

CLIMATE CHANGE: IMPLICATIONS FOR PUBLIC LAND ACQUISITION AND STEWARDSHIP

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berkeley
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CCELP
CALIFORNIA CENTER FOR
ENVIRONMENTAL LAW AND POLICY
UNIVERSITY OF CALIFORNIA, BERKELEY



About CCST

- **Nonpartisan, not-for-profit corporation established in 1988 by state legislation**
- **Designed to offer expert advice to the state government and to recommend solutions to science and technology related policy issues**
- **Work funded by state agencies, foundations, industry**
- **15 Board members, 28 Council members, 120 Fellows, 12 Cal TAC**
 - **6 Nobel Laureates, 79 National Academies members, 11 National Medals of Science or Technology**
- **Recent foci: STEM education, Intellectual Property, Nanotech, Biotech, Healthcare Information Technology, Energy, Transportation, Climate Change**



- **Sustaining institutions:** University of California, California State University, California Community Colleges, Stanford University, University of Southern California, California Institute of Technology
- **Affiliate members:** Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratory/California, Stanford Linear Accelerator Center, NASA Ames, Jet Propulsion Laboratory



SLAC



JPL

CCST analyses and reports respond to state need for information during policy deliberations

- **Genetically modified foods (2002) - helped avert legislation that would have required unnecessary labeling of GMO products**
- **Nanotechnology (2005) - balanced information on genuine opportunities and challenges for this technology to compensate for extremes of hype and hysteria**
- **Intellectual property (2006) - policy framework guidelines for unprecedented California Institute of Regenerative Medicine and state agencies**
- **Recent and ongoing:**
 - **Education**
 - **Innovation**
 - **Energy**
 - **Healthcare information technology**
 - **Federal laboratory affiliates**

California's Physical Infrastructure

IOM 2005 Healthcare

HIT - electronic medical record keeping
Removing economic barriers

NAE 2006 Energy and sustainability

Nuclear energy
Transportation
Regional Climate Change
Biodiversity

NAS 2007 Oceans



LIEUTENANT GOVERNOR JOHN GARAMENDI

The important efforts to address climate change and the corresponding necessity to reduce dependence on oil and coal have renewed the role of **nuclear power in our energy portfolio**. The inevitable and vigorous debate on the construction of new nuclear power plants has begun. The debate will surely be emotional, it should also be factual.

Sincerely,

A handwritten signature in cursive script, reading 'John Garamendi'.

JOHN GARAMENDI
Lieutenant Governor

California Legislature

SENATE COMMITTEE ON TRANSPORTATION AND HOUSING

ALAN LOWENTHAL
CHAIRMAN



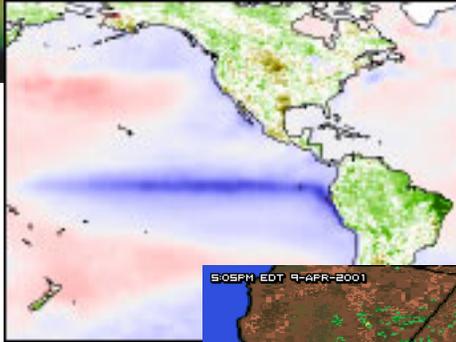
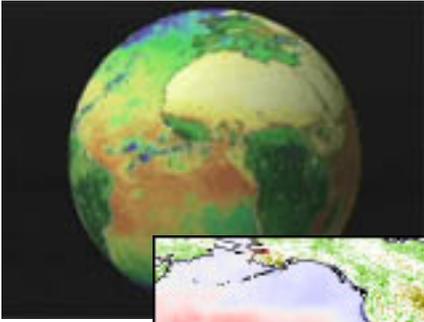
In November, Californians passed historical bond measures to help provide the down payment for investing in strategic infrastructure implementation efforts.

.....I believe that CCST can provide an **objective and impartial overview** that would help develop a solid foundation to recommend strategies to meet the 21st century challenges.....

A handwritten signature in cursive script that reads "Alan Lowenthal".

Senator Alan Lowenthal

**Think globally,
Assess regionally,
Act locally**



***Assessing the
impacts of climate
change in California***



California Biodiversity Council Climate Change Implications For Public Land Acquisition and Stewardship

Requests CCST to use the network of experts and researchers that CCST represents to bridge the gap between this research community and state/federal land managing agencies and the larger land trusts as it relates to addressing climate change and land acquisition and stewardship.

Coastal wetland restoration in SF Bay will cost \$35M but how long will it last? It will take about 5 yrs to complete and another 5 years to be really functioning. But will sea level rise over the next 25-35 years turn the salt grass/pickle weed marsh to mud flat?

Biodiversity Project

CCST proposes to work with CBC over five years to identify and clearly present relevant and current research findings about biodiversity and climate change impacts annually in a useful fashion for land use management and regulatory practitioners.

Biodiversity Project Scope

CCST will

- Identify membership, convene Steering Group
 - Membership from CCST, CBC, research and education institutions, and NGO's
 - Two meetings annually
 - Project Scoping meeting at the beginning of the year; two day meeting
 - Mid course review of process; 1day meeting

Proposed Deliverables

- Website
- Annual Report Summary
- Annual Symposium and summary of findings

Proposed Timeline

- **January**
 - Identify Executive Project Committee Members and PI's set scope and need for coming year's report
- **Feb-July**
 - PI's collect data and CCST staff plan report
 - Development of interactive website format
- **September**
 - Executive Committee meeting with PI's and CCST members to review findings
- **October**
 - CCST and Executive Committee brief CBC
 - Launch of Website
- **November**
 - Report made publicly available

Climate Change and Conservation

Research Assessment and New Policy Direction

*Planning, restoration,
acquisition, & policy toolkit*

Climate change
projections

Habitat
restoration

Landscape
reserves

Coastal
erosion

New
policies

Applicable
changes in
global and
California
climate change
projections

Important
advances in
research tied
to restoration
& acquisition
in California

New ideas to
design and
implement
reserves

Latest
projections:
impact on
coastal
development

New policies
of land
managing
entities and
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