.	► All	New Program	1-5 Years (Near-Term)	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
ALL-5.3	Collaborate with transportation agencies to identify alternative routes and stops to mitigate potential climate-related disruptions.	► All	New Program	1-5 Years (Near-Term)	none	none
ALL-5.4	Support NVTa in developing an emergency traffic operations center, ensuring all-electric transit fleet can meet community needs during evacuations and other emergency scenarios.	► All	New Program	1-5 Years (Near-Term)	none	none
ALL-6.1	Develop locally tailored agricultural heat resilience guidelines and other safety standards that consider enhancements beyond Cal/OSHA requirements.	► All	Policy / Ordinance Adoption	1-5 Years (Near-Term) & Ongoing	none	none
ALL-6.2	Expand access to bilingual training programs for the agricultural workforce on heat and smoke exposure risks, first aid and emergency responses, and other related items.	► All	Education / Outreach	1-5 Years (Near-Term) & Ongoing	none	none
ALL-6.3	Encourage the installations or retrofits of shade structures, cooling misters, and ventilated barns to reduce heat stress on livestock.	► All	Education / Outreach	1-5 Years (Near-Term) & Ongoing	none	none
ALL-6.4	Create and maintain livestock evacuation plans, including shelter locations and rapid deployment logistics during wildfires and other climate hazard events.	► All	Plan	1-5 Years (Near-Term) & Ongoing	none	none
ALL-6.5	Promote and support regenerative agricultural practices.	► All	Education / Outreach	1-4 Years (Near-Term) & Ongoing	none	none
ALL-7.1	Implement nature-based solutions, green infrastructure, and best management practices.	► All	Capital Improvement / Infrastructure Project	Ongoing	Construction effects including equipment use and ground disturbance	All
ALL-7.2	Coordinate with NCGSA to fully implement the ISW/GDE Workplan.	► All	Partnership	1-5 Years (Near-Term)	none	none
ALL-7.3	Consider expanding the scope of the ISW/GDE Workplan to areas outside the Napa Valley Subbasin.	► All	Partnership	1-5 Years (Near-Term)	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
ALL-7.4	Encourage carbon farming and other sustainable land management activities.	► All	Incentives	Ongoing	none	none
ALL-7.5	Partner with Napa RCD to expand youth education and workforce development programs focused on climate resilience, etc.	► All	Partnership	Ongoing	none	none
ALL-8.1	Incorporate Vulnerability Assessment findings into all stages of emergency management planning.	► All	Planning	Ongoing	none	none
ALL-8.2	Prioritize the safety of vulnerable communities in emergency management activities.	► All	Planning	Ongoing	none	none
ALL-8.3	Identify potential locations to site new community resilience centers or “resilience hubs.”	► All	New Program	5-10 Years (Mid-Term)	none	none
FIRE-1.1	Map and identify locations that are newly at risk, or at higher risk, for wildfires hazards and implement wildfire mitigation best practices.	► All	Planning	Ongoing	none	none
FIRE-2.1	Establish post-fire ecological recovery programs to support ecological restoration efforts.	► All	New Program	Ongoing	none	none
FIRE-3.1	Ensure wildfire mitigation best practices are planned and implemented regularly across the county.	► All	Planning	Ongoing	Minor effects to habitat from implementation	3.4-1 through 3.4-5
FIRE-4.1	Plan and design new development strategically to avoid or minimize risk in High or Very High FHSZs.	► All	Project Reviews & Development Planning	Ongoing	none	none
FIRE-4.2	Consider projections of future climate change when planning future land uses.	► All	Project Reviews & Development Planning	Ongoing	none	none
FIRE-5.1	Develop a countywide forest health and wildfire resilience vision that assesses current conditions and helps to inform project prioritization and management decisions.	► All	Partnership	1-5 Years (Near-Term) & Ongoing	none	none
FIRE-5.2	Identify key metrics of forest health and wildfire resilience to track over time.	► All	Monitoring and Updating	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
FIRE-5.3	Plan and implement forest management projects following best practices, considering future climate conditions, and aligning with natural fire regimes.	► All	New Program	Ongoing	Minor effects from forest management projects related to habitat modification and hydrology	3.4-1 through 3.4-5
FIRE-6.1	Promote educational campaigns on the health effects of wildfire smoke and preventative measures.	► All	Education / Outreach	Ongoing	none	none
FIRE-6.2	Enhance and promote early warning systems that alert the public to smoke events.	► All	New Program	1-5 Years (Near-Term)	none	none
FIRE-6.3	Protect outdoor workers from wildfire smoke by establishing policies that limit outdoor work during periods of poor air quality.	► All	New Program	Ongoing	none	none
TEMP-1.1	Share resources, update protocols, and coordinate efforts to regulate outdoor workers' activities during extreme heat events.	► All	Policy / Ordinance Adoption	1-5 Years (Near-Term)	none	none
TEMP-1.2	Provide extreme heat-related training to outdoor workers and ensure adequate shade, water, and protection from poor air quality.	► All	Education / Outreach	Ongoing	none	none
TEMP-2.1	Develop policies and strategies to grow and preserve urban forests.	► All	New Program	1-5 Years (Near-Term)	none	none
TEMP-2.2	Identify communities lacking access to parks and establish new and accessible urban parks and trail systems.	► All	New Program	1-5 Years (Near-Term)	Construction effects, including grading and equipment use	All
TEMP-2.3	Ensure newly established urban parks and trail systems are connected to high-density residential areas and workplaces.	► All	New Program	Ongoing	none	none
TEMP-2.4	Revise parking lot shade standards to provide larger minimum sizes.	► All	Policy / Ordinance Adoption	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
TEMP-2.5	Enhance shading and heat mitigation initiatives for active commuters.	► All	New Program	1-5 Years (Near-Term)	none	none
TEMP-3.1	Provide site-appropriate heat-mitigated materials, shade trees, and/or structures on pedestrian walkways and at transit stops.	► All	Partnership	1-5 Years (Near-Term)	none	none
TEMP-3.2	Evaluate and identify cool pavement technologies best suited for different applications across the county.	► All	Partnership	1-5 Years (Near-Term) & Ongoing	none	none
TEMP-3.3	Install water fountains at transit stops, where feasible.	► All	Partnership	1-5 Years (Near-Term)	none	none
TEMP-3.4	Improve shading in high pedestrian traffic areas such as downtown Napa.	► All	Partnership	1-5 Years (Near-Term)	none	none
TEMP-4.1	Upgrade communication, energy, public service, and transportation infrastructure to bolster extreme heat resilience.	► All	Capital Improvement / Infrastructure Project	1-5 Years	Construction effects including equipment use and ground disturbance	All
TEMP-5.1	Consider adopting a mandatory green building code that requires installation of cool roof technologies for new development.	► All	Policy / Ordinance Adoption	1-5 Years (Near-Term)	none	none
TEMP-5.2	Consider developing incentive programs to apply passive solar home design to future residential buildings.	► All	Incentives	Ongoing	none	none
TEMP-5.3	Consider developing incentives programs to encourage the use of rooftop gardens and green roofs in residential and commercial buildings.	► All	Incentives	Ongoing	none	none
FLOOD-1.1	Continue to implement the Phase II Small MS4 Permit.	► All	Local Enforcement	Ongoing	none	none
FLOOD-1.2	Consider implementing a low-impact development reach code for all new and redevelopment projects.	► All	Modified Program	5-10 Years (Mid-Term)	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
FLOOD-2.1	Invest in green stormwater infrastructure.	► All	Capital Improvement / Infrastructure Project	1-5 Years (Near-Term)	Minor effects to habitat from implementation	3.4-1 through 3.4-5
FLOOD-2.2	Maintain flood control infrastructure, such as gutters, drainage ditches, and culverts to maximize drainage capacity.	► All	Capital Improvement / Infrastructure Project	Ongoing	none	none
FLOOD-2.3	Enhance the capacity of stormwater infrastructure to manage high-intensity rainfall events.	► All	Capital Improvement / Infrastructure Project	1-5 Years (Near-Term) & Ongoing	Construction effects, including grading and equipment use	All
FLOOD-3.1	Coordinate to improve sewage and solid waste management infrastructure.	► All	Capital Improvement / Infrastructure Project	Ongoing	Construction effects, including grading and equipment use	All
FLOOD-4.1	Identify locations suitable for multi-benefit flood control projects.	► All	Capital Improvement / Infrastructure Project	Ongoing	none	none
FLOOD-4.2	Advance wetland restoration projects that provide multiple resilience benefits	► All	Capital Improvement / Infrastructure Project	Ongoing	Construction effects, including grading and equipment use	All
FLOOD-5.1	Upgrade and/or relocate infrastructure and critical facilities exposed to flooding hazards.	► All	Capital Improvement / Infrastructure Project	5-10 Years (Mid-Term)	Construction effects, including grading and equipment use. Potential for land conversion with relocations.	All
FLOOD-6.1	Assess and map areas with bare soil or significant disturbance from natural hazards to prioritize restoration efforts.	► All	New Program	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
FLOOD-7.1	Support investments in new and/or upgraded infrastructure to protect water supplies.	► All	Capital Improvement / Infrastructure Project	Ongoing	Construction effects, including grading and equipment use	All
FLOOD-8.1	Deliver robust, multi-lingual education and outreach materials for flood risk through multiple modes.	► All	Education / Outreach	Ongoing	none	none
FLOOD-8.2	Regularly update the Ready Napa County webpage.	► All	Education / Outreach	Ongoing	none	none
FLOOD-9.1	Prepare an asset-level sea level rise vulnerability assessment.	► American Canyon ► Napa ► Unincorporated County	Planning	1-5 Years (Near-Term) & Ongoing	none	none
FLOOD-9.2	Develop a regional sea level rise adaptive management plan.	► American Canyon ► Napa ► Unincorporated County	Planning	>10 Years (long-term)	none	none
FLOOD-10.1	Continue supporting sea level rise analyses and guide future development out of exposed areas.	► American Canyon ► Napa ► Unincorporated County	Planning	Ongoing	none	none
FLOOD-10.2	Coordinate with NCGSA to install additional monitoring wells.	► American Canyon ► Napa ► Unincorporated County	Partnership	5-10 Years (Mid-Term)	none	none
FLOOD-11.1	Update capital improvement plans to address sea level rise and other related hazards in vulnerable areas.	► American Canyon ► Napa ► Unincorporated County	Planning	5-10 Years (Mid-Term)	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
FLOOD-11.2	Design and locate critical infrastructure projects away from potential inundation areas.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Napa ▶ Unincorporated County 	Capital Improvement / Infrastructure Project	Ongoing	none	none
FLOOD-11.3	Require all new development applications to consider sea level rise and implement sufficient protective measures.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Napa ▶ Unincorporated County 	Policy / Ordinance Adoption	Ongoing	none	none
FLOOD-12.1	Conserve undeveloped land to facilitate ecosystem adaptation in areas prone to sea level rise.	<ul style="list-style-type: none"> ▶ American Canyon ▶ Napa ▶ Unincorporated County 	Secure Funding / Land Conservation/Acquisition	Ongoing	none	none
DROUGHT-11	Raise awareness for water conservation and expand incentives for water-saving devices and "Cash for Grass" landscape conversion.	<ul style="list-style-type: none"> ▶ All 	Incentives	Ongoing	none	none
DROUGHT-12	Implement regional and local water conservation opportunities.	<ul style="list-style-type: none"> ▶ All 	Policy / Ordinance Adoption	Ongoing	none	none
DROUGHT-13	Increase on-site greywater use, rainwater reuse, stormwater reuse, managed aquifer recharge, and recycled water use.	<ul style="list-style-type: none"> ▶ All 	Policy / Ordinance Adoption	1-5 Years (Near-Term)	none	none
DROUGHT-14	Determine feasibility of incentive programs that promote rainwater catchment systems.	<ul style="list-style-type: none"> ▶ All 	Incentives	1-5 Years (Near-Term)	none	none
DROUGHT-15	Consider County-wide implementation of the American Canyon Zero Water Footprint program	<ul style="list-style-type: none"> ▶ All 	Expand Program	1-5 Years (Near-Term)	none	none
DROUGHT-21	Promote and incentivize industry adoption of water conservation practices in the cultivation of wine grapes, other crops, and the breeding of livestock.	<ul style="list-style-type: none"> ▶ All 	Incentives	Ongoing	none	none
DROUGHT-2.2	Incentivize groundwater recharge by promoting soil health best management practices.	<ul style="list-style-type: none"> ▶ All 	Incentives	Ongoing	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
DROUGHT-2.3	Collaborate with the agricultural community to develop incentives for grape growers, winemakers, and other users to adopt water conservation practices beyond drip irrigation.	► All	Incentives	1-5 Years (Near-Term) & ongoing	none	none
DROUGHT-2.4	Consider expanding the geographic scope of the Napa County WC Workplan and GPR Workplan to areas outside the Napa Valley Subbasin.	► All	Planning	5-10 Years (Mid-Term)	none	none
DROUGHT-3.1	Evaluate local water supply system vulnerability to climate impacts and develop strategies to bolster resilience.	► All	Capital Improvement / Infrastructure Project	Ongoing	none	none
DROUGHT-3.2	Adopt and enforce water infrastructure resilience standards for all future development.	► All	Policy / Ordinance Adoption	1-5 Years (Near-Term)	none	none
DROUGHT-3.3	Support efforts for ongoing maintenance of existing water infrastructure and identify potential deterioration.	► All	Capital Improvement / Infrastructure Project	Ongoing	none	none
DROUGHT-3.4	Implement feasible drought mitigation measures proposed in the 2022 Napa Valley Drought Contingency Plan and the Drought Resilience Plan currently under development in response to SB 552.	► All	Adopt and Implement Plans	1-5 Years (Near-Term)	none	none
DROUGHT-4.1	Increase awareness of indoor and outdoor water conservation methods.	► All	Education / Outreach	Ongoing	none	none
DROUGHT-4.2	Expand water conservation educational materials and strategies.	► All	Education / Outreach	Ongoing	none	none
DROUGHT-4.3	Invest in water conservation demonstration projects.	► All	Education / Outreach	Ongoing	none	none
DROUGHT-4.4	Provide Spanish-language training for agricultural workers on sustainable water management.	► All	Education / Outreach	Ongoing	none	none
DROUGHT-5.1	Pursue grant funding opportunities for recycled water projects.	► All	Secure Funding	Ongoing	none	none
DROUGHT-5.2	Explore future water supply options and collaborate on water conservation strategies to improve regional capacity.	► All	Partnership	5-10 Years (Mid-Term)	none	none

Action ID ¹	Action Description ²	Applicable Jurisdiction(s)	Implementation Mechanism	Timeframe	Potential Effects on the Environment	Applicable Mitigation ³
ENERGY-1.1	Evaluate opportunities to transition to decentralized renewable energy sources, reducing reliance on centralized generation sources and long-range transmission (e.g., see MCE's Virtual Power Plant Pilot Program).	► All	Partnership	5-10 Years (Mid-Term)	none	none
ENERGY-2.1	Harden energy infrastructure against various climate stressors.	► All	Capital Improvement / Infrastructure Project	>10 Years (long-term)	Construction effects, including grading and equipment use	All
ENERGY-3.1	Reduce stress on the electrical grid by educating the public on behavior changes they can make.	► All	Education / Outreach	Ongoing	none	none
ENERGY-3.2	Expand the use of home batteries, vehicle-to-grid integration technology, and other energy storage technologies in residential and non-residential buildings to improve backup power supply availability.	► All	Policy / Ordinance Adoption	5-10 Years (Mid-Term)	none	none
ENERGY-4.1	Identify existing facilities that can serve as emergency shelters and ensure they have sufficient backup power using batteries or generators.	► All	Capital Improvement / Infrastructure Project	1-5 Years (Near-Term)	none	none
ENERGY-4.2	Partner with MCE and PG&E to explore the feasibility of microgrid installations and/or virtual power plant opportunities at local government facilities, schools, or other facilities.	► All	Partnership	1-5 Years (Near-Term)	none	none

Notes: BCDC = San Francisco Bay Conservation and Development Commission; CAL FIRE = California Department of Forestry and Fire Protection; Cal/OSHA = California Division of Occupational Safety and Health; Caltrans = California Department of Transportation; CaUFC = California Urban Forests Council; CDFA = California Department of Food and Agriculture; CDFW = California Department of Fish and Wildlife; CDPH = California Department of Public Health; DOC = California Department of Conservation; DWR = California Department of Water Resources; FEMA = Federal Emergency Management Agency; N/A = not applicable; Napa RCD = Napa County Resource Conservation District; NapaSan = Napa Sanitation District; NCFF = Napa Communities Firewise Foundation; NCGSA = Napa County Groundwater Sustainability Agency; NVTa = Napa Valley Transportation Authority; NWS = National Weather Service; OEHHA = California Office of Environmental Health Hazard Assessment; PG&E = Pacific Gas and Electric Company; USACE = United States Army Corps of Engineers; USBR = United States Bureau of Reclamation; USFS = United States Forest Service; USFWS = United States Fish and Wildlife Service; Water Board = California State Water Resources Control Board;

¹ The measure associated with each Action ID in this table can be found in Chapter 5 of the RCAAP.

² For sake of brevity, each Action Description included in this table may be a shortened or abbreviated version of the full action language found in Chapter 5 of the RCAAP.

³ Identification of applicable mitigation measures is preliminary. All determinations of applicable mitigation measures should be made by the Napa County Jurisdiction at the project level.

Source: **Compiled by Ascent in 2026.**

Appendix B

Special Status Species with Potential
to Occur

Special-Status Plants Recorded within Napa County

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
Henderson's bent grass <i>Agrostis hendersonii</i>	—	—	3.2	Valley and foothill grassland, vernal pools. Moist places in grassland or vernal pool habitat. 65-1030 m.
Purdy's onion <i>Allium fimbriatum</i> var. <i>purdyi</i>	—	—	4.3	Chaparral, Cismontane woodland. Clay, Serpentine. 300-600 m.
Franciscan onion <i>Allium peninsulare</i> var. <i>franciscanum</i>	—	—	1B.2	Cismontane woodland, valley and foothill grassland. Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. 5-320 m.
Napa false indigo <i>Amorpha californica</i> var. <i>napensis</i>	—	—	1B.2	Broadleafed upland forest, chaparral, cismontane woodland. Openings in forest or woodland or in chaparral. 30-735 m.
bent-flowered fiddleneck <i>Amsinckia lunaris</i>	—	—	1B.2	Cismontane woodland, valley and foothill grassland, coastal bluff scrub. 3-795 m.
twig-like snapdragon <i>Antirrhinum virga</i>	—	—	4.3	Chaparral, Lower montane coniferous forest. Openings, Rocky, Serpentine (often). 100-2,015 m.
Howell's broomrape <i>Aphyllon validum</i> ssp. <i>howellii</i>	—	—	4.3	Chaparral (serpentine, volcanic). 180-1,740 m.
modest rockcress <i>Arabis modesta</i>	—	—	4.3	Chaparral, Lower montane coniferous forest. 120-800 m.
Oregon rockcress <i>Arabis oregana</i>	—	—	4.3	Chaparral, Lower montane coniferous forest. 600-1,830 m.
Konocti manzanita <i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	—	—	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Volcanic soils. 225-1830 m.
Rincon Ridge manzanita <i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	—	—	1B.1	Chaparral, cismontane woodland. Highly restricted endemic to red rhyolites in Sonoma County. 90-375 m.
serpentine milkweed <i>Asclepias solanoana</i>	—	—	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest. 230-1,860 m.
Brewer's milk-vetch <i>Astragalus breweri</i>	—	—	4.2	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland (openings, often gravelly). Serpentine (often), Volcanic. 90-730 m.
Clara Hunt's milk-vetch <i>Astragalus claranus</i>	FE	SE	1B.1	Cismontane woodland, valley and foothill grassland, chaparral. Open grassy hillsides, especially on exposed shoulders in thin, volcanic or serpentine clay soil moist in spring. 95-355 m.
Cleveland's milk-vetch <i>Astragalus clevelandii</i>	—	—	4.3	Chaparral, Cismontane woodland, Riparian forest. Seeps, Serpentine. 200-1,500 m.
Jepson's milk-vetch <i>Astragalus rattanii</i> var. <i>jepsonianus</i>	—	—	1B.2	Cismontane woodland, valley and foothill grassland, chaparral. Commonly on serpentine in grassland or openings in chaparral. 175-1005 m.
alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	—	—	1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-170 m.
big-scale balsamroot <i>Balsamorhiza macrolepis</i>	—	—	1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1465 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
narrow-anthered brodiaea <i>Brodiaea leptandra</i>	—	—	1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic substrates. 30-590 m.
serpentine reed grass <i>Calamagrostis ophitidis</i>	—	—	4.3	Chaparral (openings, often north-facing slopes), Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland. Rocky, Serpentine. 90-1,065 m.
Brewer's calandrinia <i>Calandrinia breweri</i>	—	—	4.2	Chaparral, Coastal scrub. Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes). 10-1,220 m.
pink star-tulip <i>Calochortus uniflorus</i>	—	—	4.2	Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest. 10-1,070 m.
four-petaled pussypaws <i>Calyptidium quadripetalum</i>	—	—	4.3	Chaparral, Lower montane coniferous forest. Gravelly (sometimes), Sandy (sometimes), Serpentine (usually). 315-2,040 m.
Mt. Saint Helena morning-glory <i>Calystegia collina</i> ssp. <i>oxyphylla</i>	—	—	4.2	Chaparral, lower montane coniferous forest, valley and foothill grassland. On serpentine barrens, slopes, and hillsides. 280-1010 m.
Lyngbye's sedge <i>Carex lyngbyei</i>	—	—	2B.2	Marshes and swamps (brackish or freshwater). 0-200 m.
Tiburon paintbrush <i>Castilleja affinis</i> var. <i>neglecta</i>	FE	ST	1B.2	Valley and foothill grassland. Rocky serpentine sites. 120-400 m.
johnny-nip <i>Castilleja ambigua</i> var. <i>ambigua</i>	—	—	4.2	Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools (margins). 0-435 m.
Mead's owls-clover <i>Castilleja ambigua</i> var. <i>meadii</i>	—	—	1B.1	Vernal pools, meadows and seeps. Soils of volcanic origin and tend to have high clay content and be gravelly. 450-475 m.
pink creamsacs <i>Castilleja rubicundula</i> var. <i>rubicundula</i>	—	—	1B.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 20-915 m.
Rincon Ridge ceanothus <i>Ceanothus confusus</i>	—	—	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland. Known from volcanic or serpentine soils, dry shrubby slopes. 150-1280 m.
Calistoga ceanothus <i>Ceanothus divergens</i>	—	—	1B.2	Chaparral. Rocky, serpentine or volcanic sites. 100-950 m.
Kern ceanothus <i>Ceanothus pinetorum</i>	—	—	4.3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest. Granitic, Rocky. 1,040-2,745 m.
holly-leaved ceanothus <i>Ceanothus purpureus</i>	—	—	1B.2	Chaparral, cismontane woodland. Rocky, volcanic slopes. 140-720 m.
Sonoma ceanothus <i>Ceanothus sonomensis</i>	—	—	1B.2	Chaparral. Sandy, serpentine or volcanic soils. 140-795 m.
pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	—	—	1B.2	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernal mesic, often alkaline sites. 1-500 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
soft salty bird's-beak (=soft bird's-beak) <i>Chloropyron molle</i> ssp. <i>molle</i> (=Cordylanthus mollis ssp. mollis)	FE	SR	1B.2	Coastal salt marsh. In coastal salt marsh with Distichlis, Salicornia, Frankenia, etc. 0-5 m.
Brewer's clarkia <i>Clarkia breweri</i>	—	—	4.2	Chaparral, Cismontane woodland, Coastal scrub. Serpentine (often). 215-1,115 m.
Tracy's clarkia <i>Clarkia gracilis</i> ssp. <i>tracyi</i>	—	—	4.2	Chaparral (openings, serpentine). 65-650 m.
serpentine collomia <i>Collomia diversifolia</i>	—	—	4.3	Chaparral, Cismontane woodland. Gravelly (sometimes), Rocky (sometimes), Serpentine (sometimes). 200-600 m.
serpentine bird's-beak <i>Cordylanthus tenuis</i> ssp. <i>brunneus</i>	—	—	4.3	Chaparral, Cismontane woodland, Closed-cone coniferous forest. Serpentine (usually). 305-915 m.
red-stemmed cryptantha <i>Cryptantha rostellata</i>	—	—	4.2	Cismontane woodland, Valley and foothill grassland. Gravelly (often), Openings, Roadsides (often), Volcanic. 40-800 m.
swamp larkspur <i>Delphinium uliginosum</i>	—	—	4.2	Chaparral, Valley and foothill grassland. Seeps, Serpentine. 340-610 m.
dwarf downingia <i>Downingia pusilla</i>	—	—	2B.2	Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 1-490 m.
small spikerush <i>Eleocharis parvula</i>	—	—	4.3	Marshes and swamps. 1-3,020 m.
marsh horsetail <i>Equisetum palustre</i>	—	—	3	Marshes and swamps. 45-1,000 m.
streamside daisy <i>Erigeron biolettii</i>	—	—	3	Broadleafed upland forest, Cismontane woodland, North Coast coniferous forest. Mesic, Rocky. 30-1,100 m.
Greene's narrow-leaved daisy <i>Erigeron greenei</i>	—	—	1B.2	Chaparral. Serpentine and volcanic substrates, generally in shrubby vegetation. 90-835 m.
Snow Mountain buckwheat <i>Eriogonum nervulosum</i>	—	—	1B.2	Chaparral. Dry serpentine outcrops, balds, and barrens. 445-2105 m.
tripod buckwheat <i>Eriogonum tripodum</i>	—	—	4.2	Chaparral, Cismontane woodland. Serpentine (often). 200-1,600 m.
bay buckwheat <i>Eriogonum umbellatum</i> var. <i>bahiiforme</i>	—	—	4.2	Cismontane woodland, Lower montane coniferous forest. Rocky, Serpentine (often). 700-2,200 m.
Jepson's coyote-thistle <i>Eryngium jepsonii</i>	—	—	1B.2	Vernal pools, valley and foothill grassland. Clay. 3-305 m.
bare monkeyflower <i>Erythranthe nudata</i>	—	—	4.3	Chaparral, Cismontane woodland. Seeps, Serpentine. 200-700 m.
St. Helena fawn lily <i>Erythronium helenae</i>	—	—	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland. Serpentine (sometimes), Volcanic (sometimes). 350-1,220 m.
San Joaquin spearscale <i>Extriplex joaquinana</i>	—	—	1B.2	Chenopod scrub, alkali meadow, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with Distichlis spicata, Frankenia, etc. 0-800 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
adobe-lily <i>Fritillaria pluriflora</i>	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Usually on clay soils; sometimes serpentine. 45-945 m.
Purdy's fritillary <i>Fritillaria purdyi</i>	—	—	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest. Serpentine (usually). 175-2,255 m.
Hall's harmonia <i>Harmonia hallii</i>	—	—	1B.2	Chaparral. Serpentine hills and ridges. Open, rocky areas within chaparral. 335-945 m.
nodding harmonia <i>Harmonia nutans</i>	—	—	4.3	Chaparral, Cismontane woodland. Gravelly (sometimes), Rocky (sometimes), Volcanic. 75-95 m.
two-carpellate western flax <i>Hesperolinon bicarpellatum</i>	—	—	1B.2	Chaparral. Serpentine barrens at edge of chaparral. 175-825 m.
Brewer's western flax <i>Hesperolinon breweri</i>	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. 195-910 m.
drymaria-like western flax <i>Hesperolinon drymarioides</i>	—	—	1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland. Serpentine soils, mostly within chaparral. 400-1100 m.
Sharsmith's western flax <i>Hesperolinon sharsmithiae</i>	—	—	1B.2	Chaparral. Serpentine substrates. 180-670 m.
Santa Lucia dwarf rush <i>Juncus luciensis</i>	—	—	1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub. Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 280-2035 m.
Burke's goldfields <i>Lasthenia burkei</i>	FE	SE	1B.1	Vernal pools, meadows and seeps. Most often in vernal pools and swales. 15-580 m.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE	—	1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m.
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	—	—	1B.2	Marshes and swamps. In freshwater and brackish marshes. Often found with Typha, Aster lentus, Rosa californica, Juncus spp., Scirpus, etc. Usually on marsh and slough edges. 0-5 m.
Colusa layia <i>Layia septentrionalis</i>	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 15-1100 m.
Legenere <i>Legenere limosa</i>	—	—	1B.1	Vernal pools. In beds of vernal pools. 1-1005 m.
bristly leptosiphon <i>Leptosiphon aureus</i>	—	—	4.2	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland. 55-1,500 m.
Jepson's leptosiphon <i>Leptosiphon jepsonii</i>	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. 55-855 m.
broad-lobed leptosiphon <i>Leptosiphon latisetus</i>	—	—	4.3	Broadleafed upland forest, Cismontane woodland. 170-1,500 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
woolly-headed lessingia <i>Lessingia hololeuca</i>	—	—	3	Broadleafed upland forest, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland. Clay, Serpentine. 15-305 m.
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	—	SR	1B.1	Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. 0-10 m.
redwood lily <i>Lilium rubescens</i>	—	—	4.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest. Roadsides (sometimes), Serpentine (sometimes). 30-1,910 m.
woolly meadowfoam <i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	—	—	4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools. Vernal wet areas, ditches, and ponds. 60-1335 m.
Sebastopol meadowfoam <i>Limnanthes vincularis</i>	FE	SE	1B.1	Meadows and seeps, vernal pools, valley and foothill grassland. Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam. 15-115 m.
Hoover's lomatium <i>Lomatium hooveri</i>	—	—	4.3	Chaparral, Cismontane woodland. Serpentine, Volcanic (rarely). 300-885 m.
Napa lomatium <i>Lomatium repostum</i>	—	—	4.2	Broadleafed upland forest, Chaparral, Cismontane woodland. Flat to steep slopes in chaparral and woodland (mixed evergreen forest, often with madrone). Gravelly (sometimes), Openings (often), Rocky (sometimes), Sandstone (rarely), Serpentine, Volcanic (often). 90-1,440 m.
Cobb Mountain lupine <i>Lupinus sericatus</i>	—	—	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, broadleafed upland forest. In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. 120-1390 m.
Heller's bushmallow <i>Malacothamnus helleri</i>	—	—	3.3	Chaparral (sandstone), Riparian woodland (gravel). 305-635 m.
Mt. Diablo cottonweed <i>Micropus amphibolus</i>	—	—	3.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Valley and foothill grassland. Rocky. 45-825 m.
sylvan microseris <i>Microseris sylvatica</i>	—	—	4.2	Chaparral, Cismontane woodland, Great Basin scrub, Pinyon and juniper woodland, Valley and foothill grassland. Serpentine (rarely). 45-1,500 m.
green monardella <i>Monardella viridis</i>	—	—	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland. 100-1,010 m.
cotula navarretia <i>Navarretia cotulifolia</i>	—	—	4.2	Chaparral, Cismontane woodland, Valley and foothill grassland. Adobe. 4-1,830 m.
Tehama navarretia <i>Navarretia heterandra</i>	—	—	4.3	Valley and foothill grassland (mesic), Vernal pools. 30-1,010 m.
Jepson's navarretia <i>Navarretia jepsonii</i>	—	—	4.3	Chaparral, Cismontane woodland, Valley and foothill grassland. Serpentine. 175-855 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
Baker's navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	—	—	1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 3-1680 m.
few-flowered navarretia <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	FE	ST	1B.1	Vernal pools. Volcanic ash flow, and volcanic substrate vernal pools. 425-855 m.
Porter's navarretia <i>Navarretia paradoxinota</i>	—	—	1B.3	Meadows and seeps. Serpentine, openings, vernal mesic, often drainages. 175-875 m.
Marin County navarretia <i>Navarretia rosulata</i>	—	—	1B.2	Closed-cone coniferous forest, chaparral. Dry, open rocky places; can occur on serpentine. 185-640 m.
Sonoma beardtongue <i>Penstemon newberryi</i> var. <i>sonomensis</i>	—	—	1B.3	Chaparral. Crevices in rock outcrops and talus slopes. 425-1405 m.
bearded popcornflower <i>Plagiobothrys hystriculus</i>	—	—	1B.1	Vernal pools, valley and foothill grassland. Wet sites. 1-275 m.
Calistoga popcornflower <i>Plagiobothrys strictus</i>	FE	ST	1B.1	Meadows and seeps, valley and foothill grassland, vernal pools. Alkaline sites near thermal springs and on margins of vernal pools in heavy, dark, adobe-like clay. 90-125 m.
Napa blue grass <i>Poa napensis</i>	FE	SE	1B.1	Meadows and seeps, valley and foothill grassland. Moist alkaline meadows fed by runoff from nearby hot springs. 100-120 m.
Marin knotweed <i>Polygonum marinense</i>	—	—	3.1	Marshes and swamps. Coastal salt marshes and brackish marshes. 0-10 m.
California alkali grass <i>Puccinellia simplex</i>	—	—	1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. 1-915 m.
Lobb's aquatic buttercup <i>Ranunculus lobbii</i>	—	—	4.2	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools. Mesic. 15-470 m.
California beaked-rush <i>Rhynchospora californica</i>	—	—	1B.1	Bogs and fens, marshes and swamps, lower montane coniferous forest, meadows and seeps. Freshwater seeps and open marshy areas. 45-270 m.
Victor's gooseberry <i>Ribes victoris</i>	—	—	4.3	Broadleafed upland forest, Chaparral. Mesic. 100-750 m.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	—	—	1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.
Cleveland's ragwort <i>Senecio clevelandii</i> var. <i>clevelandii</i>	—	—	4.3	Chaparral (seeps, serpentine). 365-900 m.
Napa checkerbloom <i>Sidalcea hickmanii</i> ssp. <i>napensis</i>	—	—	1B.1	Chaparral. Rhyolitic substrates. 415-610 m.
Keck's checkerbloom <i>Sidalcea keckii</i>	FE	—	1B.1	Cismontane woodland, valley and foothill grassland. Grassy slopes in blue oak woodland. On serpentine-derived, clay soils, at least sometimes. 85-505 m.
marsh checkerbloom <i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	—	—	1B.2	Meadows and seeps, riparian forest. Wet soil of streambanks, meadows. 455-2030 m.

Species	Federal Status ¹	State Status ¹	CRPR ¹	Habitat
long-styled sand-spurrey <i>Spergularia macrotheca</i> var. <i>longistyla</i>	—	—	1B.2	Marshes and swamps, meadows and seeps. Alkaline. 0-220 m.
Socrates Mine jewelflower <i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	—	—	1B.2	Chaparral, closed-cone coniferous forest. Serpentine areas and serpentine chaparral. 605-1950 m.
green jewelflower <i>Streptanthus hesperidis</i>	—	—	1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; serpentine, rocky sites. 240-765 m.
Three Peaks jewelflower <i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	—	—	1B.2	Chaparral. Serpentine barrens, outcrops, and talus. 240-735 m.
Kruckeberg's jewelflower <i>Streptanthus morrisonii</i> ssp. <i>kruckebergii</i>	—	—	1B.2	Cismontane woodland. Scattered serpentine outcrops near the Lake/Napa County line. 240-665 m.
Suisun Marsh aster <i>Symphyotrichum lentum</i>	—	—	1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with Phragmites, Scirpus, blackberry, Typha, etc. 0-15 m.
short-podded thelypodium <i>Thelypodium brachycarpum</i>	—	—	4.2	Chaparral, Lower montane coniferous forest, Meadows and seeps. Adobe, Alkaline, Serpentine. 670-2,560 m.
marsh Zigadenus <i>Toxicoscordion fontanum</i>	—	—	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps. Serpentine (often), Vernally Mesic. 15-1,000 m.
Napa bluecurls <i>Trichostema ruygtii</i>	—	—	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest. Often in open, sunny areas. Also has been found in vernal pools. 30-680 m.
two-fork clover <i>Trifolium amoenum</i>	FE	—	1B.1	Valley and foothill grassland, coastal bluff scrub. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. 5-310 m.
saline clover <i>Trifolium hydrophilum</i>	—	—	1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.
dark-mouthed triteleia <i>Triteleia lugens</i>	—	—	4.3	Broadleafed upland forest, Chaparral, Coastal scrub, Lower montane coniferous forest. 100-1,000 m.
oval-leaved viburnum <i>Viburnum ellipticum</i>	—	—	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400 m.

Notes: CESA = California Endangered Species Act; CEQA = California Environmental Quality Act; CRPR = California Rare Plant Rank; CNDDDB = California Natural Diversity Database; ESA = Endangered Species Act; NPPA = Native Plant Protection Act; subsp. = subspecies; var. = variety.

¹ Legal Status Definitions

Federal:

FE Endangered (legally protected)
FT Threatened (legally protected)

State:

SE Endangered (legally protected)
ST Threatened (legally protected)
SR State-listed as rare (legally protected by NPPA)

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks:

0.1 Seriously threatened in California (more than 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20–80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Sources: CNDDDB 2025; CNPS 2025.

Special-Status Wildlife Recorded within Napa County

Species	Federal Status ¹	State Status ¹	Other Status	Habitat
Invertebrates				
Crotch's bumble bee <i>Bombus crotchii</i>	—	SCE	—	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .
western bumble bee <i>Bombus occidentalis</i>	—	SCE	—	Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	—	—	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	—	—	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.
California freshwater shrimp <i>Syncaris pacifica</i>	FE	SE	—	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.
Fish				
green sturgeon - southern DPS <i>Acipenser medirostris</i> pop. 1	FT	—	CDFW SSC	Spawning site fidelity. Spawns in the Sacramento, Feather and Yuba Rivers. Presence in upper Stanislaus and San Joaquin Rivers may indicate spawning. Non-spawning adults occupy marine/estuarine waters. Delta Estuary is important for rearing juveniles. Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.
steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus</i> pop. 8	FT	—	CDFW SSC	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.
longfin smelt - San Francisco Bay-Delta DPS <i>Spirinchus thaleichthys</i> pop. 2	FE	ST	—	Pelagic and anadromous within the Sacramento-San Joaquin River Delta, San Francisco Bay, and Gulf of the Farallones. Spawns in lower freshwater reaches of Sacramento and San Joaquin Rivers. First year in Suisun Bay; later SF Bay or Gulf of the Farallones. Occurs in salinities ranging from pure freshwater to pure saltwater; typically salinities ranging from 14-28 parts per thousand (ppt). Generally occupies water temperatures from 61-68F, with spawning occurring in water temperatures from 41-58F.
Amphibians				
California tiger salamander ² <i>Ambystoma californiense</i> pop. 3	FE	ST	CDFW WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.
California giant salamander <i>Dicamptodon ensatus</i>	—	—	CDFW SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.

Species	Federal Status ¹	State Status ¹	Other Status	Habitat
foothill yellow-legged frog - north coast DPS <i>Rana boylei</i> pop. 1	—	—	CDFW SSC	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range including watershed subbasins (HU 8) Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek in Lassen, Shasta, Tehama, and Butte Counties. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.
California red-legged frog <i>Rana draytonii</i>	FT	—	CDFW SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
Reptiles				
northwestern pond turtle <i>Actinemys marmorata</i>	Proposed	—	CDFW SSC	
Birds				
Cooper's hawk <i>Accipiter cooperii</i>	—	—	CDFW WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.
sharp-shinned hawk <i>Accipiter striatus</i>	—	—	CDFW WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.
tricolored blackbird <i>Agelaius tricolor</i>	—	ST	CDFW SSC USFWS BCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
golden eagle <i>Aquila chrysaetos</i>	—	—	CDFW FP CDFW WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
burrowing owl <i>Athene cunicularia</i>	—	SCE	CDFW SSC USFWS BCC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
ferruginous hawk <i>Buteo regalis</i>	—	—	CDFW WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.
Swainson's hawk <i>Buteo swainsoni</i>	—	ST	—	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
western snowy plover <i>Charadrius nivosus nivosus</i>	FT	—	CDFW SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.
northern harrier <i>Circus hudsonius</i>	—	—	CDFW SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.

Species	Federal Status ¹	State Status ¹	Other Status	Habitat
black swift <i>Cypseloides niger</i>	—	—	CDFW SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.
white-tailed kite <i>Elanus leucurus</i>	—	—	CDFW FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.
prairie falcon <i>Falco mexicanus</i>	—	—	CDFW WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.
American peregrine falcon <i>Falco peregrinus anatum</i>	Delisted	Delisted	—	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	—	—	CDFW SSC USFWS BCC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
bald eagle <i>Haliaeetus leucocephalus</i>	Delisted	SE	CDFW FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
California black rail <i>Laterallus jamaicensis coturniculus</i>	—	ST	CDFW FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	—	—	CDFW SSC USFWS BCC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.
double-crested cormorant <i>Nannopterum auritum</i>	—	—	CDFW WL	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.
Osprey <i>Pandion haliaetus</i>	—	—	CDFW WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
purple martin <i>Progne subis</i>	—	—	CDFW SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	FE	SE	CDFW FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.
bank swallow <i>Riparia riparia</i>	—	ST	—	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.

Species	Federal Status ¹	State Status ¹	Other Status	Habitat
northern spotted owl ² <i>Strix occidentalis caurina</i>	FT	ST	—	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.
Mammals				
pallid bat <i>Antrozous pallidus</i>	—	—	CDFW SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	—	—	CDFW SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
western red bat <i>Lasiurus frantzii</i>	—	—	CDFW SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.
salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE	SE	CDFW FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat, but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.
Suisun shrew <i>Sorex ornatus sinuosus</i>	—	—	CDFW SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean high tide line for nesting and foraging.
American badger <i>Taxidea taxus</i>	—	—	CDFW SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.

Notes: CEQA = California Environmental Quality Act; CNDDDB = California Natural Diversity Database; DPS = distinct population segment; ESU = evolutionarily significant unit; ssp. = subspecies.

¹ Legal Status Definitions

² Species have not been recorded in the County within the California Natural Diversity Database; however, critical habitat for the species has been designated by the United States Fish and Wildlife Service (USFWS) and the species may occur within the County.

Federal:

FE Endangered (legally protected)
 FT Threatened (legally protected)
 FP Federally proposed for listing (no formal protection other than CEQA consideration)
 FC Federal candidate for listing (no formal protection other than CEQA consideration)
 FD Federally delisted

State:

SE Endangered (legally protected)
 ST Threatened (legally protected)
 SC State candidate for listing (legally protected)
 SD State delisted
 FP Fully protected (legally protected)
 SSC Species of special concern (no formal protection other than CEQA consideration)

Sources: CNDDDB 2025.

References

California Natural Diversity Database. 2025. California Natural Diversity Database. Last updated September 2, 2025. Available at <https://wildlife.ca.gov/Data/CNDDDB>. Retrieved October 2, 2025.

California Native Plant Society. 2025. Rare Plant Inventory (online edition, v9.5.1). Available at <https://rareplants.cnps.org/>. Retrieved October 2, 2025.