Bruce Riordan
Bay Area Climate & Energy Resilience Project
CLIMATE IMPACTS IN THE BAY AREA

San Francisco: Extreme Heat Day Threshold: 76 °F
Livermore: Extreme Heat Day Threshold: 98 °F

Urban tree cover, summer temperatures and social equity

Warmer and drier climates favor shrublands and chaparral

2050?

Coastal California will still be coolest part of state – will we see an increase in population growth as people move away from the interior?
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
FINDING #1: GOOD NEWS

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 CTC 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 2020. 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.

4. Mapping Climate Change Exposures, Vulnerabilities, and Adaptation to Public Health Risks in the San Francisco Bay Area and Fraser Regions
   - This excellent 2012 study by Michael Jerrett and colleagues for the state FIER 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. PHRCC: 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 for passing bills and other measures for greater public health role in climate planning. Engaged with state-level Climate Action Teams, FEMA, City of San Francisco, Cal EMA, etc.

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 programs, 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)
   - BCCD leads this region sub-regional undertaking, a multi-stakeholder, 2 year project that is providing vast experience and insights 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 western Marin north to the Petaluma River. Project is being operated for the NBSA by PRBO Conservancy Science.

3. Contra Costa County Flood Control District — Sea Level Rise
   - CCFCD’s Mitch Aviance has written “Sea Level Rise and Our Law: Understanding A Flood Control Perspective” and is making presentations to increase flood control district awareness on sea level rise and extreme storm events.

   - Important scientific study led by Diana Strasburg for PRBO evaluating the sustainability and long-term resilience of marshes in San Francisco Bay under a range of climate change scenarios. Suggests that high sea level rise...
Finding #2:

- 4 Near-Universal Needs
  - Dedicated Planning Resources
  - Science Info & Guidance
  - Project Info
  - Organized Campaign to Build Support
FINDING #3:

- 12 Strategies to Accelerate
  - Focus on Vulnerable Communities
  - Secure Resources for Public Health Sector
  - Make Nature-Based Solutions Integral to Approach
  - Focus on Extreme Events
  - Reward Innovation
  - Place to Discuss Mega-Strategies
Finding #3 (continued)

12 Strategies to Accelerate

- Help Cities/Counties & Convene Local Working Groups
- Create a Bay Area Planning Process
- Work Smarter with State Government
- Integrate with EQ/Disaster Recovery
- Initiate 21st Century Regulatory Reform
- Integrate with GHG Reduction & Sequestration
2013 Action

- June Workshop: 115 Stakeholders
- Kresge Foundation: Interim grant
  - Bay Area Center Design/Launch
    - Resources
    - Champions
    - Direct services to projects
    - Regional/local complementary roles & action
  - Topic Workshops – County Meetings
    - ARCCA
    - UC Berkeley