

May 29, 2015

Honorable Bob Wieckowski  
Chair, Senate Environmental Quality Committee  
State Capitol, Room 2205  
Sacramento, CA 95814

RE: Testimony at special hearing regarding adaptation - May 29, 2015

Dear Chairman Wieckowski:

Thank you for the opportunity to speak with you today about local government's role in addressing climate change impacts, our adaptation priorities and our on-going planning efforts in Sonoma County.

The Sonoma County Transportation Authority and the Regional Climate Protection Authority are two local government entities that serve as long term planning and funding agencies fostering collaboration among all of the local government bodies in Sonoma County. While many of you may be familiar with the Transportation Authority model – most all counties have a Congestion Management Agency or Transportation Authority – the Climate Protection Authority is a unique governance structure that Sonoma County's jurisdiction sought to create in 2009 in order to better address climate change and the local government response to reducing GHG emissions.

Sonoma County communities had been working on climate change in various ways since the early 2000s, by adopting GHG reduction targets, developing municipal climate action plans, and pursuing individual projects and programs. However, many of these efforts were being done one agency or jurisdiction at a time, and only as funding allowed. The idea for the RCPA emerged in the late 2000s, after the passage of AB 32 and the stimulus funding directed to energy efficiency and conservation block grants.

It became apparent that the state and federal landscape for climate policy and funding was evolving rapidly. It was also apparent that our jurisdictions could better navigate the challenges created by climate change by working together. The RCPA was created to mirror the model of the transportation authority – to pool resources, maximize the efficiency of programs, and create structured platforms for collaboration. Our agencies also serve as a conduit for funding for implementation on a local level and as a liaison to state and federal agencies.



The RCPA is currently in the process of writing Climate Action 2020 - a community climate action plan focused on the implementation of reduction strategies; but it also includes adaptation. One of the first elements we completed in the planning effort was a hazards and vulnerabilities assessment ([http://sctainfo.org/pdf/Climate%20Ready Hazards Vulnerabilities.pdf](http://sctainfo.org/pdf/Climate%20Ready%20Hazards%20Vulnerabilities.pdf)). We also adopted a list of adaptation goals and objectives that was vetted among a diverse group of 80 community leaders at a Climate Ready Roadmap Workshop last week.

Reducing GHG emissions is our central focus but we recognize there will be new challenges brought about by climate change and we as local governments need to be informed on what to expect and how we might best be able to plan; especially since we are the entities responsible for protecting public health and safety, for building and operating critical infrastructure, and for conducting long range community planning. The good news is that much of what we anticipate happening is a more intensive version of vulnerabilities we currently handle: flood events, heat waves, droughts. The bad news is we will be seeing more of them and with greater intensity.

There are a number of Statewide tools that can help guide efforts related to planning for resilient communities but our vulnerabilities study takes it to a more granular level in order to understand what we might expect in the future in our own backyard.

Our assessment focuses on three areas of impact: people and social systems, the built environment and natural and working lands.

The impacts we expect in Sonoma County include:

- More extreme heat events
- Longer and more frequent droughts
- Greater frequency and intensity of wildfires
- Fewer nights that freeze
- More variable rain
- Bigger and more frequent floods
- More frequent inundation, increased erosion and saltwater intrusion

However I can't emphasize enough that there is no one size solution to adaptation. The impacts of rising temperatures and more volatile precipitation are very dependent upon micro-climates, terrain, geology, demographics, politics, and history.

The risks, uncertainties and volatility associated with climate change pose potentially high costs to communities in terms of public health, safety, economic vitality, security and quality of life. While our models may not be perfect in their ability to predict the precise degree of climate impacts,

preparing now will yield more effective, cost-effective, and flexible strategies than delaying action and reacting to each one off event.

Also, using historic data to predict future conditions is no longer adequate for long term planning or policy making. Local jurisdictions should have the tools to predict climate impacts in their community in order to best plan for the future.

Sonoma County is fortunate to be the beneficiary of a number of cutting edge efforts seeking to understand climate trends. We have been able to pull together research collaboratives, NGOs, academic institutions, and local governments to help refine climate projections and make them more relevant to local decision-making.

Our local partners include: Sonoma County Water Agency (SCWA), Sonoma County Agricultural Preservation and Open Space District (SCAPOS), Sonoma Clean Power, all nine of our cities, County of Sonoma, and a science based collaborative called the North Bay Climate Adaptation Initiative.

We also have great partners at the regional, State and federal level on a number of discrete planning efforts such as:

The Hwy 37 corridor planning with UC Davis, Caltrans, and MTC (<http://hwy37.ucdavis.edu/project/highway-37-stewardship-study>) is assessing how this infrastructure and its bay lands surroundings will be impacted by rising sea levels but also how best to address needed congestion relief and environmental enhancements in a critical wetlands area.

The Sonoma County Vegetation Mapping and LiDAR project (<http://sonomavegmap.org/>) is a cutting edge example of work to characterize the topographic, physical and biotic features in Sonoma County that provide valuable ecosystem services such as buffer zones, groundwater recharge, and carbon sequestration. Partners in this effort include SCWA, SCAPOS, California Department of Fish and Wildlife, the United States Geological Survey, The Nature Conservancy, the City of Petaluma, NASA, and the University of Maryland.

In addition, the Center for Western Weather and Water Extremes (<http://woodland.ucsd.edu/?cat=9>) is working to improve reservoir operations for flood control and water supply by improving our ability to predict atmospheric river events. Partners include NASA, Scripps, NOAA and the SCWA.

Local government is critical to addressing climate adaptation. Site-specific risks matter tremendously for land use and infrastructure decisions. Impacts and actions related to adaptation are truly local but they will affect regional and statewide systems.

What do we hope to achieve in the future?

First and foremost is the need to daylight the information in the vulnerabilities assessment. Sharing the data with the agriculture industry, business groups, emergency responders, decision makers and thought leaders is critical to building understanding as well as coalitions that can help respond to protect members of our community and valuable community assets.

At our workshop on building a climate ready roadmap, it was apparent to me that many people are concerned about significant changes to our way of life. The agricultural identity of Sonoma County is deep rooted, and concerns over water supply, crop viability, biodiversity, pests, and fire risk seem at the forefront for many.

Equity is also of great concern. Those members of our community most vulnerable to climate change often lack the resources to respond, even in finding the time to participate in conversations about how we address the issue as a whole community.

Economic disruptions represent an overall concern. Should infrastructure, working lands or social services be overburdened or overly disrupted due to climate related events, the reliability of our economy suffers. Diminishing the manner in which we conduct business can take a personal toll to employees and employers but it also harms the overall economy of the State and thus our State budget. How we identify and quantify the costs of NOT adapting to climate change is critical to demonstrating why we must take action now.

Another concern is limited local resources for data, planning and implementation. While the RCPA is a powerful model for pooling resources, the challenge to prepare for climate change at a local level requires more support than we can provide with our two full time staff.

Institutionalizing knowledge of local risks in all jurisdictions, in many different departments could entail a full time strategy to educate planners, engineers, emergency responders and public health workers. It should also put useful data products in their hands, facilitate scenario planning and design criteria revisions, and develop public communications tools to build community support for the trade-offs that may need to be made to prepare for local climate impacts

We believe the State's investment of funding to reduce emissions and prepare for climate change should be flexible enough to afford creative, opportunistic investments that are specific to local needs. What works in Sonoma County may not work in Fresno or Arcata or Long Beach.

However across communities as disparate as those, there are likely to be common themes. Collective impact strategies that pool resources around shared goals will be increasingly important since climate adaptation objectives overlap completely with many sector specific goals such as health, water, and food systems. To the extent possible, the State should remove barriers or criteria that constrain implementation funding. More sustainable financing strategies could evolve to replace subsidies and incentives. The State may be able to play a role in facilitating better access to capital – both public and private – to implement climate adaptation projects.

We must also invest more in capacity building – through education and funding – that enables staff and decision makers to understand how their responsibilities are changing. Lastly, all public sector leadership would benefit from tools to help them better understand the economic risks to their community of doing nothing on climate change. Or more positively, to help them understand the return on investments from early investments to reduce and respond to climate impacts.

Sonoma and the RCPA aspires to be a R&D center for local actions that compliment state, federal, and private sector action to prove that success in fighting climate change is not only possible but profitable. Thank you for the opportunity to share our thoughts with you on climate adaptation and the role of local government.

Sincerely,

A handwritten signature in cursive script that reads "Suzanne Smith".

Suzanne Smith  
Executive Director, SCTA/RCPA