

San Mateo County Climate Adaptation/Resilience Snapshot
Compiled by the Bay Area Climate & Energy Resilience Project (BACERP)
March 2014

This summary memo is based on input from San Mateo County climate stakeholders. The information was gathered via phone, email, web search, and an in-person group meeting co-hosted by San Mateo County in November 2013. The information is presented in four sections:

- County-Level “Spotlight” Adaptation & Resilience Initiatives
- Climate Planning Activities
- Current Structure for Coordination Among Cities
- Resources and Assistance To Accelerate Action

I. County-Level “Spotlight” Adaptation & Resilience Initiatives

Across the Bay Area, government, non-profit and private sector stakeholders are developing and implementing programs that address climate impacts (e.g., sea level rise, extreme storms, fire, heat) and build community resilience. Some are called “climate adaptation” projects, while others focus on health, transportation, or land conservation, but provide substantial climate adaptation or resilience co-benefits.

Whatever they are called, these efforts are increasingly mainstreaming climate issues into community planning and making our cities more prepared for the physical, economic, and social impacts of climate change. Importantly, a number of these programs can provide a wonderful double-benefit, by building local resilience AND reducing greenhouse gas emissions.

For example, in San Mateo County:

- East Palo Alto is working with Cal-Fire to expand its tree canopy as both a flood protection and a GHG reduction measure.
- The Grand Boulevard Initiative is building community resilience by reducing energy use, promoting healthy activities, and bolstering local economies.
- The County’s Office of Emergency Services has developed plans for dealing with heat, flooding, fire and other natural disasters that are projected to increase as climate change worsens over the next few decades.
- To reduce auto dependency and increase mobility, Caltrain, C/CAG, and other partners fund and operate an extensive system of last mile shuttles linking train stations with work centers.
- City of Burlingame passed an aggressive green building ordinance that will create resiliency by reducing energy dependence and insulating businesses against future price shocks.
- A collaborative effort developed the comprehensive San Mateo Energy Strategy 2012 which addressed 1) the increasing financial costs of energy

- and water, 2) the impact that energy infrastructure on local communities, and 3) the increasing concern about climate change and its effects.
- The nonprofit *Get Healthy San Mateo* works collaboratively with individuals and organizations in the County to develop strategies that will reduce health risks related to unhealthy eating and a lack of physical activity.

At the same time, there are a growing number of region-wide, climate-related initiatives such as Plan Bay Area, the Bay Area Ecosystems Climate Change Consortium, PG&E's infrastructure protection work, the Integrated Regional Water Management Plan, TBC3's fine-scale hydrology mapping for land managers, the Bay Area Council's extreme storm study, Bay Localize's Community Resilience Toolkit 2.0, BayREN (energy efficiency), Cal-BRACE (health), and the Baylands Ecosystem Habitat Goals Project. (These regional efforts are outside the focus of this county-level report.)

Within this broad and growing climate context, we have selected 5 San Mateo climate adaptation and resilience initiatives to "spotlight" as notable examples of *county-level innovation and leadership*. These are described below with the hope that they will inspire and inform stakeholders in counties across the region. (Note: For accuracy, we have used language from project web sites where possible.)

Web links are provided for each spotlight initiative. To learn more, including project contact info, email the BACERP staff — Bruce@bayareaajpc.net or Aleka@bayareaajpec.net.

San Mateo County Regionally Integrated Climate Action Planning Suite (RICAPS)

C/CAG leadership and expert assistance makes climate planning more effective

In San Mateo County, each city develops its own Climate Action Plan using a special set of tools developed by the City and County Association of Governments (C/CAG) in conjunction with KEMA Inc. and Hara. This unique and effective approach has been funded by grants from the Bay Area Air Quality Management District (BAAQMD) and Pacific Gas and Electric Company (PG&E) and C/CAG. Climate action plans developed with these tools help cities meet BAAQMD's CEQA guidelines for a Qualified Greenhouse Gas Reduction Strategy. Sea level rise, heat, and other climate impacts are included in the climate adaptation chapter of the plan template. C/CAG and its consultants also provide technical assistance to the cities to complement the CAP tools.

San Mateo County Sea Level Rise/Adaptation Workshops

Leadership to convene partners and raise awareness about San Mateo County's high risk from sea level rise

San Mateo County has held two adaptation workshops to bring together all 20 cities to understand climate risks for their areas and begin strategy discussions. The first workshop was held in June 2013 and featured speakers from UC Berkeley, the Joint

Policy Committee, and the State of California. City representatives and other stakeholders identified and discussed their top needs for information, guidance, and best practices.

The second workshop in December focused on sea level rise and drew a large crowd of interested stakeholders. “Meeting the Challenges of Sea Level Rise in San Mateo County” featured Congresswoman Jackie Speier, Assemblyman Rich Gordon, Supervisor Dave Pine, author John Englander, as well as panelists from FEMA, the Army Corps of Engineers, SFO, BCDC, and the Coastal Conservancy. The experts presented information that contributed to the overall consensus that the sea level is indeed rising and that it's not as important to determine when, but rather how the region can protect itself. With 240 square miles of filled land and 1,100 miles of California coastline, San Mateo County is among the most at risk to flooding. A follow up workshop on similar issues will be held in the spring of 2014.

San Franciscquito Creek Joint Powers Authority/Flood Control 2.0

Five public entities turning a liability into a shared asset with multiple benefits

Following years of effort to address environmental issues, and a 45-year flood in 1998 that damaged approximately 1,700 properties, five local agencies from two counties—the cities of Palo Alto, Menlo Park, and East Palo Alto, the County of San Mateo, and the Santa Clara Valley Water District—joined together to create a new government agency, the San Franciscquito Creek Joint Powers Authority (SFCJPA). Elected officials represent these jurisdictions on the SFCJPA Board. The JPA employs an executive director and two professional staff, with much of its project work being done by consultants.

The SFCJPA project aims to reduce flood risks in East Palo Alto and Palo Alto along a flood-prone section of the creek from Highway 101 to San Francisco Bay. Project strategies include:

- Widening the creek to convey a 100-year storm flow, coupled with a 100-year tide and 26 inches of sea level rise.
- Excavating sediment built up over several decades and replace it with a marsh plain with higher value vegetation that is naturally more self-sustaining.
- Selectively reducing the height of an abandoned levee to allow high creek flows into the Palo Alto Bay lands north of the Creek, thus reinstating a natural connection to the Bay for the first time in over 75 years.
- In the area confined by homes and businesses, constructing floodwalls aligned to Caltrans’ Highway 101 bridge over the creek.

The project will also provide the capacity needed for upstream flood protection projects, enhance the habitat of three endangered species in the area, and improve Bay trails and outdoor education opportunities. San Franciscquito Creek is also part of the three-creek project, Flood Control 2.0, with additional partners Bay

Conservation and Development Commission (BCDC) and the San Francisco Estuary Partnership (SFEP).

San Mateo County Climate Action Plan: Vulnerability Assessment

An initial review of the county's vulnerabilities to get the ball rolling

The San Mateo County vulnerability assessment was conducted in 2011 as a collaborative effort between ICLEI - Local Governments for Sustainability, PMC, San Mateo County's Planning and Building Department, as well as the San Mateo County Vulnerability Assessment Working Group.

The assessment addresses the impacts of climate change on public health, water supply, and agriculture (including farms and managed timber) due to temperature and precipitation changes; wildfires; and the impacts of sea level rise on built infrastructure and ecosystems. The Working Group consisted of staff representatives from County departments including Parks and Recreation, Planning, Public Health, and Public Works, as well as external experts and stakeholders including BCDC, the California Coastal Commission, Cal-FIRE, and PG&E.

2013 San Mateo County Energy Efficiency Climate Action Plan

300+ page guide to reducing GHGs, building resilience and addressing adaptation

San Mateo County developed the Energy Efficiency Climate Action Plan (EECAP) for the county's unincorporated areas with four goals:

- Reduce fossil fuel emissions;
- Reduce the total energy use of the eligible entities;
- Improve energy efficiency in the transportation, building, and other appropriate sectors; and
- Create and retain jobs.

Chapter 6 of the EECAP features a set of strategies to address climate adaptation. This work builds on the vulnerability assessment conducted in 2011. The EECAP recognizes that climate change has the potential to seriously impact county residents and businesses. The EECAP includes assessment information and adaptation actions tailored to six sectors:

- Agriculture and forestry
- The built environment
- Natural resources
- Fire
- Public health
- Water

The EECAP builds on the County's groundbreaking *Energy Strategy 2012*, which was developed by the San Mateo Utilities Sustainability Task Force, an ad-hoc energy-working group of the Congestion Management and Environmental Quality Committee.

II. Climate Planning Activities

A. Climate Action Plans

Climate Action Plans (CAP's), completed by more than 40 Bay Area cities, set goals and strategies for greenhouse gas (GHG) emissions reduction. Recently, some cities have also begun to include climate adaptation strategies in their CAP's that address heat, sea level rise, extreme storms, higher fire risk, and other climate impacts. The chart below provides key information on San Mateo County climate action plans.

Climate Action Planning Activity

City/Town	Adopted CAP	GHG Reduction Goal	Adaptation Section in Cap
Atherton	No	-	-
Belmont	No	-	-
Brisbane	No	-	-
Burlingame	Yes	15% below 2005 levels by 2020	Includes adaptation chapter with specific strategies for local and regional action ¹
Colma	Yes	15% below 2005 levels by 2020	Includes adaptation chapter with specific strategies for local and regional action ²
Daly City	No	-	-
East Palo Alto	Yes	15% below 2005 levels by 2020	Includes list of local climate impacts and stresses need for monitoring and preparation ³
Foster City	In Progress	-	-
Half Moon Bay	No	-	-
Hillsborough	Yes	-	Includes chapter on adaptation and recommends evaluation of climate impacts and vulnerabilities ⁴
Menlo Park	Yes	27% below 2005 levels by 2020	-
Millbrae	No	15% below 2005 levels by 2020 ⁵	-

¹ <http://www.burlingame.org/Modules/ShowDocument.aspx?documentid=5458>

² http://www.colma.ca.gov/index.php?option=com_content&view=article&id=265&Itemid=206

³ http://dreamsofacity.pbworks.com/f/1st_Draft_Climate_Action_Plan.pdf

⁴ <http://www.hillsborough.net/civica/filebank/blobload.asp?BlobID=4121>

⁵ Adopted by Resolution 09-68

Pacifica	No	-	-
Portola Valley	No	-	-
Redwood City	Yes	15% below 2005 levels by 2020	Includes chapter section and appendix on adaptation, lists steps for effective adaptation planning and adaptation strategies and measures ⁶ .
San Bruno	No	-	-
San Carlos	Yes	15% below 2005 levels by 2020	Includes adaption section with detailed potential strategies and specific focus on sea level rise
San Mateo	Yes	15% below 2006 levels by 2020	-
South San Francisco	No	-	-
Woodside	No	-	-
County ⁷ (municipal) ⁸	Yes	7% below 2005 levels by 2020 and 15% below 2005 levels by 2035	Includes appendix on adaptation, lists steps for effective adaptation planning and recommends specific strategies and measures ⁹

B. Other Climate Planning

The San Mateo County General Plan (2013) includes a 30-page Energy and Climate Element that outlines a GHG emissions inventory of the County unincorporated area as well as mitigation and adaptation goals, policies and programs.

III. Current Structure for Coordination Among Cities

San Mateo County provides an on-going structure for cities to work together through the RICAPS program (see Section I).

⁶ <http://www.redwoodcity.org/ClimateActionPlan.pdf>

⁷ Community County CAP sets a goal of 17% below 2005 levels by 2020

⁸ The county of San Mateo also has a recently released an Energy Efficiency CAP (EECAP): http://www.co.sanmateo.ca.us/planning/rechargesmc/pdf/docs/SanMateoCounty_EECAP_FINAL_06-04-2013.pdf

⁹ http://www.co.sanmateo.ca.us/Attachments/greenportal/PDFs/SMC_LGO_Climate%20Action%20Plan.pdf

IV. Resources and Assistance to Accelerate Action

BACERP staff asked San Mateo stakeholders to identify and discuss what services or products would be most helpful to advancing their climate work. This could include assistance and resources provided by a proposed regional climate adaptation “hub.” San Mateo stakeholder input is summarized below (grouped but unranked).

Note: The bold headings describe common themes from the stakeholder discussions. The bulleted items are opinions expressed by individuals.

RICAPS program structure has been VERY helpful—help us to sustain it.

- RICAPS has been incredibly helpful — good model for other counties.
- City of Colma would not have developed a CAP without the RICAPS tools and support. The most helpful aspect of the program is the “menu of measures” provided in the template.
- The menu of measures has been very helpful for the city of Menlo Park – although the city had already created a CAP prior to joining RICAPS, tools like the measures have enabled Menlo Park to learn from other cities and improve our plan.
- Big cities were early adopters of RICAPS. However, San Mateo County has many smaller cities – this is why the tools and program are so important.
- The RICAPS monthly meetings have been really helpful and have given KEMA the opportunity to provide “office hours” for city staff while also providing structure and consistent deadlines for cities.
- Although transportation actions and emissions are included in city CAPs, this sector would be more effectively addressed on a regional level. Smaller cities do not have the resources for transportation and there is too much overlap between cities.

Climate planning guidelines or mandates from the state would advance our work at the local level.

- Would be helpful for the state to provide guidelines for what a regional/countywide adaptation plan should include. However, an adaptation plan doesn’t have to be a whole new plan – could be incorporated into existing plans or be a “plan of plans”.

- Cities work on mandates – without a mandate, implementation of CAPs and adaptation plans is not rising to the level of importance that it needs to.
- Would be helpful to have more guidance on best practices/policy options for adaptation planning. Cities don't know where to start or which policy options to consider.
- Communities want to have their voices heard – adaptation planning mandates should take this into account and allow for local flexibility.
- There is a need to map existing mandates to better understand what additional measures might be needed for adaptation planning.
- Need more clarity from the state on Title 24¹⁰ and how cities should be planning/responding to new regulations.

Help build political support for adaptation and resilience work.

- Political support will only be gained if you also engage citizens at the grassroots level.
- The people who are not at RICAPS meetings have the most need for additional political support for this work. Cities need help convincing department directors and elected officials that climate action planning is not completely separate from all other work.
- To gain political support, it is important to make sure that we don't "redo" the story – need to know what is already out there and make messaging/outreach consistent.
- The message needs to be delivered by trusted members from the community. In order to minimize language barriers, the message should be tailored and translated for non-native English speaking communities.
- KEMA put together a position paper for staff to use with RICAPS to help build support for the program. Very helpful. Need more of this kind of assistance.
- Need to tie adaptation and GHG reduction work into *existing* mandates – it's most often the same person at a city level that is doing this work and tying these together will build political support.

¹⁰ <http://www.energy.ca.gov/title24/>

- More groundwork needs to be done with vulnerable communities prior to implementing climate programs and setting goals – essential to understand specific needs and resources within each community.
- Who the message is coming from as well as the timing of when it is promoted are keys to building political support – strategic timing is crucial.
- Cities and counties need to better understand how we can use Community Based Social Marketing¹¹ to promote the policies and programs that will help us reach climate goals. We are currently not being as sophisticated about public outreach as we should be – cities need access to external expertise on this issue.

Identifying and creating funding streams for local agencies that are accessible and sustainable

- Our citizens are well aware of climate change – the challenge for us is implementation. We are currently talking with city council about developing funding options for this work.
- Identifying and securing funding is great, but it's important to be very conscious of the “strings” attached to specific funding sources. For many cities, reporting and other requirements are so extensive that it's not worth it unless the grant is fairly large (at least \$100,000).
- Agree that funding requirements should be well understood before accepting – specifically, cities and counties also need to be aware of matching fund requirements as this often makes grant opportunities unrealistic for cities to pursue.
- Given funding constraints, providing technical assistance from a (funded) third-party would be really helpful.
- PG&E now has nine specific task forces on different topics that have been helpful for cities to engage with – the Hub could expand on this issue specific assistance.
- Our cities are mostly small and in need of additional staff capacity.

Get Insurance industry more involved in adaptation

- We have been in multiple meetings/discussions where the role of the insurance industry in adaptation planning has come up – surprised that this

¹¹ <http://www.cbsm.com/pages/guide/preface/>

industry hasn't been more involved as this will be a big issue and there is a need to engage them in discussions now.

- Some cities have been very careful to ensure that their projects don't activate a negative response from the insurance industry - this is likely holding some cities back.

Assistance with energy projects—that's something we can do well in cities

- It would be helpful to review outcomes of programs like Energy Upgrade California to assess progress and make improvements.
- Any assistance implementing energy related projects/programs/policies would be helpful – specifically, would like to be able to apply more localized approaches.
- Community Emissions Data – the state has this information and could be providing it to all municipalities but are not currently doing so. Getting the state to compile and share this information annually would be very helpful on a number of levels, but especially in terms of reducing city staff time which could be refocused on actual implementation.
- The state developed the Cal-Adapt tool but few people in cities know about it or use it. You are on your own as opposed to RICAPS which was especially helpful because the program provides tools AND technical assistance and guidance to use the tools.

Focus and Tailor Outreach and Educational Efforts to the Most Vulnerable Communities

- We need a greater emphasis on climate adaptation/resilience outreach and education for non-English speakers. This should be achieved through community-based, culturally relevant messaging delivered by trusted community champions.
- More groundwork needs to be done with vulnerable communities prior to implementing climate programs and setting goals – essential to understand specific needs and resources within each community.
- We need to develop specific responses to help the most vulnerable communities impacted by high levels of environmental pollution. We should focus on air and ground water quality and mitigating risks to seniors, children and people of color.

- We should follow best practice models of community outreach and education (i.e. *Promoters de Salud*¹²). The reason why *Promotores de Salud* have been so successful in engaging community members is they have a close understanding of the communities they serve and often share the same language, culture or socio-economic class.
- We should engage community-based organizations as an instrument to conduct outreach and to develop and support spokespeople and community advocates to actively participate in climate change policy discussions.
- Access to information on climate change impacts and climate adaptation strategies should be made available through educational institutions and community based organizations (such as community colleges and community health centers). We should invest in training and education for young adults interested in climate adaptation/resilience and encourage them to take leadership roles in these efforts.

V. Participants

We thank the following San Mateo County stakeholders who provided their valuable time and smart thinking:

- Lori Burns, Human Resources Manager, Town of Colma
- Leslie Carmichael, Planning Manager, Foster City
- Michael Closson, Consultant, Sierra Club
- Ed Cooney, Innovative Program Manager, CSG Consultants, Inc.
- Michelle Daher, Environmental Coordinator, City of East Palo Alto
- Sapna Dixit, Community Energy Manager, PG&E
- Rebecca Fotu, Environmental Programs Manager, City of Menlo Park
- Kevin Gardiner, Planning Manager, City of Burlingame
- Nathan Kinsey, DNV GL - Energy
- Kathy Kleinbaum, Senior Management Analyst, City of San Mateo
- Erica Kudyba, Resource Conservation Associate, County of San Mateo
- Ortensia Lopez, Executive Director, El Concilio of San Mateo County
- Stephen Mahaley, District Coordinator, Office of Emergency Services, County of San Mateo
- Joe McCluskey, Recycling Specialist, City of Burlingame
- Susan McCue, Consultant, City of South San Francisco
- Jeff Norris, District Coordinator, Office of Emergency Services, County of San Mateo

¹² The promoter model is founded in community engagement and education through local *Promoters de Salud* or community health workers. Through this model, local *Promoters de Salud* receive training in health prevention and health management. <http://minorityhealth.hhs.gov/templates/content.aspx?lvl=2&lvlid=207&ID=8930>

- Tara Peterson, Assistant to City Manager, City of San Carlos
- Steve Schmidt, Environmental Initiatives Committee Member, Town of Los Altos Hills
- Betty Seto, Sustainability Manager, DNV GL - Energy
- Matt Seubert, Senior Planner, County of San Mateo
- Kim Springer, Resource Conservation Program Manger, County of San Mateo
- Sandy Wong, Executive Director, City/County Association of Governments (C/CAG)
- Susan Wright, Resource Conservation Specialist, County of San Mateo