Bay Area Climate & Energy Resilience Project Funded by the Kresge Foundation and the Bay Area Joint Policy Committee Proposed 12-Month Action Plan March 29, 2013

Overview

This 12-Month Action Plan is based on the climate adaptation needs assessment the Bay Area Climate & Energy Resilience Project recently conducted for the Kresge Foundation and the Bay Area Joint Policy Committee. That assessment included interviews with more than 100 Bay Area adaptation stakeholders, plus four special reports on equity, governance, science information, and integrated "win-win" climate strategies. For summary reports on the needs assessment's findings and recommendations see: http://www.abag.ca.gov/jointpolicy/projects.html.

This ambitious — but feasible — Action Plan is designed to accelerate and strengthen Bay Area adaptation planning over the next twelve months through three basic approaches. Elements of the plan will:

- 1. Provide needed support services to major adaptation initiatives, e.g., the Resilient Shorelines Project for sea-level rise and earthquake impacts.
- 2. Bring organizations that are working on adaptation *together* for joint actions that will move the region forward in a more powerful manner.
- 3. Establish formal relationships with adaptation programs run by the State of California and metropolitan areas statewide, and link the Bay Area to similar programs in major cities across the country.

Implementation of the Action Plan will produce substantial, tangible outcomes for Bay Area adaptation efforts, including:

- Increased funding for planning
- New solutions for critical problems
- Cost-saving partnerships for local governments
- Alignment and integration with hazard mitigation plans, the Sustainable Communities Strategy, and state agency adaptation strategies
- Greater focus on protecting highly vulnerable communities and ensuring equity
- More use of "win-win" strategies that address climate impacts <u>and</u> reduce greenhouse gas emissions

The Bay Area Climate & Energy Resilience Project partners will use the Action Plan over the next few months to engage with foundations, civic organizations, and government agencies. The goal of these discussions is to build funding and support for implementation of various Action Plan elements. Project partners will then prepare specific funding proposals (costs, timelines and deliverables) and working agreements.

Bay Area Climate Impacts

The nine-county Bay Area (population 7.1 million residents) is facing serious consequences from the emerging impacts of global climate change. Research on the Bay Area and California shows that current and future impacts include sea-level rise, more extreme storms, higher temperatures (particularly in inland areas), precipitation shifts (droughts, more rain/less snow in the Sierra, etc.), and ocean acidification. In addition, as part of a globalized economy, we will be affected by climate-related events outside Northern California that may increase food and energy prices, disrupt business supply chains and markets, increase insurance costs, and produce other negative local consequences.

These climate changes pose a significant and imminent threat to the Bay Area's economy, public health, and ecosystems. Together, they present a serious challenge to maintaining the Bay Area's renowned quality of life, a key attractor for the talented individuals that have made the region a worldwide innovation leader for business, social issues and environmental protection. And while no one in the Bay Area will be spared climate impacts, certain vulnerable populations will be hit harder, such as low-income individuals and the elderly, exacerbating their already challenging living conditions and making it more difficult to reduce regional inequities.

Bay Area Adaptation Strategies

Fortunately, we can take a wide range of actions to prepare the Bay Area for climate change and to build a more resilient region. Examples include restoring wetlands and building artificial barriers to deal with sea-level rise and storm surge; urban redesign to reduce storm flooding and "heat island" impacts; water/energy conservation and efficiency projects to manage demand for those climate-stressed systems; public health emergency programs for high heat days; and projects to address food and energy costs for low-income residents. Across the nine-county region, land-use and development decisions will play a critical role in reducing risk from coastal flooding, wildfires, and other impacts.

These actions—by government agencies, nonprofit organizations, and the private sector—have the potential to build our resilience and substantially reduce the projected damage to Bay Area human health, critical infrastructure, and natural systems. On a broader scale, implementing these actions in a timely fashion will allow the Bay Area to effectively compete on the 21st century global stage. If the Bay Area moves at the speed and scale required, our children and grandchildren will have the opportunity to make the Bay Area *their own* global center for innovation, justice, and natural beauty.

Bay Area work on adaptation, however, must be paired with significant actions to reduce greenhouse gas emissions; our ability to adapt to climate change has practical limits. Unless we shift substantially away from our current global emissions path, the Bay Area will eventually face conditions that overwhelm local adaptive capacities. Therefore, the

Bay Area's efforts on climate adaptation must be complemented by meaningful state, national, and global efforts to reduce fossil fuel consumption and deforestation. To this end, it is recommended that (a) Bay Area leaders join with other regions and states to advocate for the national policies that are absolutely essential to begin this global shift and (b) the Bay Area develop a much stronger nine-county GHG reduction program that can be a model for the world.

Moving Forward

The Bay Area has made a good start on climate adaptation planning. The Bay Conservation and Development Commission, Coastal Conservancy, NOAA, PRBO Conservation Science, and other stakeholders have initiated a series of important projects to deal with coastal and bayside flooding. Our recent survey found that an increasing number of water agencies, energy utilities, regional planning agencies, conservation organizations, community-based organizations, and local governments are assessing climate risks and vulnerabilities and studying adaptation strategy options. (See Summary of Needs Appendix A <u>http://www.abag.ca.gov/jointpolicy/projects.html</u>) State agencies are lending helpful research and guidance to these efforts. Pilot projects are underway that will provide great learning for similar efforts elsewhere in the region. While some sectors today are definitely more advanced than others, and resources are limited everywhere, the Bay Area's awareness of climate impacts across the region is growing steadily.

While individual projects are welcome news, the Bay Area must accelerate its adaptation planning and begin turning plans into action. Uncertainty over the timing of various Bay Area climate impacts cannot delay this effort. Recent events in this country and internationally have clearly demonstrated that preparing for climate change must be done now with both near- and long-term impacts in mind.

The Bay Area needs a more coordinated approach that will make it possible for existing "early adopter" stakeholders to do much more, even in a financially constrained environment. The region needs a comprehensive program to bring missing players fully into the game and build an aligned *system* of adaptation strategies that complement and reinforce one another. The region requires a more powerful and strategic approach that will fully utilize our innovative, progressive history and talents to address the most difficult issues—including land use, finance, and regulatory reform—that stand in the way. To build a highly resilient 21st century Bay Area, we must assemble an unprecedented coalition of public, private, nonprofit, academic, and community organizations to work towards clear, common goals.

12-Month Action Plan

To accelerate and strengthen Bay Area adaptation planning, the Bay Area Climate & Energy Resilience Project proposes five actions to support major projects and develop collective solutions to key barriers. The Project partners will seek funding and support from government, foundations, the private sector, and other sources to phase in implementation of these actions over the next 12 months.

1. ESTABLISH THE BAY AREA ADAPTATION CENTER ("HOME" LOCATION TBD)

The Adaptation Center will put a "there" there for Bay Area climate adaptation, providing overall coordination for the nine-county region and supporting major projects and initiatives. Adaptation Center staff will provide the basic services described below, fundraise for additional services, and oversee development and implementation of these additional services as funding is secured. The center will be located at a regional agency, foundation, civic organization, university or other Bay Area institution.

Basic Services:

Coordinating Council

The Adaptation Center staff will convene a staff-level Coordinating Council representing the broad range of Bay Area adaptation stakeholders, including government agencies, infrastructure owners, business associations, conservation managers, community-based organizations, academic institutions, state agencies, and youth-focused organizations. Council members will report on their progress, identify key issues, solve problems, and form partnerships.

The Council members' work will help the Bay Area to better understand regional readiness for each potential climate impact and the interconnections among them. The information will be summarized in a state-of-the-region report by December 31, 2013.

A key Council task will be to identify options for integrating climate adaptation into hazard mitigation plans, the Sustainable Communities Strategy, general plans, and other existing processes. Another important focus area will be ensuring that all Bay Area adaptation-planning processes address the needs of vulnerable communities and include community-based organizations in their design.

The Council will not be a decision-making body. Rather, it will use facilitated discussion to improve understanding and to reach voluntary agreements on staff-level issues. Higher-level issues and potential solutions will be vetted and forwarded to each organization's executive leadership and to the Regional Leaders Forum described below in Action #2.

Adaptation Center staff will facilitate the Council. Council members will assist staff in communicating news and information back to stakeholders in their sector. Selected Council members will act as the Bay Area's representatives to the Alliance of Regional Collaboratives for Climate Adaptation (ARCCA) formed in 2012 by the Bay Area with San Diego, Los Angeles, and Sacramento adaptation experts. ARCCA provides a high-value venue to learn from other regions and to create unified advocacy positions to influence statewide policy.

Leaders Campaign

The Adaptation Center staff will conduct a strategically focused Leaders Campaign to (a) increase support, commitment, and resources for Bay Area adaptation planning and (b) get leaders to "ask the climate question" within local planning processes. The campaign will use one-on-one meetings and small-group discussions with elected officials, public agency directors, foundation executives, community leaders, university executives, and others who control resources and decision-making processes. Adaptation Center staff will manage the campaign.

The campaign will use trusted messengers from a range of diverse Bay Area communities and a science- and economics-based narrative including slides, print materials, and talking points. A powerful and consistent set of messages will spotlight:

- Current and projected climate impacts to the Bay Area's economy, human health, and natural systems
- Bay Area strategy options to address each impact
- Examples of solutions already being implemented in the region
- Key barriers to progress in the Bay Area
- A set of clear calls-to-action tailored for each targeted leader

Direct Services to Projects

The Adaptation Center staff will provide "Extension Agent"-type services to selected Bay Area projects to help them solve problems and move forward. This will include best practices info, partnership facilitation, and funding source identification. Adaptation Center staff will directly deliver these services through site visits, phone, email and webinars and will bring back success stories and lessons learned for dissemination to the Bay Area adaptation community.

A key focus of the "extension service" will be convening small groups of infrastructure owners, local governments, community-based organizations, and other stakeholders within specific geographic areas for integrated, cross-sector planning. Adaptation Center staff will initiate this approach, which has proven highly valuable in limited Bay Area trials, in conjunction with local experts.

Permitting issues will be another important focus of the extension service. Staff will work with stakeholders that have identified high-value, consensus-backed, climate-friendly projects that have been stalled by the Bay Area's complex maze of regulations and regulatory agencies. These issues will be brought to the Coordinating Council or the Regional Leaders Forum for discussion and possible action.

Support services that will be phased in as funding is secured by the Adaptation Center staff:

Bay Area Climate Service

The Bay Area Climate Service will ensure that planners, decision-makers, and others get the science information and guidance they need, and that, to the maximum extent

possible, major stakeholders are working from the same science "playbook." The service will focus on significantly enhancing the dialogue between scientists, managers, planners, and decision-makers, including both hard sciences and social sciences. It will provide stakeholders with easy access to reliable data sets and personal guidance in using that information for general plans, water management plans, infrastructure protection planning, and other local/regional processes.

The Climate Service will also work with practitioners and researchers to identify gaps in needed information and develop joint research projects to fill those gaps. Scenario planning may be an important aspect of these future projects.

The Climate Service will have dedicated staff or consultants and will be overseen by the director of the Adaptation Center. The service will be developed in partnership with State of California climate research experts as well as those at UC Berkeley, Lawrence Berkeley Lab, and other relevant entities. Staff will investigate if it is preferable to develop a statewide climate service through ARCCA in conjunction with UCLA, Scripps Institute, UC Davis, and other partners.

Pilot Projects

The City and County of San Francisco and Sonoma County are each putting structures in place to manage an array of climate adaptation activities involving countywide participants. Each municipality will co-sponsor a pilot project with the Adaptation Center to explore how county and sub-regional adaptation networks can bring together small and mid-sized cities (or multiple city departments) for coordinated, cross-sector action. This will also be a good venue to test other potential county-level initiatives such as strategic communications strategies to reach diverse populations. Adaptation Center staff will work directly with the local leaders of the county pilots to design and evaluate the projects.

Microfinance Fund

The Adaptation Center will establish a microfinance fund for individuals and small organizations to encourage and promote innovation in climate adaptation planning. This program will support and reward innovative thinking and the public sharing of these new solutions. The fund and a special web portal will support the formation of teams across the region to work together to solve common problems. A particular focus will be on encouraging the participation of youth teams.

Adaptation Center staff will manage the fund and solicit funding for microfinance efforts from foundations, the private sector, and other sources.

2. ESTABLISH THE REGIONAL LEADERS FORUM

While the Coordinating Council will bring together <u>staff</u> from a wide range of organizations, the Regional Leaders Forum will convene high-level executives from government, business, nonprofit, and philanthropic worlds with academic experts to

tackle difficult adaptation issues that cannot be solved at the staff level. This group will serve to break the logjams that too often impede progress towards worthy goals.

The Regional Leaders Forum will be established at a Bay Area university, civic organization, or other "neutral" site. Members of the Coordinating Council will nominate issues for discussion at the Regional Leaders Forum. The process will be reserved for barriers and opportunities that have the potential to be game-changers for Bay Area adaptation. Adaptation Center staff will recruit a Bay Area executive to serve as the Chair for a nominated topic. The Chair will then convene a 10-15 person special meeting of Bay Area leaders and topic-specific experts.

Each meeting will be designed to problem-solve the specific adaptation issue and build the political will to implement a solution through legislation or other means. The discussions will provide a great opportunity for new thinking about persistent barriers in the region by bringing together academic experts and "real world" leaders. After reaching agreement on a solution, the Regional Leaders Forum will send the topic back to the Coordinating Council to create an action plan for implementation. Actual implementation of the action plans will likely require work by a coalition of Bay Area stakeholders with support from the Adaptation Center.

Potential topics include:

- Multi-jurisdictional governance particularly regarding land-use decisions related to sea-level rise, wildfire, and water/energy use.
- Regional financial solutions for (a) mega-projects such as comprehensive wetlands restoration and (b) capital shortfalls facing parts of critical Bay Area infrastructure.
- Evaluation of mega-strategies with far-ranging consequences.
- Serious climate-related threats to the resilience of our water and electrical systems.
- How the Bay Area will maintain and protect access to basic needs—food, water, energy, and shelter—for <u>all</u> communities as climate change causes prices to rise.
- Turning the Bay Area into a world-class model for GHG reduction.
- 21st century regulatory reform that will encourage and support climatefriendly project development at the speed and scale required.

For some topics, small teams of academic experts and practitioners will be commissioned to conduct joint research projects (additional funding required) that will provide more information about a problem and possible solutions. These towngown teams will also conduct evaluations of key issues where a full-blown research project may not be needed. The teams will bring back results from the research projects and issue evaluations to the high-level leaders for review and decisions on action.

3. DESIGN AND IMPLEMENT THE BAY AREA VULNERABLE COMMUNITIES INITIATIVE

The Vulnerable Communities Initiative will work to ensure that (a) the needs of the Bay Area's most vulnerable populations are fully addressed and (b) that communitybased organizations are key partners in the design and implementation of Bay Area adaptation planning processes.

The Vulnerable Communities Initiative will be created by and for vulnerable communities. The initiative will design and implement projects that focus on the top issues facing low-income populations and other vulnerable groups, with particular attention to the economic impacts of climate change. The initiative's projects will serve to complement work by the Adaptation Center, Coordinating Council, Regional Leaders Forum, and other efforts described in this Action Plan that support vulnerable populations.

Dedicated staff will design and manage the Vulnerable Communities Initiative. The initiative will provide funding to community-based organizations to enable their participation in adaptation planning efforts.

The initiative's staff will design specific activities. Examples may include:

- Implementing projects to identify highly vulnerable residents throughout the Bay Area.
- Creating effective working partnerships with local governments, regional agencies, special districts, and others who are doing adaptation planning.
- Working with the Bay Area research community to ensure that Bay Area adaptation research includes data on the impacts on vulnerable populations.
- Identifying and securing regional investments in existing community resilience activities, including building employment for local residents into climate-related projects.
- Evaluating local and regional adaptation plans and projects and their implementation.
- Working with foundations, government agencies, and others who are funding adaptation efforts to influence their allocation priorities.

4. ORGANIZE AND CONDUCT A CAMPAIGN FOR DEDICATED PLANNING RESOURCES

The Bay Area Climate & Energy Resilience Project partners will develop and implement a campaign to secure <u>dedicated</u> funding for Bay Area climate adaptation planning. Critical regional and local planning for activities like the development of the Regional Sea-Level Rise Strategy cannot simply be added to existing planning portfolios. New resources will also be added to fill a major gap in adaptation planning capacity among public health departments.

A paid consultant will lead a coordinated regional effort to identify and secure dedicated planning resources for climate adaptation. This effort will look at <u>all</u> possible public and private sources. The consultant will convene and work with Bay Area leaders, state agencies, and the statewide ARCCA partners to reach this goal. The consultant will also work with financial experts to explore potential private funding sources, including support from stakeholders with Bay Area high-risk profiles. At the same time, the consultant will work with local and regional government agencies to determine how to make more efficient use of existing regional and local planning resources.

Based on the above investigations, the consultant will prepare a report that identifies the most promising sources of dedicated planning funding. The consultant will present the report to the Coordinating Council, the Regional Leaders Forum, the Joint Policy Committee and other appropriate bodies for discussion and decisions on action. Based on the direction from the Regional Leaders Forum, the consultant will carry out their action plan to begin securing new planning resources.

At the same time, the Adaptation Center staff will work with public health sector partners to secure new funding to support public health department planning for climate adaptation and to coordinate their participation in regional/state adaptation initiatives. This new funding will fill one of the largest gaps in Bay Area adaptation planning capacity. The funding will be provided to an existing entity such as the Bay Area Regional Health Inequities Initiative, following the successful model established by BARHII for the SB 375/Plan Bay Area planning process.

5. INTEGRATE ADAPTATION + GHG REDUCTION

Without a major shift from our current global emissions path, adaptation at the local level will eventually become extremely difficult. To complement its adaptation programs, the Bay Area should take a stronger leadership role in state and national efforts for meaningful GHG reduction.

Working within the Regional Leaders Forum framework, the Adaptation Center staff will partner with climate science experts to build high-level support for exerting Bay Area leadership, in conjunction with other U.S. metropolitan areas, for the national carbon tax or similar economic mechanism that will be required to <u>significantly</u> shift the GHG emissions path.

On a parallel track, Adaptation Center staff will build a partnership with Bay Area GHG stakeholders from building, energy, transportation and other sectors to expand the use of Bay Area "Win-Win Strategies" that build resilience <u>and</u> reduce GHGs or sequester carbon. These dual-purpose strategies will include energy efficiency, a stronger and smarter electrical grid, local renewable power, wetlands restoration, urban heat island measures, and transit-oriented, infill development.

This two-pronged approach will begin to move the Bay Area towards a fully integrated regional climate program that promotes health, equity, and economic development. When the Bay Area is successful with this approach, it will be seen as a model for metropolitan areas worldwide.