

## **SUMMARY OF FINDINGS**

This report provides “snapshots” of county-level climate adaptation and resilience initiatives in each of the nine Bay Area counties. The Bay Area Climate & Energy Resilience Project (BACERP) gathered the information from November 2013 to February 2014 through individual and group interviews, email correspondence, and web searches. BACERP is a project of the Bay Area Joint Policy Committee with funding support from the Kresge Foundation.

The goal of this BACERP effort is to better understand local and sub-regional projects and structures, and the barriers that Bay Area stakeholders are facing as they undertake adaptation planning. This intelligence will be extremely valuable in the eventual design of a long-term Bay Area adaptation and resilience *program* that integrates these innovative county-level initiatives with adaptation efforts by regional, state and federal actors.

While this report focuses on county-level initiatives, it is worth noting the increasing number of regional climate-related efforts 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 new 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. BACERP inventoried many of these region-wide programs in a 2013 report for the Kresge Foundation and the Joint Policy Committee.

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

Section I focuses on a selection of county-level efforts that we call “spotlight” projects that are notable for innovation, leadership, replicability, and potential impact. Bay Area local governments, special districts, regional agencies, and non-profit organizations are implementing these projects.

#### ***Flooding (sea level rise, extreme storms)***

The sub-regional initiatives spotlighted below are developing locally-specific solutions and providing valuable lessons learned:

1. Adapting to Rising Tides (Page 14)
2. Contra Costa County Flood Control Leadership (p. 28)
3. Flood Control 2.0 (p. 28)
4. Hayward Area Shoreline Planning Agency — Sea Level Rise Project (p. 15)
5. Marin County Coastal and Bay Flooding Projects [multiple web sites] (p. 41)
6. Napa River/Napa Creek Flood Protection Project (p. 54)
7. Port of San Francisco Sea Level Rise and Climate Adaptation Study (p. 67)
8. San Francisquito Creek Joint Powers Authority (p. 79, 94)
9. San Mateo County Sea Level Rise/Adaptation Workshops (p. 78)

10. [SF Baylands Restoration and Flood Protection Project](#) (p. 94)
11. [SF Mission Bay Vulnerability Assessment](#) (p. 68)
12. [SF Ocean Beach Master Plan for Sea Level Rise](#) (p. 68)
13. [Solano County Sea Level Rise Strategic Program](#) (p. 106)
14. [South Bay Salt Bay Pond Restoration Project](#) (p. 95)
15. [South San Francisco Bay Shoreline Study](#) (p. 95)
16. [State Route 37 Stewardship Study](#) (p. 55)
17. [Suisun Marsh Restoration Project](#) (p. 108)

### ***Water***

All of the Bay Area’s water supply agencies are assessing climate risks to their infrastructure and water supplies, and are implementing strategies to address both supply and demand. Five specific initiatives are spotlighted:

1. [Bay Area Regional Desalination Project](#) (p. 30)
2. [EBMUD Water and Energy Conservation Projects](#) (p. 17)
3. [Santa Clara Valley Water District Projects](#) (p. 93)
4. [SFPUC Upper Tuolumne River Flow & Climate Change Scenarios](#) (p. 68)
5. [Sonoma County Water Agency: Leadership & Projects](#) (p. 117)

### ***Energy***

Energy initiatives include both the protection of infrastructure and power generation from storms, heat, and sea level rise, as well as energy efficiency and local renewable power efforts that boost our resilience to energy shortages and price spikes. In the Bay Area, PG&E is leading considerable efforts to address the former while a number of county-level projects aim to reduce fossil fuel dependence. Seven county-level projects for the latter are spotlighted:

1. [Alameda County Santa Rita Jail Smart Grid](#) (p. 17)
2. [Marin Clean Energy](#) (p. 29, 40)
3. [Regional Renewable Energy Procurement Project \(R-REP\)](#) (p. 18)
4. [San Francisco Renewable Power Program](#) (p. 69)
5. [Solano County Wind and Solar Energy: Leadership and Planning](#) (p. 107)
6. [Sonoma Clean Power](#) (p. 118)
7. [Sustainable Napa County Energy Projects](#) (p. 56)

### ***Land: Natural Systems and Agriculture***

A number of collaborative projects are underway to better understand the climate risks to the Bay Area’s fabulous natural systems as well as to identify how these assets can sequester carbon and fight climate change. Spotlight projects include:

1. [Climate Change, Conservation & Land Use: Sonoma County Pilot Project](#) (p. 120)
2. [Marin Carbon Project](#) (p. 42)
3. [Napa Green: Sustainability Leadership in the Wine Industry](#) (p. 55)
4. [North Bay Climate Adaptation Initiative](#) (p. 118)
5. [Preparing for Climate Change with Scenarios: Marin Case Study](#) (p. 43)

6. [Sonoma County Veg Map](#) (p. 119)

### **Health**

County health departments and health advocates are beginning to marshal their resources to address climate change impacts on human health, often with a focus on highly vulnerable populations. Two climate projects are spotlighted below. In addition, health experts are working on active transportation, local food production, and other activities that have climate co-benefits.

1. [Contra Costa County Health Services: Climate Leadership](#) (p. 67))
2. [San Francisco Climate Ready Initiative](#) (p. 29)

### **Multiple Impacts and Sectors**

Some cities, counties and other entities have organized adaptation and resilience initiatives that cut across impacts and sectors. We spotlight the following:

1. [Benicia Climate Action Plan/Community Sustainability Commission](#) (p. 106)
2. [Berkeley Hazard Mitigation Plan](#) (p. 16)
1. [Contra Costa County Climate Leaders](#) (p. 30)
2. [Joint Venture Silicon Valley Public Sector Climate Task Force](#) (p. 95)
3. [Marin Climate & Energy Partnership](#) (p. 40)
4. [Napa Countywide Climate Action Framework](#) (p. 56)
5. [Oakland Climate Action Coalition](#) (p. 16)
6. [Rockefeller 100 Resilient Cities Challenge](#) (p. 18, 69)
7. [San Francisco Carbon Fund](#) (p. 68)
8. [San Jose Green Vision](#) (p. 93)
9. [San Mateo County Energy Efficiency Climate Action Plan](#) (p. 80)
10. [San Mateo County Climate Action Plan: Vulnerability Assessment](#) (p. 80)
11. [San Mateo County Regionally Integrated Climate Action Planning Suite](#) (p. 78)
12. [SF Adapt](#) (p. 66)
13. [Silicon Valley 2.0](#) (p. 92)
14. [Small Cities EPA Climate Showcase Grant](#) (p. 29)
15. [Solano Transportation Authority Leadership: Climate Action Plans](#) (p. 107)
16. [Sonoma Climate Action 2020 Plan](#) (p. 119)
17. [Sonoma Climate Protection Campaign](#) (p. 117)
18. [Sonoma Regional Climate Protection Authority](#) (p. 116)
19. [West Oakland Environmental Indicators Project](#) (p. 17)

## **II. Climate Planning Activities**

40+ cities and counties in the Bay Area have completed Climate Action Plans (CAPs). (See county charts in each summary.) Climate action plans now cover 100% of the cities in two counties—Alameda County and Sonoma County.

While city/county climate action plans focus primarily on greenhouse gas emissions reduction, a number of these plans now include adaptation activities. Examples

include plans done by Fremont, El Cerrito, Burlingame, and Oakland. Plans completed in the last few years are more likely to include adaptation strategies. (See county charts in each summary.)

A small but growing list of cities now include climate in general plans, hazard mitigation plans, and other existing official planning processes. Examples include general plans for San Jose, San Mateo County, Marin County, Richmond and Pinole, as well as hazard mitigation plans in Berkeley and San Francisco.

### III. County-level Structures for Coordination Among Cities

We have identified ten on-going structures that bring together cities for climate/energy planning. These structures vary widely, but all are providing valuable opportunities for collaboration within a given county or sub-region.

1. [Alameda County Energy Council Joint Powers Authority](#) (p. 20)
2. [Contra Costa County Climate Leaders](#) (p. 30)
3. [Joint Venture Silicon Valley Public Sector Climate Task Force](#) (p. 95)
4. [Marin Climate & Energy Partnership](#) (p. 40)
5. [San Mateo County Regionally Integrated Climate Action Planning Suite](#) (p. 78)
6. [SF Adapt](#) (among city/county departments) (p. 66)
7. [Silicon Valley 2.0 Working Group](#) (p. 92)
8. [Solano Transportation Authority](#) (p. 107)
9. [Sonoma Climate Protection Campaign](#) (p. 117)
10. [Sonoma Regional Climate Protection Authority](#) (p. 116)

### IV. Resources and Assistance to Accelerate Bay Area Action

Stakeholders report a range of barriers and a set of actions needed to accelerate Bay Area progress on adaptation and resilience. The proposed actions could be implemented by various Bay Area institutions and collaboratives.

Major themes from the stakeholder discussions include:

#### **Move from Individual Projects to Coordinated Bay Area-Wide Action**

- Identify the “accelerants”—e.g., insurance issues, state mandates, business community demands—to address why cities and counties would act at the speed and scale required.
- Move climate adaptation planning into mainstream planning by integrating it into general plans, hazard mitigation plans, and capital improvement plans that already command attention. Show that climate planning is not something totally new and different (and all extra work).
- Work with stakeholders to create a Bay Area road map so everyone can see where we are (eventually) going, to identify the key work areas, and understand where they fit in.

- Create a set of goals and indicators that will guide actions and measure our progress.
- Focus more research and resources on highly vulnerable communities and support community leadership and organizations in their resilience planning.

### **Identify and Develop New, Substantial Funding Streams/Approaches**

- Create a funding strategy with insurance, real estate, finance, and other private sector entities that have assets at risk by focusing on the cost of doing nothing.
- Identify how to shift more of the Bay Area’s tremendous resources, spending, and wealth to work for adaptation and resilience building.
- Think creatively about funding strategies that will produce at-scale, e.g. Napa River Flood Project, SF Bay Restoration Authority, Marin Clean Energy, and the California cap-and-trade program.
- Pull local governments together for more powerful *joint action* to advocate for state and federal funding.
- Position the Bay Area now to connect to federal adaptation funding when it becomes available on a larger scale.

### **Build Political Support and Engage The Public**

- Engage communications experts (private sector, academia, community, etc.) to frame a powerful communications campaign on the need to take action now.
- Clearly connect the dots on health, jobs, the Bay Area’s natural beauty *and* climate change by focusing not some abstract, future, far-away world, but on things that people care about in their day-to-day lives.
- Develop a set of narratives that will speak directly to each sub-regional “tribe” about their own part of the Bay Area. It is NOT “one message fits all.”
- Help leaders and the general public understand how GHG reduction and adaptation are linked and need to be considered as two parts of a whole.
- Help people see what we are talking about. Create a positive vision for what a resilient future Bay Area looks like. Use scenarios to see multiple futures.

### **Provide Centralized Information/Assistance to Deal with a Dynamic Environment**

- Leverage existing local staff and resources by providing guidelines, templates, technical experts, shared-staff, and other time- and labor-saving tools.
- Provide one clear, trusted, clearinghouse/referral center that can screen and synthesize science information, and provide guidance on how to use that information.
- Make it much easier to get information on Bay Area projects, state and federal adaptation programs, best practices from outside the region, and potential partners so stakeholders can focus on doing their own work.
- Provide locally specific impacts information that will allow us to develop local adaptation strategies linked to overall regional goals.

### **Build and Take Collaborative Action Where It Will Add Real Value**

- Identify the best roles and responsibilities for each stakeholder group—cities, counties, regional agencies, state/federal government, non-profit organizations, and the private sector—then divide the work and develop a coordinated team approach.
- Support new and existing topic-specific networks of practitioners—sea level rise, water, energy, public health, vulnerable communities, etc.— for information-sharing, problem-solving, and joint advocacy.
- Provide a direct link between Bay Area stakeholders and state agencies, including developing a common advocacy agenda.
- Provide assistance to and link together county-level networks such as Marin Climate & Energy Partnership, Silicon Valley 2.0, Contra Costa County Climate Leaders, and the San Mateo RICAPS program.
- Encourage innovation in the most innovative region on the planet—don't just create top-down plans.

### **NEXT STEPS**

1. BACERP staff will develop draft recommendations for action based on these findings as well the findings from the Kresge Foundation-funded regional needs assessment conducted by BACERP in 2012-13.
2. BACERP staff will discuss the draft recommendations with key stakeholders and funders, and finalize them in Spring, 2014.
3. BACERP staff and other stakeholders will use the recommendations to design and secure funding for new resources, assistance and structures that will accelerate Bay Area climate action.

### **Questions? Comments? Additions? Corrections?**

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#### **Check out the BACERP web page:**

<http://www.abag.ca.gov/jointpolicy/projects.html#climate>