



County Department & Agencies Climate Change/Resiliency Efforts

Survey Results
December 2019

Introduction:

The County of Sonoma has consistently led the charge in exploring methods to respond to climate change and in 2020, the Board intends to include climate change issues and building climate resiliency as critical goals for the County. The County of Sonoma has a national reputation for forging the way in climate adaptation and mitigation strategies to address climate change and many County departments are actively engaged in this work, as well as regional partner agencies.

In November 2019, the Office of Recovery & Resiliency created a survey that was sent to all County Departments and Agencies to identify established climate resiliency goals and climate change related initiatives, projects, or programs within each department. This report provides a summary of the survey and results.

The following County Departments and Agencies have identified goals and activities that each are engaged with or taking on to address climate change and resiliency work in 2020:

- Ag + Open Space
- Auditor-Controller-Treasurer-Tax Collector
- County Administrator's Office
- County Counsel - Natural Resources & Resiliency Practice Group
- Economic Development Board
- General Services
- Information Services Department
- Permit Sonoma
- Regional Parks
- Sonoma Water
- Transportation and Public Works
- University of California Cooperative Extension

The efforts of County Departments and Agencies will be pivotal to addressing climate change locally, in 2020 and beyond. On September 17, 2019, the Board of Supervisors joined over 1,000 local governments representing over 219 million people in 19 countries in declaring a climate emergency. The resolution solidified the County's and the international commitment to mobilizing an emergency response that is commensurate with the scale of the climate crisis.

Summary of Department and Agencies Specific Climate Resiliency Activities for 2020:

County Departments and Agencies are currently engaging in or planning climate resiliency activities for 2020. Below is a summary of departmental actions organized into these 10 topical areas:

1. Agriculture and Food Coordination
2. Community Education and Training
3. County Business Practices and County Infrastructure
4. Disaster Resiliency
5. Financing and Investments
6. Local Business Community Engagement
7. Natural Resources Protection
8. Policy Development, Planning, and Research
9. Technology to support Sustainability
10. Transportation and Electric Vehicles

Agriculture and Food Coordination

- Protecting agricultural lands that provide local food under increasingly volatile climate and drought condition - **Ag + Open Space**
- Expansion of Match.Graze to connect landowners to contract grazers - increase the number of available grazers - **UCCE**
- Implementation of Climate Smart Agriculture - soil health and manure management- **UCCE**
- Food Waste Reduction Initiative- **UCCE**
- Food Access Initiative- **UCCE**

Community Education and Training

- "Be a Climate Change Agent" - Environmental Education and Interpretation Programs, Exhibits and Signs that educate visitors on how climate change affects our landscape and our communities and how they can be part of the solution. – **Regional Parks**
- Expansion of the Good Fire Alliance - **UCCE**
- Fire safe landscaping and demonstration gardens – **UCCE**
- Ensure a sustainable/modular building curriculum is developed for the Regional Construction Training Center as recommended by Strategic Sonoma (Target Completion: 2020, pending grant approval - center is slated to serve 500 students yearly once operational) - **EDB**

County Business Practices and County Infrastructure

- Eliminate all printed reports, guides and collateral (Target Completion: 2019) – **EDB**
- Implement RES-BCT for the Los Guilicos solar array and benefitting account and obtain Maintenance Agreement for Existing Solar Systems owned by the County (MCAP). – **General Services**
- Obtain energy audits for the Veteran's Buildings and Heavy Fleet and produce a comprehensive plan to perform identified improvements including LED lighting upgrades (MCAP & requires Capital budget). – **General Services**
- Update the Green Purchasing Policy to reflect new products and create incentives within the purchasing portal (MCAP). – **General Services**
- Identify County-Owned Real Estate to will remain in the property portfolio and upgrade existing building systems to improve efficiency and resiliency, i.e. battery storage, PV, solar thermal, geothermal, variable speed drives, etc. – **General Services**

- Work to integrate additional on-site generation, install clean energy storage and resilient micro-grid technology on new County buildings to achieve zero net energy. – **General Services**
- Installation of Solar Photovoltaic System at airport - **TPW**
- Installation generators at the airport and Santa Rosa Yard - **TPW**

Disaster Resiliency

- Planning and implementing land conservation projects that help our community to be more resilient to extreme events, including fires, floods and drought - **Ag + Open Space**
- Ongoing support for Recovery & Resiliency Framework implementation – **County Counsel**
- Increase emergency preparation and improve response to natural disasters: Advanced Quantitative Precipitation Information, LHMP updates and implementation. – **Sonoma Water**
- "Climate Durable" Parks - replacing burned or flooded infrastructure with more resilient structures, designs and materials to better prepare for repeat events. – **Regional Parks**

Financing and Investments

- SCEIP Expansion for Wildfire Hardening (Target Completion: Feb/Mar 2020) - **ACTTC**
- Treasury Investment Policy Statement Amendment to prioritize environmental investment opportunities (Target Completion: Dec 2019) - **ACTTC**
- FEMA and CalOES Disaster Claiming to maximize County reimbursements for past and future disasters (Ongoing) – **ACTTC**
- Provide legal support and analysis of potential funding mechanisms for the Board's climate action initiatives – **County Counsel**
- Expand the Energy Independence Program financing to include seismic strengthening and Wildfire Safety (March 2020). – **General Services**

Local Business Community Engagement

- Partner with the Small Business Development Center to launch "Boot Camps" for local sustainable businesses (Target Completion: 2020 - could serve 25 entrepreneurs/businesses per cohort; 2 cohorts yearly) - **EDB**
- Potential crowdfunding platform for sustainable business concepts from "Boot Camp" graduates (Recommended by Strategic Sonoma, still under consideration) - **EDB**
- Potential local "Fair Trade" certification for businesses that achieve environmental, labor, and community benchmarks (Still under consideration) - **EDB**

Natural Resources Protection

- Protecting key groundwater basins and source watersheds that provide clean drinking water, agricultural water, water for native species, and help to avoid flooding - **Ag + Open Space**
- Protecting native habitats and ecosystems that support the resiliency of our natural systems and biodiversity - **Ag + Open Space**
- Integrating sea level rise data into land conservation prioritization work, and using these data to inform a cost effective “green infrastructure” approach to sea level rise, rather than the much more expensive built infrastructure approach - **Ag + Open Space**
- Creation of parks and urban open spaces that support community health as the climate warms - **Ag + Open Space**
- Protect drinking water supply and promote water use efficiency: Forecast Informed Reservoir Operations, compliance with Biological Opinion and Dry Creek Enhancements, Implement SGMA – **Sonoma Water**

- Sonoma Water Climate Adaptation Plan – **Sonoma Water**
- Fire Smart Lake Sonoma Watershed- source water protection – **Sonoma Water**
- Sonoma Water Energy Policy and Projects – **Sonoma Water**
- Upper River Coordination – **Sonoma Water**
- Strengthen partnership with USDA Natural Resources Conservation Service for climate resiliency: rehab and upgrade Central Sonoma Watershed Project facilities and infrastructure, source water protection and conservation – **Sonoma Water**
- Utilize regional planning to increase water supply resiliency: Groundwater Sustainability Plans, Urban Water Management Plans, Storm Water Resource Plans – **Sonoma Water**
- Lake Sonoma Watershed project - **UCCE**

Policy Development, Planning, and Research

- Support Board's climate initiatives arising from the Board's adoption of the Climate Emergency Resolution in September 2019 – **County Counsel**
- Work with CAO/ORR, County departments and sister agencies on legislative platform and advocacy for climate action initiatives – **County Counsel**
- Hold a regional Climate Conference as recommended by Strategic Sonoma – **EDB**
- General Plan- reaffirm targets, establish new thresholds, and programmatic EIR – **Permit Sonoma**
- Airport Area Specific Plan- connection of jobs, housing, and transit, circulation network improvements with multi-modal focus – **Permit Sonoma**
- Springs Specific Plan- circulation network improvements with multi-modal focus, PDA (priority development area) focused housing growth, programmatic EIR. draft goals include: – **Permit Sonoma**
 - Goal SC-1: Ensure that the Street Network is Designed to Provide Equally for the Needs of All Users, including Pedestrians, Bicyclists, Motorists, and Transit Riders.
 - Goal SC-2: Create a Safe, Convenient, and Well-connected Pedestrian and Bicycle Circulation System with Generous Amenities that Encourage Walking and Cycling.
 - Goal SC-3: Increase Transit Ridership in the Springs Area
- Local Coastal Program- The local coastal plan update extensively discusses climate change and adaptation, particularly in the guise of sea level rise in the Public Safety Element, increased potential risks and risk reduction for other hazards are discussed as well. The below program is the most “specific” example. The plan also reinforces the emissions reductions goals as adopted by the Board – **Permit Sonoma**
 - Program C-PS-11: Identify existing green infrastructure (coastal land, habitats, vegetation, natural features, and ecological processes) which may be used to increase coastal resiliency to climate change, sea-level rise, and flood and geologic hazards (erosion); and strategies for adapting to climate change and sea-level rise through maintenance or enhancement of this green infrastructure. These adaptation strategies may include, but are not limited to, planned retreat, land preservation, habitat conservation, and habitat restoration.
- Hazard Mitigation Plan- the Sonoma County Hazard Mitigation Plan 2016 addresses climate change as it relates to the increased risk of potential hazards including sea level rise, increased drought, and wildfire risk. Mitigation measures to these hazards, like reducing fuel loads in forests, or improving stream habitats to reduce flooding have co-benefits of improving green infrastructure for carbon sequestration and resilience to further climate change impact. The HMP is currently being reworked into a multijurisdictional plan and will likely improve these connections and set goals for implementation throughout multiple jurisdictions. – **Permit Sonoma**
- GHG Checklist in process for Development Applications. – **Permit Sonoma**

- Tree Preservation Ordinance Update- carbon sequestration, urban heat island reductions/urban greening. – **Permit Sonoma**
- Housing Sites EIR- rezoning sites for housing in urban areas to reduce vehicles miles traveled (VMT) and transportation emissions, among other co-benefits. – **Permit Sonoma**
- SB 743 Implementation- new procedures and guidelines for the measurement of VMT for development projects. – **Permit Sonoma**
- Building Code Update- Increased building efficiency standards. – **Permit Sonoma**
- Recreational and Cultural Events in Right of Way- zero waste provision, promotion of health and multi-modal travel behaviors. – **Permit Sonoma**
- Implement 47 measures from the 2016 Municipal Climate Action Plan (MCAP) (program improvement). – **General Services**
- Implement actions from the 2030 RCPA Plan and participate with RCPA in the Urban Land Institute Working Group for the County and Santa Rosa, and in the USDN. – **General Services**

Technology to support Sustainability

- Computer Technology – Prioritize investments in low power consumption technology purchases in the data center and for client consumption. Examples include mobile technology, printers, monitors, servers, etc. While the price on these items are higher the energy savings are substantial. - **ISD**
- Telecommuting – Improve technology and adopt standards which permit a larger percentage of County employees to telecommute. This will reduce the production of greenhouse gases from using a gas powered automobile to drive to and from the office. - **ISD**
- Records Digitization - Develop plans and priority projects to reduce costs of paper creation and storage and increase efficiency of work flows embedded in paper based systems. - **ISD**
- Cloud First – When replacing centralized software system house in the County Data Center prioritize selection of cloud based systems available through the Internet. This enhances opportunities for telecommuting but also reduces the consumption of electricity at the County Data Center while also improving business resiliency. - **ISD**
- Mobility - Reduce device counts by implementing mobile devices at the desktop and enhancing remote access that does not require connection to a personal desktop at work. – **ISD**
- Enhancement of mobile communications - **TPW**

Transportation and Electric Vehicles

- Clean Commute Program: Pre-Tax Commuter Benefits – **County Administrator’s Office**
- Research, develop, and implement Electric Vehicle Workplace Charging for all county employees and upgrade Existing Electric Vehicle Infrastructure. - **General Services**
- Implement full County Employee Clean Commute Program following pilot study, including bicycle sharing, and electric vehicle shuttle to/from SMART stations. - **General Services**
- Purchase of electric Transit buses - **TPW**
- Installation of transfer switches at all traffic signals - **TPW**
- "Climate Conscious Park Use" - Messaging that helps visitors navigate to parks on public transportation and/or via bike/walk routes. – **Regional Parks**

Recovery and Resiliency Framework Alignment:

The reality of climate change was assumed in development of the Recovery and Resiliency Framework (Framework) and many of the initiatives identified in the Framework could be considered Climate Change/Resiliency strategies. Many of these have already been identified above and are actively being pursued by departments. The Framework, representing the County's long-term vision for a resilient future, has five strategic areas of recovery and resiliency: Community Preparedness and Infrastructure, Housing, Economy, Safety Net Services, and Natural Resources. Many of the implementation goals in the Framework are related to or support actions to reduce greenhouse gas emissions, mitigate climate change impacts, and promote climate resiliency.

Some examples of the Board's implementation goals within the Framework include:

- Housing Goal 3 which supports building and development standards with improved local hazard resiliency and reduced climate impacts;
- Natural Resources Goal 1 calls for moving forests on a trajectory of increased resistance to drought, disease, and insects;
- Natural Resources Goal 2 supports water supply and drought tolerance; and
- Natural Resources Goal 3 aims to build on prior partnerships to integrate best available science into outreach efforts, policy development, regulations, incentives, and land use planning decisions.

To implement these goals, the Framework includes activities that align with the above list of climate change/resiliency activities for 2020, such as updating the General Plan and the Local Hazard Mitigation Plan, promoting climate positive construction, pursuing development of clean local energy systems and microgrids, and expanding clean commute and green business programs.

An additional component to the Framework includes applying for grant funding to support goals and activities. Several of these funding opportunities also support climate change/resiliency efforts. One recently obtained grant to support this work is FEMA Hazard Mitigation Grant Program (HMGP) funds for Permit Sonoma for the Sonoma County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) Update. Additional funding to support both the Framework and climate change/resiliency will continue in 2020.

Appendix A

Survey Questions

In addition to general information about the department/agency and contact person responding, the survey asked the following questions:

1. Has your Department or Agency taken on any significant climate resiliency related work?
2. Does your Department or Agency have any specific Climate Resiliency Goals (these may/may not be included as top 18-month performance goals)?
3. If yes, please list them below (include targeted date of completion of each goal as well as any metrics that will determine success)
4. Are any of the above stated goals included in the Recovery and Resiliency Framework approved by the Board in December 2018?
5. If you answered yes to Question 6, please state which goals are included in the framework.
6. Are any of the above initiatives, projects, or programs included in the Recovery and Resiliency Framework approved by the Board in December 2018?
7. If you answered yes to Question 9, please list the initiatives identified in the framework below.

Appendix B Department and Agency Goals

County Departments and Agencies identified the following climate resiliency goals for 2020:

Auditor-Controller-Treasurer-Tax Collector:

1. SCEIP Expansion for Wildfire Hardening (Target Completion: Feb/Mar 2020)
2. Treasury Investment Policy Statement Amendment to prioritize environmental investment opportunities (Target Completion: Dec 2019)
3. FEMA and CalOES Disaster Claiming to maximize County reimbursements for past and future disasters (Ongoing)

Ag + Open Space:

1. Take a lead role in Board Ad Hoc Committee, as developed
2. Develop a climate change program (Target Completion: 18-months)
3. Addressing climate change in all Ag + Open Space program areas including conservation planning, acquisition, and stewardship. Response to climate change is also included under Goal 1 Vital Lands Initiative.
4. Participate on the Watershed Task Force

****Goals 3 and 4 align with the Recovery & Resiliency Framework*

County Administrator's Office:

1. Reduce carbon emissions by promoting alternative forms of transportation for County employees. Will use employee survey and avoided Vehicle Miles Traveled (VMT) data to determine greenhouse gas impacts.

County Counsel - Natural Resources & Resiliency Practice Group:

1. Work with County departments and sister agencies to ensure ordinances and other legal documents necessary to advance the Board's climate action initiatives are in progress or completed.
2. Support implementation of climate resiliency actions in the Recovery & Resiliency Framework.
3. Provide input on climate related legislation and advocacy.

****Goal 2 aligns with the Recovery & Resiliency Framework*

Economic Development Board:

1. Hold a regional Climate Conference as recommended by Strategic Sonoma (Target Completion: 2020)
2. Ensure a sustainable/modular building curriculum is developed for the Regional Construction Training Center as recommended by Strategic Sonoma (Target Completion: 2020, pending grant approval - center is slated to serve 500 students yearly once operational)
3. Partner with the Small Business Development Center to launch "Boot Camps" for local sustainable businesses (Target Completion: 2020 - could serve 25 entrepreneurs/businesses per cohort; 2 cohorts yearly)
4. Potential crowdfunding platform for sustainable business concepts from "Boot Camp" graduates (Recommended by Strategic Sonoma, still under consideration)
5. Potential local "Fair Trade" certification for businesses that achieve environmental, labor, and community benchmarks (Still under consideration)

6. Eliminate all printed reports, guides and collateral

General Services:

1. Increase by 3% the number of SCEIP PACE financing consultations and resulting contracts for new construction that include energy, water, and power generation measures.
2. Following Judicial approval, launch SCEIP financing to include seismic strengthening and wildfire safety by (Target Completion: March 2020).
3. Continue to maintain Building Set Points to OSHA Guidelines (Heat to 68F, Cool to 76F) as approved by the Board in June 2018.
4. By 2015, reduce usage of plastic liners in recycling bins by 700,000 disposable liners annually through contract modification completed (Municipal Climate Action Plan (MCAP) goal).
5. Board adoption of the Municipal Climate Action Plan by June 2020.
6. Increase energy efficiency, solar, and water conservation consultations for post-fire rebuilds by 10%
7. Increase energy efficiency, solar, and water conservation consultations for post-fire rebuilds (in general) by 10%
8. Install rooftop PV on General Services Fleet Building by March 2020.
9. Soft launch Advanced Energy Center by third quarter FY 19/20 under Lead Locally contract with Sonoma Clean Power.
10. Transfer County Government Center electricity account to Sonoma Clean Power's EverGreen Service by January 2020.

**** Goals align with Recovery and Resiliency Framework, including Housing goals 1, 3, and 4.*

Information Systems Department:

1. Technology Alignment - support County department's efforts in climate resiliency priorities to improve our natural environments' drought tolerance, and provide flood attenuation while sustaining ecological diversity. Geographical Information Systems, Web Sites, and Social media applied to support planning, data collection, outreach, and community awareness.
2. Virtual Server Transition - continued efforts to replace remaining individual servers with virtual clusters which support hundreds of servers to improve utilization, scalability, and resilience while reduce power consumption. Database environments targeted for completion 2nd Quarter FY 20-21.
3. General Plan- reaffirm targets, establish new thresholds, and programmatic EIR.

**** Goals 1 and 2 align with the Recovery and Resiliency Framework.*

Permit Sonoma:

1. General Plan- reaffirm targets, establish new thresholds, and programmatic EIR
2. Airport Area Specific Plan- connection of jobs, housing, and transit, circulation network improvements with multi-modal focus
3. Springs Specific Plan- circulation network improvements with multi-modal focus, PDA (priority development area) focused housing growth, programmatic EIR. draft goals include:
 - i. Goal SC-1: Ensure that the Street Network is Designed to Provide Equally for the Needs of All Users, including Pedestrians, Bicyclists, Motorists, and Transit Riders.
 - ii. Goal SC-2: Create a Safe, Convenient, and Well-connected Pedestrian and Bicycle Circulation System with Generous Amenities that Encourage Walking and Cycling.
 - iii. Goal SC-3: Increase Transit Ridership in the Springs Area
4. Local Coastal Program- The local coastal plan update extensively discusses climate change and adaptation, particularly in the guise of sea level rise in the Public Safety Element, increased potential

risks and risk reduction for other hazards are discussed as well. The below program is the most “specific” example. The plan also reinforces the emissions reductions goals as adopted by the Board

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9. SB 743 Implementation- new procedures and guidelines for the measurement of VMT for development projects.
10. Building Code Update- Increased building efficiency standards.
11. Recreational and Cultural Events in Right of Way- zero waste provision, promotion of health and multi-modal travel behaviors.

Regional Parks:

1. Implement a Climate Decision Tool (Target Completion: July 2020)
2. Replace gas vehicles with full electric (Target: 3 vehicles by July 2020)
3. Replace gas generators with solar (Target: 3 generators by July 2020)
4. Change reporting locations for staff to reduce miles driven (Target Completion: March 2020)
5. Add EV charging stations at campgrounds (Target: 6 stations by December 2021)
6. Add solar panels to rentable cabins in campgrounds (Target Completion: December 2020)
7. Dramatically increase interpretation of climate change at parks and on parks social media channels (Target Completion: December 2020)
8. Quantify the carbon footprint of the parks system and measure improvements (Baseline: December 2020)

Sonoma Water Goals:

1. Regional Resilience Study (Target Completion: end of year 2020)
2. Prescribed Burn for manage wildfire hazards (Target Completion: Winter 19/20)
3. Floating Solar Program- under development
4. Aquifer Storage and Recovery-project underway with future projects in development

****Goals align with the Recovery and Resiliency Framework, especially in the areas of Community Preparedness and Natural Resources.*

Transportation and Public Works Goals:

1. Review of Construction Project management to adapt with more resilient materials and practices
2. Alternative sources of power for facilities and equipment
3. Enhance communication systems for quicker response time
4. Creation of a mobile procedures so as to adapt quicker to disasters

****All Goals support the Recovery and Resiliency Framework*

University of California Cooperative Extension:

1. Develop outreach materials for forest, oak woodland, and grassland owners, which addresses the economic and ecological management of vegetation for fire fuel reduction. Web-based tool kit developed will assist landowners in prioritizing and implementing best management practices.
2. Increase economic viability for dairies, vineyards and livestock industries, provide technical assistance on soil health, alternative manure management, etc. Will reduce greenhouse gas emissions and bring state funding opportunities to agriculture community.
3. Complete a disaster evacuation plan, with Animal Control, for livestock producers; for use statewide.
4. Implement programs that promote community-based, locally grown food in home, neighborhood and school settings, with a particular focus on minority and ethnic food diversity. Create and disseminate educational materials, in English and Spanish, on sustainable landscape practices and food gardening.
5. Lead the Sonoma County Food Recovery Coalition; increase food recovery and reduce food waste. Reduce greenhouse gas production through reduced food waste in landfills. Provide leadership in the emergency food assistance.
6. Lead and expand the Good Fire Alliance, increasing acceptance and application of prescribed fires on working landscapes.
7. Lead and expand efforts to increase the application of grazing as a management tool to reduce fire fuels and increase ecosystem health.

****Goals align with the Recovery and Resiliency Framework including, increased use of prescribed grazing and fire to reduce vegetation management; animal evacuation, home hardening collaborative efforts and ensuring a safe, supply of food in an emergency.*