

6.4.2 Climate Resilience Co-benefits from GHG Reduction Strategies in CA2020

The GHG reduction measures described in Chapter 4, *Reducing Community Emissions*, will also contribute to the climate readiness of Sonoma County and its resources. Measures under Building Energy will help conserve energy and expand localized, renewable energy generation. These measures will reduce community reliance on the electrical grid, which is vulnerable to climate hazards including extreme weather events, sea-level rise, and heat waves. This, in turn, will help reduce climate-related personal and economic risks for residents and businesses in Sonoma County.

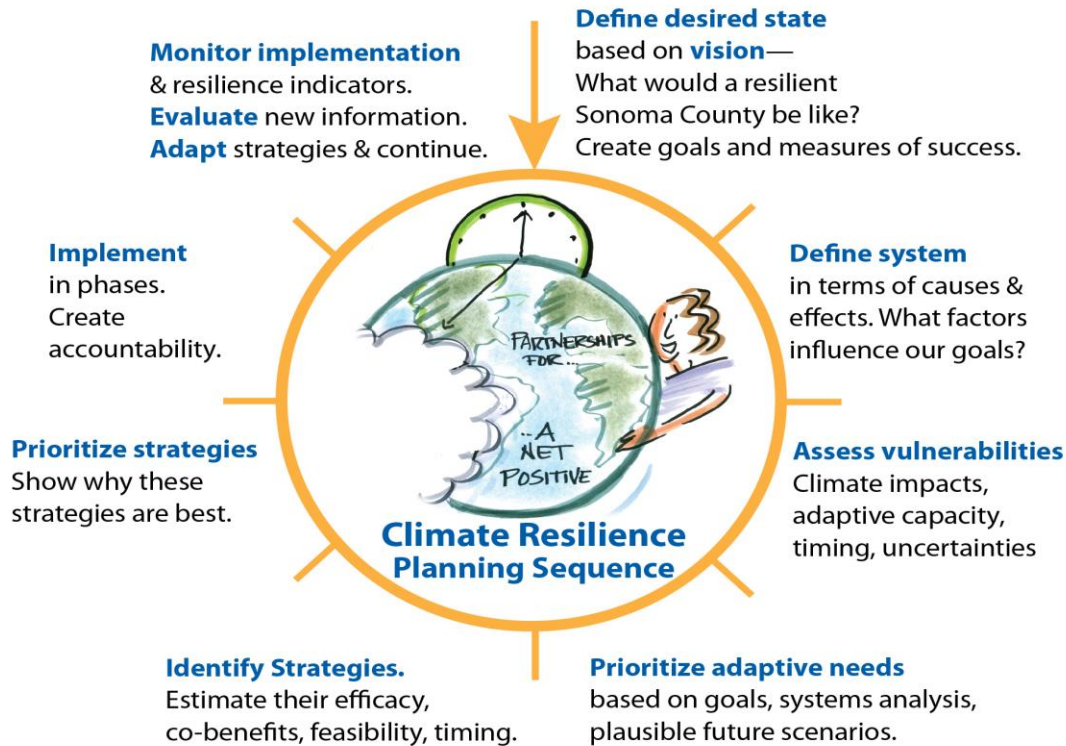
GHG reduction measures under on-road transportation will reduce vehicle miles traveled and increase alternative modes of travel, such as walking, biking, and transit. These measures help reduce stress on the county's aging transportation infrastructure, which is also vulnerable to climate change hazards. Reducing stress on the transportation system helps protect a significant capital investment and avoid service disruptions and the resulting risks to residents and businesses throughout the county.

GHG reduction measures for other sources also provide various resiliency benefits. Strategies to reduce emissions from livestock and fertilizer will also help preserve soil fertility, conserve water, reduce energy use, and support sustainable agricultural products, all of which benefit a community adapting to a changed climate. Increasing reuse of materials and recycling from solid waste helps reduce natural resource use in the manufacture of goods from original materials, thus helping to preserve water supplies, energy supplies, and natural resources that will likely be stressed in the future due to climate change impacts. Protection or enhancement of forests, wetlands, floodplains, or stream systems will not only increase carbon sequestration, but will also bring benefits for water supply, flood control, temperature moderation, and pollination. GHG reduction measures that reduce water demand help reduce climate change vulnerabilities by reducing the demand for stressed water supplies, reducing the amount of water treatment, and reducing the costs associated with water consumption.

6.5 Next Steps

The pervasive nature of anticipated climate change hazards in Sonoma County requires that both public and private entities play a role in enhancing local resilience. The vulnerability assessment summarized above represents some of the first steps in the overall climate readiness sequence, as shown on Figure 6-7.

Figure 6-7. Overall Climate Readiness Sequence for Sonoma County



In line with the goals summarized in Table 6-6, existing efforts to prepare for climate change should be integrated, expanded, and evaluated to explore how well they are serving the community by increasing climate resilience.

On an ongoing basis, climate readiness strategies should be explicitly integrated into existing plans and programs that are already used to promote public health, safety, and prosperity in Sonoma County, including the following.

- Hazard Mitigation Plans. Sonoma County’s 2016 hazard mitigation plan will be the first to incorporate current knowledge about climate change and climate hazards facing the county.
- General Plans, specific plans, and the Local Coastal Plan, particularly as they relate to locations vulnerable to flood, landslide, and coastal hazards, and locations important for water supply, groundwater recharge, and shoreline protection. As required under new state law (Senate Bill 379, 2015), general plan safety elements must include “climate adaptation and resiliency strategies,” including “goals, policies, and objectives for their communities based on the most current information available regarding climate change adaptation and resiliency.” Senate Bill 379 also allows jurisdictions to use adopted climate action plans, such as CA2020, to meet this new requirement.

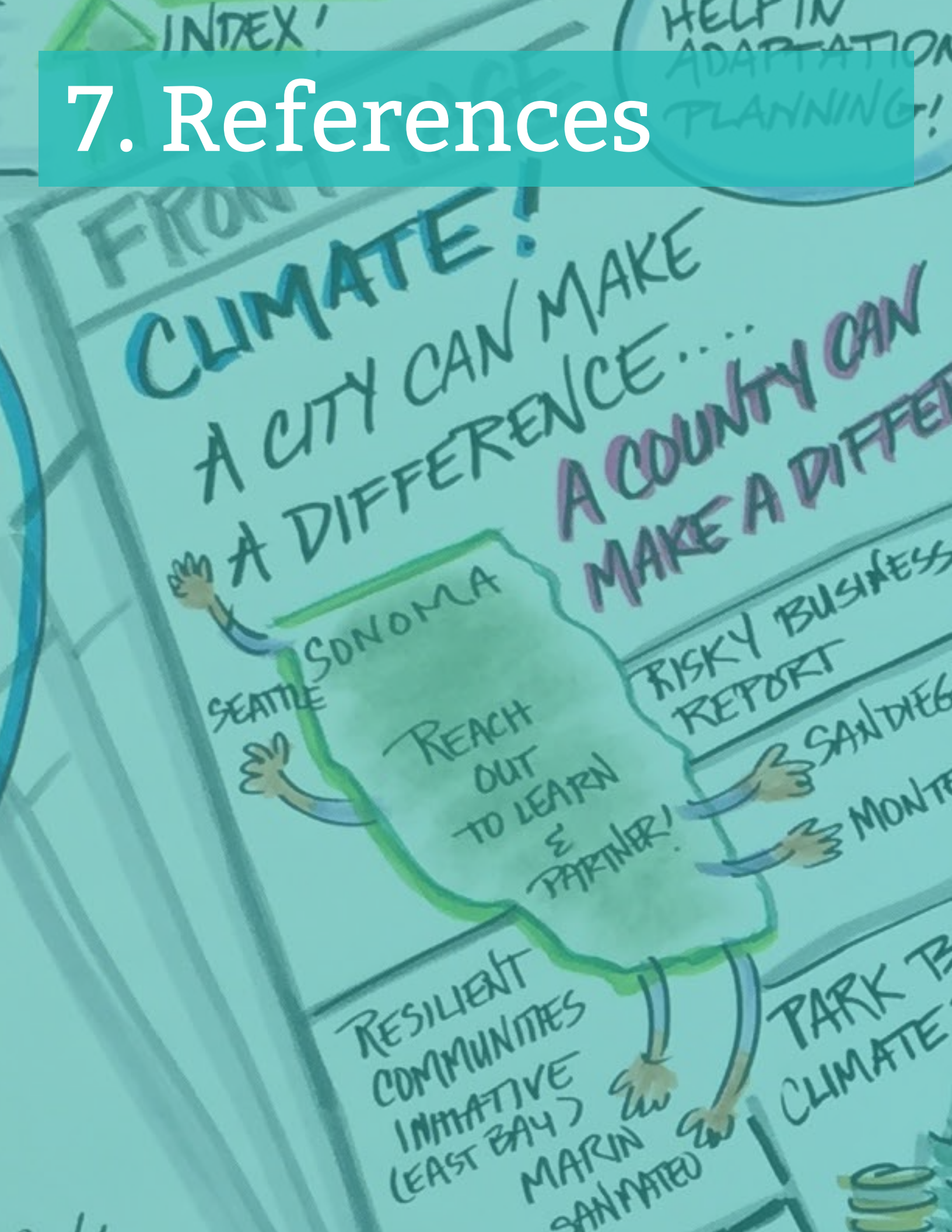
- Parks, trails, and open space plans.
- Water supply, stormwater, and flood management plans and ordinances. Sonoma County Water Agency is also undertaking an in-depth climate adaptation plan for its operations.
- Environmental impact reports.
- Transportation and other capital improvement plans.
- Public health monitoring.
- Emergency preparedness plans.
- Street tree and water-efficiency ordinances.
- Zoning, building, and fire codes.
- Groundwater management plans.
- Administrative policies, procedures, and initiatives.

In every area, from road-building to public health to transit, help is needed to translate technical information about a changed climate future into appropriate actionable steps. Climate adaptation efforts in Sonoma County have already identified a need for Climate Ready Advisors who can help residents, businesses, local governments, and non-governmental organizations make sense of the growing volume of climate hazard information and produce climate-smart decisions, plans, budgets, and priorities.

Local leaders, residents, and stakeholders, such as RCPA, must work together to respond to the county's climate vulnerabilities, implement the goals in Table 6-6, and evaluate how well current and new strategies are increasing community readiness for climate change.

An effective response to the climate challenge requires substantial investment, and therefore calls for a deep analysis of how to make that investment cost effective. As the cities and County have already done with Health Action and an array of new clean-power programs, the community will need to re-imagine and re-align its investments so that new and existing incentives, disincentives, and funding streams result in climate-resilient behavior throughout Sonoma County.

7. References



Chapter 7

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None