



## SUMMARY REPORT

---

**Agenda Date:** 8/15/2023

---

**To:** Board of Directors, Sonoma County Water Agency  
**Department or Agency Name(s):** Sonoma County Water Agency  
**Staff Name and Phone Number:** Dale Roberts (707) 547-1979  
**Vote Requirement:** Majority  
**Supervisory District(s):** All

**Title:**

Sonoma Water Energy and Climate Resiliency Policy

**Recommended Action:**

Approve the updated Energy and Climate Resiliency Policy to replace Sonoma Water's previous Energy Policy and authorize and direct the General Manager to implement the Energy and Climate Resiliency Policy.

**Executive Summary:**

In 2011, Sonoma County Water Agency's (Sonoma Water) latest Energy Policy was approved by its Board of Directors and directed to pursue Carbon Free Water and collaborate on regional energy projects. Since that time, Sonoma Water has achieved a net carbon neutral power supply (Carbon Free Water), led regional renewable energy efforts, and begun to confront the effects of climate change as one of Sonoma Water's core functions. Sonoma Water staff recommend the Board approve an updated Energy Policy, now titled the "Energy and Climate Resiliency Policy." The new policy directs Sonoma Water to maintain its energy program with the new directive to continue to prepare its systems for climate change through continued investment in climate science and innovation; develop and implement climate resiliency strategies; and pursue energy and climate resiliency projects of regional benefit.

The proposed Energy and Climate Resiliency Policy is a formalization of programs and activities already underway at Sonoma Water. Thus, no new funding or staff is currently being requested to support the updated policy.

**Discussion:**

Sonoma Water has a special interest in energy and climate resiliency matters, as it relies on a healthy environment to perform its core functions and consumes significant electrical power in its base operations. In 2011, the Board approved an updated Energy Policy directing Sonoma Water to achieve Carbon Free Water and to collaborate on regional energy projects including investigating the feasibility of establishing a Community Choice Aggregation program. As a result of that directive, Sonoma Water and partners established Sonoma Clean Power in 2012. Sonoma Water achieved Carbon Free Water in 2015.

Since that time, our region has begun to directly confront the effects of climate change on our infrastructure, public safety, and natural resources. Sonoma Water has expanded its focus from climate mitigation (reduction of greenhouse gas emissions) to include climate resiliency (proactively preparing for the effects of climate change, or "adaptation").

In 2021, the Board approved Sonoma Water's Climate Adaptation Plan. The plan reviews climate-driven vulnerabilities to Sonoma Water's core functions; identifies projects, programs, and management actions to mitigate Sonoma Water's vulnerabilities while incorporating other community priorities; emphasizes continued collaborations and investments in climate science to support science-based decision making; and introduces a vision for continued updates as new information becomes available.

#### Updated Energy and Climate Resiliency Policy

The proposed updated Energy and Climate Resiliency Policy directs Sonoma Water to:

- Continue to pursue Carbon Free Water by developing and procuring renewable energy sources and promoting cost-effective water use efficiency measures;
- Invest in climate science and innovation;
- Develop and implement climate resiliency strategies, including those identified in the Climate Adaptation Plan such as winter-water use strategies like Forecast-Informed Reservoir Operations and on-farm recharge; repairing aging water transmission and wastewater infrastructure; and restoring ecological function in critical areas of the watershed to stabilize carbon stocks and protect water quality;
- Collaborate with low-income and communities of color to develop infrastructure planning processes that result in better outcomes for all members of our community; and
- Pursue energy and climate resiliency projects of regional benefit like the Advanced Quantitative Precipitation Index (AQPI), which will greatly improve flood forecasting for emergency response in the Bay Area region.

The proposed Energy and Climate Resiliency Policy formalizes programs and activities already underway at Sonoma Water and in partnership with County departments, premier research institutions, and other community partners. No new funding or staff is currently being requested to support the updated policy.

#### **Sonoma County Strategic Plan**

This item supports the Climate Action and Resiliency Pillar by directing Sonoma Water staff to continue working on shared climate resiliency programs in support of the County, Sonoma Water, and our partners.

This item directly supports the County's Five-year Strategic Plan and is aligned with the following pillar, goal, and objective.

#### **Pillar:** Climate Action and Resiliency

**Goal:** Goal 5: Maximize opportunities for mitigation of climate change and adaptation through land conservation work and land use policies. □

**Objective 1:** By 2025, update the County General Plan and other county/special district planning documents to incorporate policy language and identify areas within the County that have the potential to maximize carbon sequestration and provide opportunities for climate change adaptation. The focus of these actions will be to increase overall landscape and species resiliency, reduce the risk of fire and floods, and address sea level rise and biodiversity loss.

#### **Sonoma Water Strategic Plan Alignment:**

Climate Change, Goal 1: Continue improving our ability to respond and adapt to climate change.

The Energy and Climate Resiliency Policy empowers Sonoma Water to continue its commitment to providing

Carbon Free Water and working toward climate resiliency in all operations and infrastructure.

**Racial Equity:**

**Was this item identified as an opportunity to apply the Racial Equity Toolkit?**

Yes

Utilizing the Racial Equity Toolkit, published by the Government Alliance on Race and Equity, Program staff have expanded consideration of racial equity in decisions, including policies, practices, programs, and budgets. Staff recognizes the racial equity tool can help to develop strategies and actions that reduce racial inequities and improve success for underserved members of our community. Below are several questions adapted from the Toolkit provided by the County.

**Step 1: What Is Your Proposal And The Desired Results And Outcomes?**

In 2011, Sonoma Water's Board of Directors approved its current Energy Policy, thereby directing Sonoma Water to pursue Carbon Free Water for its operations and to collaborate on energy projects of regional benefit such as investigating the creation of a Community Choice Aggregation energy entity. This direction resulted in the formation of Sonoma Clean Power.

This proposal would revise Sonoma Water's current Energy Policy to form an Energy and Climate Resiliency Policy. Since 2011, Sonoma Water's activities have expanded beyond climate mitigation to include substantial resiliency planning. The revised policy is meant to bring the existing policy into accordance with our current programs and goals and does not call for near-term changes in staff allocation or budget prioritization. Under the proposed policy, Sonoma Water staff will maintain the provision of Carbon Free Water, maintain collaborations on regional energy projects, and develop and implement climate resiliency strategies to reduce system vulnerabilities to extreme weather associated with climate change.

The proposed Energy and Climate Resiliency Policy includes a commitment to climate equity, which is a new programmatic goal for Sonoma Water articulated in its 2022 Strategic Plan. The proposed policy revision is intended to shape Sonoma Water's growing climate portfolio by establishing climate equity as a core programmatic goal. The policy is high-level in nature. However, intended results include new considerations within our project development processes to better serve underrepresented communities of color, building strategic partnerships with community groups serving people who experience marginalization, and a forthcoming spatial analysis to evaluate how climate vulnerabilities within Sonoma Water's service area interact with indices of social vulnerability.

**Step 2: What Is The Data? What Does The Data Tell Us?**

The proposed Energy and Climate Resiliency Policy draws from down-scaled global climate models indicating a warming trend in our region over the 21st century with associated reductions in early and late wet season runoff, as well as increasing incidence of atmospheric rivers which will likely increase the magnitude or intensity of precipitation, leading to greater flood risk. Studies suggest we can anticipate an overall increase in the variability of precipitation, including more severe drought. For a selection of literature consulted, see:

- Dettinger M, Hidalgo H, Das T, Cayan D, Knowles N. 2009. Projections of potential flood regime changes in California. Public Interest Energy Research, California Energy Commission, Sacramento, CA. Available online at <http://www.energy.ca.gov/2009publications/CEC-500-2009-050/CEC-500-2009-050-D.PDF>
- Flint, L.E, and Flint, A.L. 2012a. Downscaling future climate scenarios to fine scales for hydrologic and

ecological modeling and analysis: Ecological Processes, v. 1, no. 1.

- Flint, L.E., and Flint, A.L. 2012b. Simulation of climate change in San Francisco Bay Basins, California: Case studies in the Russian River Valley and Santa Cruz Mountains: U.S. Geological Survey Scientific Investigations Report 2012-5132, 55 p.
- Flint et al. 2013. Fine-scale hydrologic modeling for regional landscape applications: the California Basin Characterization Model development and performance. Ecological Processes, 2:25
- Micheli, Elisabeth, Flint, Lorraine, Veloz, Sam, Johnson, Kelley, Heller, Nicole. 2016. Climate Ready North Bay Vulnerability Assessment Data Products - Sonoma County Water Agency, Technical Memorandum.
- Ralph, F. M., P. J. Neiman, G. A. Wick, S. I. Gutman, M. D. Dettinger, D. R. Cayan, and A. B. White. 2006. Flooding on California's Russian River: Role of atmospheric rivers, Geophys. Res. Lett., 33, L13801, doi:10.1029/2006GL026689

Sonoma Water conducted a series of Vulnerability and Risk Assessments for its Climate Adaptation Plan to assess interactions between increased climate hazards and the provision of Sonoma Water's core services. These assessments also inform the revised Energy and Climate Resiliency Policy.

All of Sonoma Water's service areas will be affected by the proposed policy revision. Those areas include:

- Residents of Sonoma and Marin Counties who receive potable water from Sonoma Water's contractors: This group includes most of Sonoma County, and therefore a wide variety of language, ethnic, economic, ability, and education contexts.
- Those who reside or work within funded flood zones (Flood Zones 1A, 2A, and 3A): This represents much of Santa Rosa, Cotati, Rohnert Park, Sebastopol, Petaluma, and Sonoma.
- Customers of Sonoma Water's sanitation districts and zones: This service area includes a wide mix of Sonoma County. Sonoma Water is particularly sensitive to vulnerabilities within the sanitation system in The Springs, a low-income Latinx community in Sonoma Valley, and the Russian River County Sanitation District, which serves economically disadvantaged communities in the lower Russian River.

The Portrait of Sonoma: 2021 Update inspired Sonoma Water to reflect on the varied health and wellbeing of our community members. As directed by its Strategic Plan, Sonoma Water will investigate the impact of unmitigated climate hazards on communities who have historically experienced marginalization. The proposed Energy and Climate Resiliency Policy reflects our commitment to climate equity.

### **Step 3: How Have Communities Been Engaged? Are There Opportunities To Expand Engagement?**

All community members identified in the previous question are expected to benefit from improved climate resiliency in our systems. It is possible that subsequent climate adaptation projects may cause benefits or burdens to specific community members. Sonoma Water's revised Energy and Climate Resiliency Policy directs intentional consideration of low-income and communities of color with the goal to proactively mitigate any disproportionate impacts during project development. Both systematically and on a project-by-project basis, Sonoma Water staff and leadership are committed to building meaningful partnerships with organizations who can help staff bridge the gap to better understand and ultimately meet the needs of vulnerable communities in our service area. Implementation of the Energy and Climate Resiliency Policy and the Climate Adaptation Plan will be guided by the language access and community engagement plans to be developed by the Office of Equity in fiscal year 2023-2024.

Additionally, Sonoma Water's climate science program produces cutting edge research that is made widely available to partner entities in our region. These data are a broad benefit to our community, and particularly to those populations most likely to experience vulnerabilities as a result of climate change.

**Step 4: What Are Your Strategies For Advancing Racial Equity?**

The proposed Energy and Climate Resiliency Policy acknowledges the disproportionate effects of climate change on low income and people of color in our community. Sonoma Water is committed to pursuing strategies for climate resiliency in partnership with community members likely to experience disproportionate impacts of climate change. We recognize this effort will require dedicated staff and a process of both systematic and meaningful engagement and project-by-project deliberation. By directing intentional consideration of low-income and communities of color, the revised Energy and Climate Resiliency Policy will improve the resilience of our whole community.

**Step 5: What Is Your Plan For Implementation? Describe Your Plan For Implementation.**

The proposed Energy and Climate Resiliency Policy empowers Sonoma Water to formalize its ongoing leadership on climate and dedicate staff resources to further reduce greenhouse gas emissions and embrace climate adaptation strategies. With this expanded policy direction, Sonoma Water will align its Climate Resiliency group with this relatively new and vital programmatic focus: addressing equity in core program areas. The policy is high-level in nature, however, intended results include new considerations within our project development pipeline to better serve underrepresented communities, building strategic partnerships with organizations serving communities who have been marginalized, and a forthcoming spatial analysis to evaluate equity and areas for improvement across our core service areas. This challenge will be met in close collaboration with Sonoma Water's core equity team and key partners in the County family who are similarly committed to climate action, resiliency, and equity.

**Is Your Plan:**

- ☒ Realistic?
- ☐ Adequately funded?
- ☐ Adequately resourced with personnel?
- ☐ Adequately resourced with mechanisms to ensure successful implementation and enforcement?
- ☐ Adequately resourced to ensure ongoing data collection, public reporting, and community engagement?

If the answer to any of these questions is "no", what resources or actions are needed?

Sonoma Water's Climate Resiliency group intends to conduct a strategic review of our climate programs to bring equity into the center of our decision-making processes. That review will include recommendations to leadership for key investments necessary to ensure the success of the program.

**Step 6: How will you ensure accountability, communicate, and evaluate results?**

- 1) How will impacts be documented and evaluated? Are you achieving the anticipated outcomes? Are you having an impact in the community?
- 2) What are your messages and communication strategies that will help advance racial equity?
- 3) How will you continue to partner and deepen relationships with communities to make sure your work to advance racial equity is working and sustainable for the long-haul?

The revised Energy and Climate Resiliency Policy directs Sonoma Water staff to maintain the provision of Carbon Free Water; continue to invest in climate science and innovation; develop and implement climate

resiliency strategies; and pursue energy and climate resiliency projects of regional benefit.

Metrics of evaluation:

- 1) Maintenance of Carbon Free Water
- 2) Papers published, research partnerships developed; climate science effectively operationalized through our programs and project designs
  - a) The expansion of our research portfolio to include climate equity considerations
- 3) Implementation of our Climate Adaptation Plan: projects completed; project successes
  - a) Revision of our Climate Adaptation Plan every 5-10 years, with a future focus on equity
- 4) Regional partnerships brokered and effectiveness of projects completed
- 5) Community voices brought into project planning, design, and implementation
- 6) The resilience of Sonoma Water's systems in the face of climate change, as evidenced by continuous uninterrupted operation during and after extreme events such as floods, droughts, and wildfires

**Prior Board Actions:**

10/29/2021: Approved Sonoma County Water Agency's Climate Adaptation Plan.

03/22/2011 Approved an updated Energy Policy and directed the General Manager to evaluate the feasibility of a Community Choice Aggregation program. Sonoma Clean Power was formed shortly thereafter.

**FISCAL SUMMARY**

<b>Expenditures</b>	<b>FY 22-23 Adopted</b>	<b>FY 23-24 Projected</b>	<b>FY 24-25 Projected</b>
Budgeted Expenses			
Additional Appropriation Requested			
<b>Total Expenditures</b>			
<b>Funding Sources</b>			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
Contingencies			
<b>Total Sources</b>			

**Narrative Explanation of Fiscal Impacts:**

The proposed Energy and Climate Resiliency Policy is a formalization of programs and activities already underway at Sonoma Water. Thus, no new funding or staff is currently being requested to support the updated policy.

<b>Staffing Impacts:</b>			
<b>Position Title (Payroll Classification)</b>	<b>Monthly Salary Range (A-I Step)</b>	<b>Additions (Number)</b>	<b>Deletions (Number)</b>

---

**Agenda Date:** 8/15/2023

---


**Narrative Explanation of Staffing Impacts (If Required):**

N/A

**Attachments:**

Attachment 1 Updated Energy and Climate Resiliency Policy  
PowerPoint

**Related Items “On File” with the Clerk of the Board:**

N/A