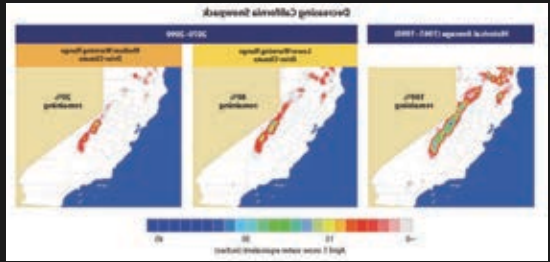
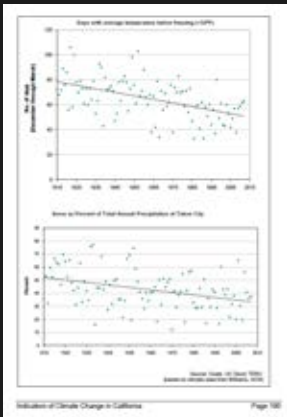
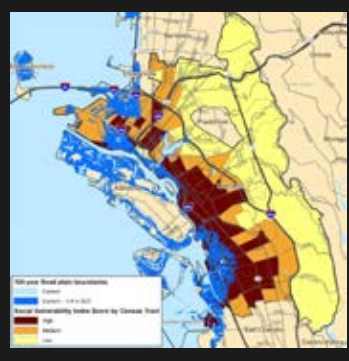
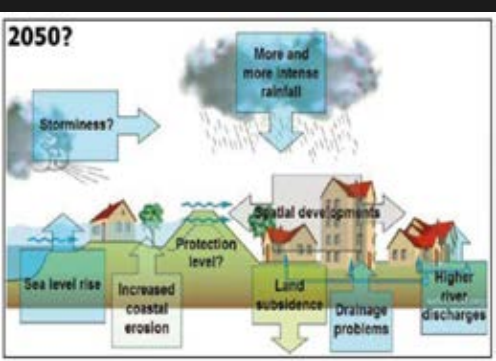
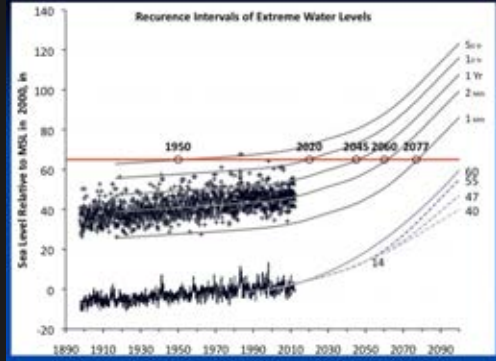
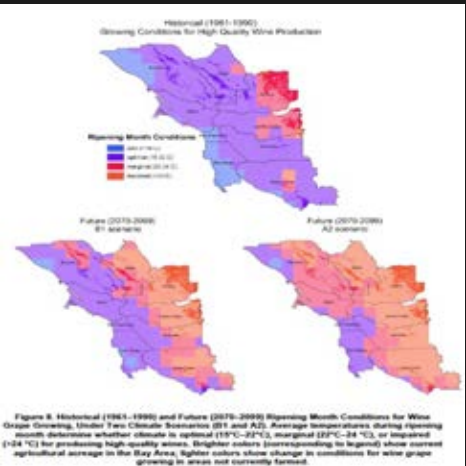
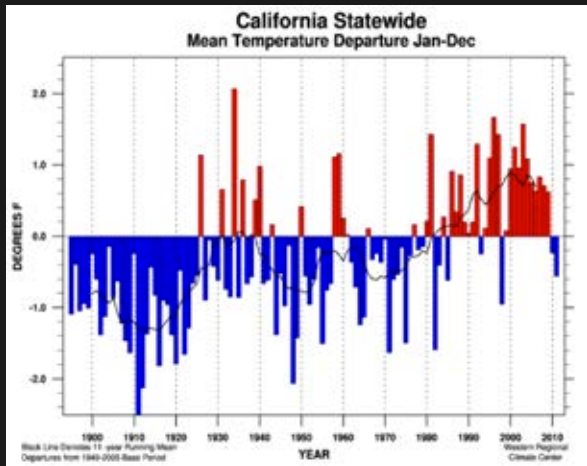


Bay Area Adaptation Planning

Bruce Riordan
Bay Area
Joint Policy Committee
March 14, 2013





The Almanac

ALL GIRLS' NEED KNEES

Officials declare emergency over East Palo Alto levee damage

Twelve areas needing immediate repair were identified after a city inspection of the entire length of the creek within the city.

By Tom Ichniowski

East Palo Alto officials on Tuesday declared a state of emergency over levee damage in the city's East Palo Alto neighborhood, after a city inspection of the entire length of the creek within the city.

The declaration, which the county will enforce through administrative action, allows the city to use state and federal funds to repair the levee system.

Officials say the damage to the levee system is extensive and that the city is unable to repair the damage on its own.

The city will use state and federal funds to repair the damage.

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Appendix B: Selected Bay Area Adaptation Projects

In the course of the stakeholder interviews, a number of Bay Area projects and programs were identified. While not a comprehensive listing of all Bay Area projects, the 90+ initiatives described below provide a good snapshot of Bay Area adaptation efforts in early 2013.

Section 1 Protecting & Enhancing Public Health — Heat, Air Pollution, Infectious Diseases

Selected Projects

1. **Cal-BRACE (Building Resilience Against Climate Effects)**
Bay Area will be one major target area for CDC-funded statewide climate change project. Will apply the CDC BRACE model (Building Resilience Against Climate Effects) including five steps to help develop comprehensive climate and health adaptation plans.
2. **Climate Ready Initiative — San Francisco Department of Public Health**
CDC-funded pilot project by the San Francisco Department of Public Health to develop public health capacity and adaptation strategies to reduce human health impacts from climate change. The focus is on preventing heat stress morbidity and mortality from extreme heat events and associated air quality impacts, which are expected to increase in frequency and duration.
3. **County Public Health Department Adaptation Projects (partial list)**
A number of county public health departments have begun climate adaptation-related activities. Marin County added extreme heat to the county's emergency operations plan. Santa Clara County is working on the public health section of Silicon Valley 2.0. Contra Costa County is developing a Health in All Policies framework that includes climate change. Alameda County has participated in the Adapting to Rising Tides project. San Mateo County worked public health into the climate action plan template used by cities in the county. City of Berkeley public health department is involved in the city's climate change planning and emergency preparedness.
4. **Mapping Climate Change Exposures, Vulnerabilities, and Adaptation to Public Health Risks in the San Francisco Bay Area and Fresno Regions**
This excellent 2012 study by Michael Jerrett and colleagues for the state PIER program uses an environmental hazard inequality index and applies it to potential

Oakland climate change impacts in order to identify and understand highly vulnerable populations.

5. **NRDC: Climate Change and Health**
San Francisco office is very actively engaged on climate adaptation issues at the state level concerning health impacts from heat waves, air pollution, infectious diseases and other issues. Strong advocacy (including position papers and other printed material) for greater public health role in climate planning. Engaged with state-level Climate Action Team, FEMA, City of San Francisco, Cal-EMA, and others.
6. **Public Health Institute Climate Change White Paper and Mini-Grants**
Statewide project, funded by the Kresge Foundation, to produce a white paper linking climate adaptation and mitigation to existing public health programs such as WIC, Nutrition Network, etc. Will include mini-grants for 3 topic areas — possible topics include urban heat islands, regional asthma management program, and community food programs.

SECTION 2 Protecting & Enhancing Bayside/Coastal Assets & Populations — Sea Level Rise and Extreme Storms

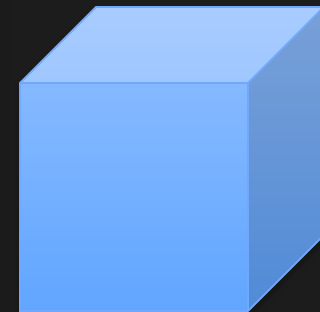
1. **Adapting to Rising Tides (East Bay — Bay Bridge to San Mateo Bridge)**
BCDC leads this major sub-regional undertaking, a multi-stakeholder, 2-year project that is providing vast experience and lessons learned in planning for sea level rise and storm impacts.
2. **Adapting to Sea Level Rise Along the North Bay Shoreline**
Project funded by the North Bay Watershed Association to support the shoreline of eastern Marin north to the Petaluma River. Project is being operated for the NBWA by PRBO Conservation Science.
3. **Contra Costa County Flood Control District — Sea Level Rise**
CCCFC's Mitch Avalon has written "Sea Level Rise and Our Low Lying Communities: A Flood Control Perspective" and is making presentations to increase flood control district engagement on sea level rise and extreme storm events.
4. **Evaluating Tidal Marsh Sustainability in the Face of Sea-Level Rise: A Hybrid Modeling Approach Applied to San Francisco Bay.**
Important scientific study led by Diana Stralberg for PRBO evaluating the sustainability and long-term resilience of marshes in the San Francisco Bay under a number of climate change scenarios. Suggests that under high sea level rise

HOW TO ACCELERATE & STRENGTHEN?

- Kresge Project Needs Assessment
 - Stakeholder Interviews
 - 4 Roadmaps
 - Equity & Community Engagement
 - Multi-Jurisdictional Decision-Making
 - Information for Decision-Makers
 - Win-Win Strategies
- Adapting to Rising Tides (ART)
- Earthquake/Disaster Planning
- ARCCA

KEY FINDINGS

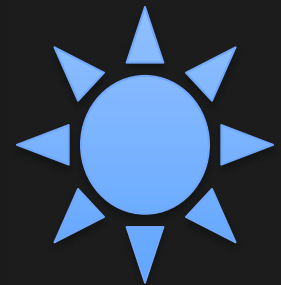
- 4 Near-Universal Needs
 - Organized Campaign
 - Dedicated Planning Resources
 - Science Info & Guidance
 - Project Info



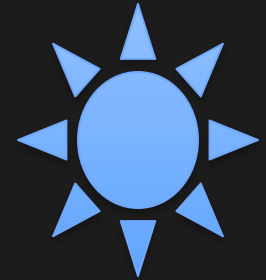
KEY FINDINGS

□ 11+1 Strategies to Accelerate

- Create a *Bay Area* Planning Process
- Help Cities/Counties & Convene Local Working Groups
- Work Smarter with State Government
- Focus on Vulnerable Communities
- Secure Resources for Public Health Sector
- Integrate with EQ/Disaster Recovery



KEY FINDINGS



□ 11+1 Strategies to Accelerate

- Initiate 21ST Century Regulatory Reform
- Create Center for Mega-Strategy Discussions
- Make Nature-Based Solutions Integral to Approach
- Focus on Extreme Events
- Reward Innovation
- Integrate with GHG Reduction & Sequestration

DRAFT PROPOSALS?

1. Create Bay Area Adaptation Center
2. Mount Campaign for Dedicated Funding
3. Create Leaders Forum
4. Implement Vulnerable Communities Initiative
5. Significantly Increase GHG Reduction

Support Resilient Shorelines Project
Move Region Forward

