



# BAY AREA CLIMATE NEWS

August 2016

## Climate Change: 2 Platforms

## The Big Picture

### **We're Lucky Climate Change Did Not Happen Sooner**

David Archer's fascinating [proposal](#), published in *Climatic Change*, that we are VERY fortunate the pre-industrial CO<sub>2</sub> level was 280 ppm in 1750. If this "background" CO<sub>2</sub> level had been substantially lower, our fossil fuel burning would have made a big impact on the planet much SOONER. Significant warming in 1950 or even 1900, when our scientific skills and understanding were less advanced.

### **Sierra Tree Die-off (map)**

Seen the Sierra this summer? Experiencing Sequoia-Kings Canyon last week was to watch a staggering news story come-to-life: [26 million Sierra trees have died in the last 8 months](#) from drought, heat and bark beetles. The total now is 66 million since 2010. Here's that word again—"unprecedented," says Agriculture Secretary Tom Vilsack.

### **Young People Bring Landmark Suit Against the Feds**

Oral arguments will be heard September 13th in an Oregon courtroom as twenty-one, 8-19 year olds (Our Children's Trust) sue the U.S. government, asserting that "in causing climate change, the federal government has violated the youngest generation's constitutional rights to life, liberty, property, as well as failed to protect essential public trust resources." Stay tuned.

### **Kerry: Air Conditioners As Big a Threat As ISIS (Fox News)**

One of Roger Ailes' last headlines draws attention to what some have called the most important climate action of 2016— cutting out HFCs, used in refrigerators and air conditioners, that produce annual emissions equal to 300 coal-fired power plants. The agreement that John Kerry and others are trying to nail down by October could cut .5°C globally by 2100. Get the real story [here](#). All part of the increased focus on cutting [SLCPs](#).

Not that party platforms mean much in today's presidential campaigns, but the specific climate and energy language of the [Republican](#) (pg. 19) and [Democratic](#) (pg. 27) platforms is worth a quick read. "No U.S. funding for the UNFCCC" vs. "Securing Environmental and Climate Justice."

## 2 Adaptation Surveys That Want YOUR Input!

USC Sea Grant and partners are currently conducting the California Coastal Adaptation Needs Assessment. This 30-40 minute, on-line survey seeks to understand the needs of professionals working along California's coast who are preparing for the effects of climate change. The survey builds on two previous surveys in 2005 and 2011. If you would like to participate in the survey, please send email to <mailto:agnewton@usc.edu>.

As part of the California 4<sup>th</sup> Assessment research portfolio, ICF and partners are surveying California adaptation professionals about the financial and institutional barriers they are facing. To provide your survey input, click [here](#).

## August Spotlight: 3 Cool Bay Area Projects

### **City of Berkeley Microgrid Project**

The City of Berkeley, with a \$1.5 million grant from the California CEC, is designing a microgrid to provide clean power (via solar and battery storage) to City Hall and the Public Safety Building for daily use AND when power is disrupted by earthquakes or extreme storms. A twofer! Reducing GHGs and building resilience by keeping the power on for emergency operations.

### **San Francisco Bay Model**

This mammoth (400 ft. X 300 ft.) PHYSICAL model of the bay and delta, first constructed by the Army Corps of Engineers in the late 1950's, is still a marvel to visit and study at its home in Sausalito. Walk completely around the bay, watch the tides go in and out, and learn about the [Reber Plan](#)—all in one huge warehouse/visitor center. And, it's FREE, Tues-Fri 9am-4pm and Saturday 10-5 (closed Sunday/Monday).

### **Contra Costa County ART Project — Adapting to Rising Tides**

BCDC's ART program is convening and staffing an adaptation planning project in west and central Contra Costa County from Richmond to Bay Point. The team is working with Contra Costa stakeholders to investigate how flooding may impact transportation and utility networks, industrial facilities and employment sites, residential neighborhoods, parks, and more. The potential for disproportionate impacts on certain communities and populations is being studied. See the project map, working group meeting agendas, and other materials [here](#).

## CRI Project Updates

### **RISeR: Resilience of Infrastructure as Seas Rise**

Mark Stacey and the RISeR team continue developing the advanced SF Bay modeling that will allow cities and others to SEE how flood protection actions taken by one locality will affect neighboring cities. At the same time, Mark Lubell (UC Davis) is interviewing local/regional leaders on decision-making for our 21<sup>st</sup> century sea level rise challenges.

### **CRI WEBINAR: Nate Kauffman - Live Edge Adaptation Project**

The one-hour video of Nate's great and thought-provoking presentation on LEAP is now available (via YouTube) on the [CRI website](#).

### **Land Acquisition and Ecosystem Carbon in Coastal California**

This project—a collaboration of David Ackerly, Whendee Silver, Maggi Kelly, Van Busic, John Battles and Patrick Gonzalez—started July 1st. With funding from the Coastal Conservancy, the team will compile state-of-the-art estimates of ecosystem carbon for a variety of California land types and uses, and evaluate consequences of land use history and land management practices.

### **CRI Summer Project**

Bruce Riordan, Brooke Solomon ('17) and Thayer White ('17) are working on two long (but interesting!) memos spotlighting key science findings on "Bay Area Climate/Health Impacts" and "Distant Changes = Local Impacts." Both DRAFTS will be released for review and comment later this month.

## Chart of the Month

**Arctic Sea Ice Extent June 1979 – 2016.** Full image and more data [here](#).

