



# CLIMATE ACTION *through* CONSERVATION

A SONOMA COUNTY MODEL CLIMATE  
STRATEGY FOR LAND CONSERVATION



*This initiative will help Sonoma County, and ultimately other counties across California, address climate change through natural resource conservation and land use. We will do this by developing a replicable countywide portfolio of tools, policies and economic incentives for Sonoma County that facilitate the conservation of priority natural and working landscapes and urban forests to optimize climate benefits, as well as other critical public benefits for the region.*

### CLIMATE CHANGE AND CONSERVATION

Conserving land — including working landscapes, natural areas and urban forests — plays a critical role in avoiding and reducing greenhouse gas (GHGs) emissions that contribute to climate change. Over 15% of the worldwide emissions are caused by deforestation, forest degradation and land use change. Natural areas and working landscapes sequester carbon, providing a “sink” for greenhouse gases that could otherwise contribute to climate change. However, conversion of natural or working lands to other uses can reduce natural vegetation cover, emit stored carbon to the atmosphere and diminish the land’s natural ability to regulate the climate. Conservation of working landscapes, urban forests, and natural areas is therefore an important strategy in combating climate change — one part of a portfolio of actions needed to address climate change.

Conservation also helps ecosystems, species and human communities respond to the unavoidable impacts of climate change by maintaining open, diverse landscapes, resilient habitats and populations that can shift with changing conditions. In addition to playing a key role to address climate change, conservation of natural areas, working landscapes and urban forests provide many other benefits — including recreation, food security, clean drinking water and air, biodiversity, jobs, and economic vitality.

### LOCAL GOVERNMENT LEADERSHIP

Local governments such as counties and cities play an essential role in addressing climate change.

Climate impacts are most tangible at the local level and decisions made by local governments influence whether natural or working lands and urban forests will be maintained and protected to provide valuable climate and public benefits or whether they will be converted to other uses.

The County of Sonoma and its nine cities are collaborating — via the Regional Climate Protection Authority (RCPA) — on one of the most ambitious climate change reduction strategies in the nation. Conservation is a key strategy among a portfolio of actions designed to reduce GHG emissions 25% below 1990 levels by 2015. Sonoma County is fortunate to have several natural resource agencies partnering with the RCPA to implement the GHG goals related to conservation — including the Sonoma County Agricultural Preservation and Open Space District (SCAPOS), Sonoma County Regional Parks, Sonoma County Water Agency and many innovative conservation NGOs.

### OPPORTUNITIES AND INCENTIVES TO ADDRESS CLIMATE CHANGE

California’s climate policies, such as the Global Warming Solutions Act (AB32) and the Sustainable Communities and Climate Protection Act (SB375), present opportunities and potential incentives for local and regional governments to address climate change while optimizing many other public benefits. Greenhouse gas emissions reductions can be derived from not only transportation and energy efficiency at the local level, but also changes in land use, conservation and urban forestry. To take advantage of these opportunities, local governments need the tools to account for the climate impacts and benefits of their actions.

While some tools exist to account for the climate impacts of transportation and energy use, there is minimal guidance available to counties to estimate the climate impacts and benefits from various land use scenarios and activities related to natural and working lands or urban forestry. Furthermore, there is little guidance on how these considerations could be integrated with other land use or climate plans and financial incentives.

***This initiative will fill these gaps by:***

- Developing the decision support tools that counties and local governments need to assess the climate impacts of different land use scenarios and activities; and
- Aligning positive conservation and climate outcomes with emerging state and local incentives.

**INITIATIVE DESCRIPTION: SONOMA COUNTY MODEL CLIMATE STRATEGY FOR LAND CONSERVATION**

The *Sonoma County Climate Strategy for Land Conservation* is intended to provide data, tools and incentives to help Sonoma County and other counties address climate change through the conservation of these valuable resources. With Sonoma County as the pilot, this initiative will develop the methods and tools needed to help counties estimate and monitor the climate impacts of different land use scenarios and activities, such as forest restoration, urban forestry or conversion of forest and grasslands to other uses. The initiative will create a nexus to key climate initiatives and emerging economic incentives that will enable Sonoma and other counties to more effectively reduce GHG emissions through countywide conservation and urban forestry actions.

**Initiative Elements & Methods**

The Initiative includes the following elements:

**Conservation and climate values assessment :**

This is an analysis using a number of GIS data layers depicting important natural, agricultural and recreational resources, specific land cover types that play a role in regulating GHG emissions, as well as data layers depicting zoning, policies and laws that affect how land is developed in the County. These values will be combined with land-based carbon stocks data and estimates of existing and potential GHG reduction values associated with forests, grasslands and urban forests. The integration of conservation values and climate benefits will be designed in a scenario framework to produce a “greenprint” for the County. The greenprint will complement the County’s existing climate action plan, as a strategy to link emissions reduction with land use planning and conservation priorities.

**Countywide GHG Accounting Framework and Tool:**

A county-scale GHG accounting and monitoring framework for carbon emissions and sequestration from forests, grasslands and urban forests will be developed and integrated with the other conservation values.

**Policies and Incentives:** Model policies and incentives will be developed to support implementation of the conservation strategies and emissions reductions, helping Sonoma County and others to integrate conservation and climate change into their overall climate and land use strategies. The initial focus includes incentives that may be available from the implementation of California’s GHG emissions trading program and Sustainable Communities and Climate Protection Act. It will also be integrated with incentives available at the local level.

**Education & Outreach:** Outreach materials will be developed and workshops, meetings, and trainings will be conducted to develop the initiative’s key deliverables and ultimately help state and local decision-makers use the tools and incentives envisioned by this initiative.

**Sonoma County Pilot Projects:** The initiative will include a pilot test in Sonoma County where conserved lands will be used to assess and adjust, if necessary, the GHG accounting framework and decision support tools developed. It will result in the integration of this framework and integrated plan into the District’s management and acquisition strategies, which will include the conservation of the County’s iconic redwoods and oak woodlands, among other important landscapes.

**HOW TO GET INVOLVED*****Initiative Manager for Sonoma County:***

Karen Gaffney, Sonoma County Agricultural Preservation and Open Space District, Karen.Gaffney@sonoma-county.org, (707) 565-7360.

***Initiative Manager for The Nature Conservancy:***

Michelle Passero at the Nature Conservancy, mpassero@tnc.org, (415) 281-0443.

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