



CHAPTER 6

Implementation and Monitoring



6 IMPLEMENTATION AND MONITORING

This chapter describes how the Napa County Regional Climate Action and Adaptation Plan (RCAAP) will be implemented and monitored. The six local jurisdictions within Napa County (hereinafter referred to as “Napa County Jurisdictions” when pertaining to the collective government entities of the County of Napa, the Cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville) have a responsibility in successfully implementing the RCAAP. As such, this chapter includes further details on a coordinated regional implementation strategy, a summary of the cost and funding analyses conducted for some of the RCAAP’s GHG reduction and adaptation measures, monitoring and reporting considerations, future plan updates, California Environmental Quality Act (CEQA) tiering and streamlining, and ongoing community engagement.

6.1 IMPLEMENTATION STRATEGY

Successful RCAAP implementation will require a coordinated approach that leverages regional and local collaboration across the Napa County Jurisdictions and other partner agencies and organizations.

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). However, individual jurisdictions may tailor the implementation of measures or specific actions that apply to all jurisdictions to account for the unique needs and characteristics of each of the Napa County Jurisdictions. A single jurisdiction, such as the County, may also take the lead in implementing specific actions that will have regional benefit and inform measure implementation efforts across jurisdictions (e.g., conducting feasibility studies, or developing model ordinances that all jurisdictions will eventually adopt). In all cases, however, if specific actions are implemented primarily by one jurisdiction, close coordination with other jurisdictions will be required to ensure consistent results are achieved across jurisdictions.

Specific implementation details for all measures and actions identified in Chapters 3 and 5 can be found in **Appendix H**. For each action, the matrices provide a short description, applicable jurisdictions, potential partners, the implementation mechanism, and estimated start and end dates.

6.2 IMPLEMENTATION COSTS AND POTENTIAL FUNDING SOURCES

RCAAP implementation will require substantial funding, and a coordinated regional investment strategy is needed. Accordingly, a series of cost and funding assessments were prepared to inform the public and decision-makers regarding potential costs and options for funding and financing implementation, as described in this section.

Implementation Cost Estimates

A preliminary cost assessment, prepared by Jacobs, estimated and classified Napa County Jurisdictions' potential implementation costs for nine priority GHG reduction measures and 10 climate adaptation measures. The specific measures included were prioritized either because of the magnitude of potential GHG reductions associated with the selected GHG measures relative to others, or because of the potential degree or scale of impact in the case of the selected climate adaptation measures. This assessment does not include cost estimates for all RCAAP measures. A complete cost estimate for the entire RCAAP would require further study.

The Napa County Jurisdictions collectively have a responsibility to successfully implement the RCAAP, and as such, the preliminary cost assessment includes total costs regionwide for implementation of the selected measures as presented in the RCAAP, and costs are not estimated individually for any one jurisdiction, unless specifically noted. No cost-sharing analysis was included in the scope of the preliminary cost assessment.

The preliminary cost assessment to implement nine GHG reduction and 10 adaptation measures over a 20-year horizon (i.e., 2025-2045) includes labor (i.e., public agency staffing), capital costs (i.e., construction costs related to physical assets), and other costs (i.e., non-capital expenses, such as consultants, rebates, or special studies).

- ▶ Some measures are one-time activities such as developing a program or plan, or the adoption of an ordinance.
- ▶ Other measures are ongoing, such as comprehensive electrification of existing buildings, structure hardening, or certain infrastructure projects, that have a longer timeframe.
- ▶ Potential cost savings may offset public agency costs to the Napa County Jurisdictions (e.g., through reduced municipal utility bills associated with more efficient buildings and vehicles), and private community cost savings (e.g., reduced utility bills through home electrification or fuel costs through vehicle electrification).

Key findings from the preliminary cost assessment, included in **Appendix I**, are as follows:

- ▶ If all 19 measures selected for analysis were fully implemented, total implementation costs would be approximately \$1.1 billion over 20 years, or approximately \$57 million per year. Approximately seven percent of total costs would be labor or administrative costs incurred by local agencies.
- ▶ Implementation of nine priority GHG reduction measures would cost approximately \$772 million over 20 years. Over 90 percent of these estimated costs are associated with rebates, incentives, or other program costs. For GHG measure BE-1 alone, the estimated cost of residential and commercial rebates or other incentives for electrification of all existing buildings countywide could cost over \$400 million over 20 years.
- ▶ Implementation of 10 priority climate adaptation measures would cost approximately \$359 million over 20 years. Approximately 66 percent of these estimated costs are associated with rebates, incentives, or other program costs, while 28 percent would be for capital costs.

These preliminary cost estimates are based on planning-level, order-of-magnitude estimates with an accuracy range of -30 to +50 percent of actual costs. These preliminary cost estimates are subject to change based on a variety of factors. Examples of such factors include potential revisions to RCAAP measures, actual implementation or program details that are defined later during implementation but are unknown or undefined during the planning stage, changes in market conditions, the availability and cost of zero-emission technology, and Napa County Jurisdictions' staff availability and workload.

Funding and Financing Options

Economic & Planning Systems prepared a funding and financing options assessment that identifies potential funding sources and financing mechanisms to support RCAAP implementation (see **Appendix I** for a more detailed discussion and copy of the full assessment). The funding and financing options assessment focused on nine priority GHG measures and 10 climate adaptation measures analyzed in the preliminary cost assessment. The funding & financing assessment identified the following potential options:

- ▶ **Local funding sources** (e.g., general fund revenues, new taxes or assessments, new fees);
- ▶ **Grants** (e.g., federal, state, regional, or local grant programs);
- ▶ **Loans** (e.g., California Infrastructure and Economic Development Bank [Iban] products, on-bill financing available through utilities);
- ▶ **Debt financing mechanisms** (e.g., general obligation bonds, revenue bonds, certificates of participation, Mello-Ros community facilities districts, enhanced infrastructure financing districts, climate resilience districts); and
- ▶ **Other sources** (e.g., carbon credits, public-private partnerships, development or operating agreements; and regional programs such as Marin Clean Energy Flex Market Programs, Bay Area Regional Energy Network incentives, Transportation Fund for Clean Air).

Implementing the RCAAP will require a **coordinated, long-term investment strategy** that draws upon both existing and new sources of funding from public and private entities. While a wide range of funding mechanisms exist, accessing and managing them presents several challenges. Limited public budgets, fragmented and competitive funding sources, and shifting state and federal priorities can constrain the availability and consistency of financial support. Additionally, many GHG reduction measures and climate adaptation measures demand high upfront costs and significant administrative effort, requiring jurisdictions to prioritize actions that align with local capacity and offer the greatest long-term benefits. In this context, successful implementation will depend on the Napa County Jurisdictions' ability to strategically sequence investments, pursue diverse funding streams, and build partnerships with organizations across sectors—including public agencies, private businesses, nonprofit groups, and community stakeholders—to expand capacity and strengthen support for climate initiatives.

The funding and financing assessment identified the following specific steps that Napa County Jurisdictions can take in developing a long-term RCAAP investment strategy:

- ▶ Develop a **phased funding roadmap** that sequences implementation based on funding availability, project readiness, and potential for maximizing GHG reduction and community co-benefits.
- ▶ **Prioritize actions that can be implemented relatively easily** by identifying projects that have the following characteristics:
 - Lower cost-barriers,
 - Existing staffing capacity to redirect toward implementation,
 - Capital improvements that can be included in respective jurisdictional capital improvement plans.
- ▶ Determine if any **General Fund revenues** can be made available to fund any short- or long-term actions.
- ▶ **Evaluate the feasibility of establishing new or dedicated local funding sources**, including new taxes, assessments, fees, or utility surcharges earmarked for GHG reduction or climate adaptation efforts.
- ▶ **Pursue state and federal grants** by actively monitoring funding opportunities from existing or new programs. This may require jurisdictions to **build internal capacity or hire grant specialists** and **collaborate** across public agencies to increase competitiveness.
- ▶ **Utilize public financing tools**, such as climate resilience districts or other mechanisms.
- ▶ Attract private investment by pursuing **public-private partnerships** for targeted actions.
- ▶ **Coordinate via the Climate Action Committee (CAC) and corresponding joint powers agreement** to align local funding priorities, pool match funding, and develop joint applications for regional-scale investments.

6.3 MONITORING AND REPORTING

Napa County Jurisdictions will regularly monitor and report 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, along with progress towards meeting established GHG targets and goals for 2030 and 2045, will also be monitored regularly and shared with the public. Monitoring and reporting efforts will also inform future RCAAP updates in the event adjustments to measures are required. Future RCAAP updates are addressed further under Section 6.4 below.

Monitoring

Monitoring efforts for the RCAAP will include tracking both the status of implementation of each measure and associated implementing actions, as well as tracking the performance of each measure based on data collection.

- ▶ **Implementation Status:** Napa County Jurisdictions will track the status of all GHG reduction and climate adaptation measures identified in **Chapters 3 and 5** and their specific actions quarterly. Agency staff will maintain and update tracking tables, using consistent implementation status categories. Examples of these categories may include but are not limited to, the following: planned, waiting for funding approval, in progress, nearing completion, completed, ongoing, or not yet started. Agency staff will also include the most current/available data on implementation status in annual monitoring reports.
- ▶ **GHG Performance Monitoring:** Napa County Jurisdictions will monitor the effectiveness of all GHG reduction measures based on specific tracking metrics or key performance indicators (KPIs) that are closely aligned with the performance targets established for applicable quantified GHG reduction measures, as presented in **Chapter 3**. Agency staff will identify the specific tracking metrics or KPIs that will be monitored for applicable GHG reduction measures. Data will be gathered annually for each set of KPIs unless otherwise noted, and results will be included in an annual monitoring report for the RCAAP.

Reporting

Napa County Jurisdictions will post regular updates online regarding implementation status and performance monitoring efforts. The latest available data on progress in achieving measure-specific performance targets, estimated GHG reductions to date, and overall progress in achieving the RCAAP's GHG targets will be shared publicly via an interactive RCAAP "Dashboard" that will be developed and launched shortly after RCAAP adoption.

Agency staff will also prepare annual RCAAP monitoring reports and present these reports to the Napa County CAC or individual local governing bodies. The purpose of these annual reports is to report on the implementation progress and performance of the RCAAP and to identify where further efforts and additional resources may be needed to ensure effective implementation. The first annual RCAAP monitoring report will be issued in 2027, approximately one year after the approval of the RCAAP. Annual monitoring reports will include the status of

each GHG reduction and climate adaptation measure, along with the associated implementation actions. These reports will also provide a summary of the latest data on the performance of GHG reduction measures and overall progress toward achieving the regional GHG targets, based on the identified metrics and KPIs.

6.4 FUTURE PLAN UPDATES

Napa County Jurisdictions will update the RCAAP approximately every five 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 five-year RCAAP updates will 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. Refined cost estimates and funding sources may also be identified as necessary. Future updates to the RCAAP will also comply with CEQA Guidelines 15183.5. **Table 6.1** provides a schedule of planned activities for future RCAAP updates and related activities, including monitoring and reporting efforts.

Table 6.1 RCAAP Updates and Monitoring Schedule

Year	Activity	Description
2026	RCAAP Adoption	<ul style="list-style-type: none"> Each of the Napa County Jurisdictions’ governing bodies will adopt the RCAAP in 2026.
2026-Ongoing	Implementation	<ul style="list-style-type: none"> Implementation of the RCAAP will begin in 2026 following adoption.
2026-Ongoing	Annual Monitoring and Reporting	<ul style="list-style-type: none"> RCAAP monitoring efforts will begin in 2026. The first annual monitoring report would be published in 2027, approximately one year following RCAAP adoption.
2030-Ongoing	Annual GHG Emissions Inventory Updates	<ul style="list-style-type: none"> The regional GHG emissions inventory will be updated every five years. The next inventory update will be completed by the year 2030 to inform the first five-year RCAAP update.
2031	RCAAP Update	<ul style="list-style-type: none"> The RCAAP will be updated every 5 years, with the first update completed by 2031.

Notes: GHG = greenhouse gas; RCAAP = Napa County Regional Climate Action and Adaptation Plan; Napa County Jurisdictions = the collective government entities of the County of Napa, the Cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville.

Source: **Compiled by Ascent in 2025.**

6.5 CEQA GHG ANALYSIS TIERING AND STREAMLINING

Napa County Jurisdictions may 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), which are summarized in **Table 6.2** below.

Napa County Jurisdictions’ existing development review processes will demonstrate an individual project’s consistency with applicable GHG measures in the RCAAP. A project’s incremental contribution to cumulative GHG emissions may be determined not to be cumulatively considerable based on consistency with the forecasts and GHG reduction measures presented within the RCAAP.

Table 6.2 RCAAP Compliance with Elements of a Qualified Greenhouse Gas Reduction Plan Under the CEQA Guidelines, Section 15183.5(b)

Element	Element Description	How Does the RCAAP Meet the Criterion?
A	Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.	The RCAAP is based on the region’s 2019 inventory of existing GHG emissions, and forecasts for 2030 and 2045, for both the unincorporated area and incorporated jurisdictions in Napa County. GHG emissions for all years include emissions associated with all countywide activities. The inventories and forecasts were prepared pursuant to the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (Community Protocol) version 1.2 (July 2019) developed by Local Governments for Sustainability (ICLEI) and the ICLEI Local Government Operations Protocol (LGO Protocol), version 1.1 (May 2010) developed by ICLEI. Further, the inventories and forecasts include sources over which Napa County Jurisdictions have some level of jurisdictional control or influence and exclude those sources over which the County has no jurisdictional control or influence. See RCAAP Chapter 2 and Appendix B for further technical details.
B	Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.	The RCAAP establishes 2030 and 2045 targets GHG emissions reductions in alignment with legislative targets for statewide emissions reductions and the state’s 2022 Scoping Plan for Achieving Carbon Neutrality. As explained in CEQA Guidelines Section 15064.4(b)(3), a lead agency “may consider a project’s consistency with the state’s long-term climate goals or strategies” when determining the significance of a project’s cumulative GHG emissions impacts. Therefore, the RCAAP’s 2030 and 2045 targets represent the level below which GHG emissions would not be cumulatively considerable. See RCAAP Chapter 2 and Appendices B, E, and F for further technical details.

Element	Element Description	How Does the RCAAP Meet the Criterion?
C	Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.	The regional GHG emissions inventory, along with emissions forecasts prepared for 2030 through 2045, account for both existing emissions and estimated changes in emissions over time. The forecasts of future emissions analyze how existing emissions are expected to change over time under a business-as-usual scenario and an adjusted business-as-usual scenario that accounts for state and federal legislative reductions. The RCAAP includes a broad suite of GHG reduction measures and associated implementation actions to reduce GHG emissions countywide to achieve regional 2030 and 2045 targets. See RCAAP Chapters 2 and 3 , and Appendices E and F for further technical details.
D	Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.	The RCAAP includes GHG reduction strategies, measures, and implementing actions and presents analysis demonstrating that their collective implementation would achieve the 2030 and 2045 targets. The RCAAP also identifies how, if certain GHG measures were implemented on a project-by-project basis, the measures collectively would achieve the 2030 and 2045 targets. The RCAAP includes measures that address the largest GHG emissions sources (such as building energy use and transportation), core measures that are likely to reduce large amounts of emissions based on substantial evidence, and transparency in methods of quantification. See RCAAP Chapter 3 and Appendix F for further technical details.
E	Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.	The RCAAP includes a regional strategy for implementing, monitoring, and reporting, including how the RCAAP and various technical components will be updated periodically. Napa County Jurisdictions will evaluate the effectiveness of GHG measures and actions and include regular emissions inventory updates to ensure the region is on track to meet the regional 2030 and 2045 GHG reduction targets. The implementation strategy also includes details regarding applicability of specific actions under each measure, estimated costs and funding and financing options, and matrices summarizing implementation assumptions. See RCAAP Chapter 6 and Appendices H and I for details.
F	Be adopted in a public process following environmental review.	Napa County Jurisdictions will conduct environmental review and prepare an Initial Study for the RCAAP, pursuant to CEQA. The County of Napa will serve as lead agency for the preparation of the Initial Study, with other incorporated jurisdictions acting as responsible agencies. The Initial Study will evaluate the potential environmental effects of the proposed RCAAP and its implementation, and the County and responsible agencies will make the appropriate environmental determination following completion of the Initial Study. Following completion of the environmental review process, each governing body will certify the CEQA document and adopt the RCAAP following a public hearing.

Notes: GHG = greenhouse gas; RCAAP = Napa County Regional Climate Action and Adaptation Plan.

Source: **Compiled by Ascent in 2025.**

Projects eligible for streamlining include discretionary projects subject to environmental review that are determined by Napa County Jurisdictions to be consistent with their respective General Plan and the GHG forecast assumptions used in the RCAAP. Projects that are inconsistent with

the General Plan or the forecast assumptions will not be eligible for tiering and streamlining their GHG analysis from the CAP. A project that a local lead agency determines to be eligible for GHG analysis tiering and streamlining using the RCAAP must demonstrate consistency with the RCAAP by implementing applicable GHG reduction measures and/or demonstrating consistency with performance standards associated with such measures. Eligible projects can then tier from and/or incorporate by reference the RCAAP's programmatic review of GHG emissions in their CEQA analysis of cumulative GHG emissions. However, if there is substantial evidence 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 greenhouse gas emissions, an EIR must be prepared for the project, pursuant to CEQA Guidelines Section 15183.5(b)(2).

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**. 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 that are appropriate in each individual jurisdiction. The Checklist will also be updated over time, if necessary, as the RCAAP is updated every five years. The Checklist will not apply to ministerial projects or other actions that are not considered a "project" and therefore are not subject to environmental review under CEQA.

6.6 ONGOING COMMUNITY ENGAGEMENT

Continued engagement with and active participation by the community is critical for the successful implementation of the RCAAP. As Napa County Jurisdictions implement and monitor measures and actions, engagement with residents, businesses, community organizations, developers, property owners, and other local, regional, and state agencies will ultimately guide measure implementation and promote the achievement of the RCAAP's goals. While some measures may be led solely by an individual jurisdiction, many will require cross-agency collaboration, as well as partnerships and collaboration with other organizations, as noted in previous chapters.

Many of the measures and implementing actions in the RCAAP focus on increasing community awareness and participation in existing programs, as well as connecting the community with new information, tools, funding, and resources. Effective and long-term climate action and resilience building in the community depend on ongoing efforts that change the way individuals and businesses interact with the environment. Numerous measures require participation from residents, businesses, and visitors to be fully implemented, and the Napa County Jurisdictions are committed to continuing outreach and engagement efforts through implementation, monitoring, and future plan updates, as outlined above.