CDFW Climate College: Lecture #5

Go Big or Go Home: Collaborative Partnerships in a Changing Climate

Diana Craig
U.S. Forest Service

Emily Young
San Diego Foundation

January 15, 1:30-2:30

Don't Forget!

- Climate College project – be a part of the Awards ceremony with the Director!
  - Submit project title and type of proposal to climatechange@dfg.ca.gov by **February 1, 2013**
  - Final projects are due by **May 31, 2013**
  - More info online at www.dfg.ca.gov/Climate_and_Energy/Climate_Change/Climate_College/Project_Guidelines.aspx

- Participate in the online Climate and Sustainability Roundtable discussion forum

CDFW Climate College: Lecture #5

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California Department of Fish and Wildlife – Climate College
January 15, 2013

Go Big or Go Home: Collaborative Partnerships in a Changing Climate

Diana Craig
Deputy Director, Ecosystem Management Staff
Pacific Southwest Region
USDA Forest Service

DFW Climate College – January 15, 2013

Go Big or Go Home: Collaborative Partnerships in a Changing Climate

Diana Craig, USDA Forest Service

- **Why collaborative partnerships - How can collaborative partnerships help you?**
- **Examples**
  - **Large scale - California Landscape Conservation Cooperative**
  - **Regional scale - BAEEC**
  - **Local scale - Collaborative Forest Landscape Restoration Program**
- **Closing Thoughts**

DFW Climate College – January 15, 2013

Go Big or Go Home: Collaborative Partnerships in a Changing Climate

Diana Craig, USDA Forest Service

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- **Examples**
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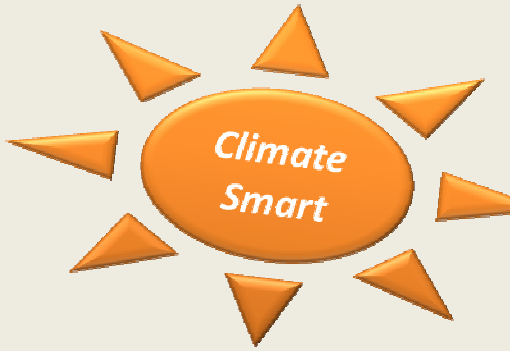
- **Closing Thoughts**

- ***Accelerates effective problem solving***
- ***Leverages resources***
- ***Improves communication***
- ***Facilitates broad support and understanding***
- ***Helps lead to an "all lands approach"***

Together,
we can do more!

Climate Smart Conservation Key Principles & Examples

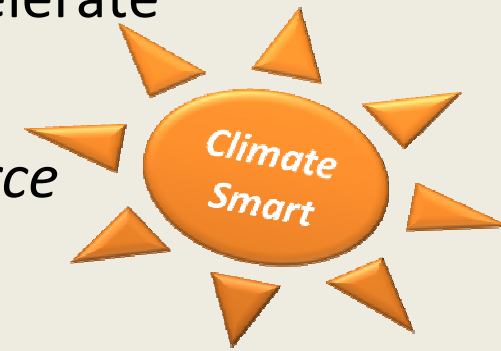


1. Focus on future
2. Ecosystem context
3. Adaptive, flexible management
4. Prioritize actions
5. Collaborate & communicate across sectors

Adapted from: Draft Principles for CA Resources Agency Adaptation Update 2012; NWF Climate Smart Conservation Adaptation Principles 2011; CSIRO's Climate change impacts on Australia's biodiversity conservation & protected areas, Sept 2012 Update

COLLABORATE & COMMUNICATE ACROSS SECTORS

- establish/ expand non-traditional alliances to accelerate effective problem solving
  - (*e.g., between/among public & private resource managers, scientists, decision-makers);*



- share knowledge openly & actively
- regularly and clearly communicate to the public on the science as well as range of solutions- convey hope;
- engage local communities to instill conservation ethic for long term success.

- Why collaborative partnerships - How can collaborative partnerships help you?
- **Examples**
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  - Regional scale – BAEEC
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- Closing Thoughts

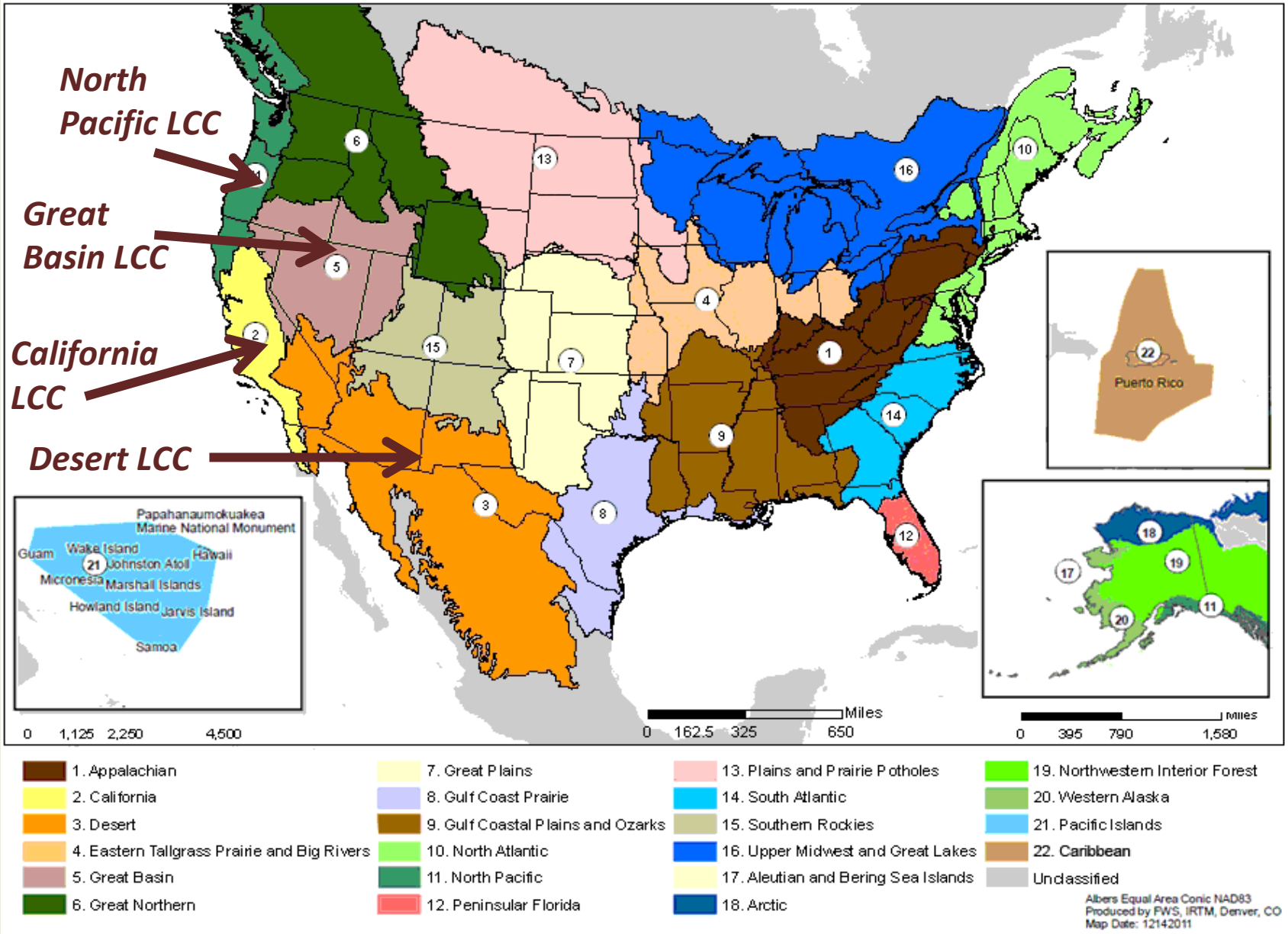
California Landscape Conservation Cooperative

What are LCCs?

- **Self-directed public-private partnerships that inform management actions**
- **Develop jointly established conservation objectives**
- **Provide science and technology support on a landscape scale**
- **<u>Links science with conservation delivery</u>**

Sacramento National Wildlife Refuge

There are 22 LCCs, with 4 in California



California Landscape Conservation Cooperative

What is the CA LCC?

- A science-management partnership bringing together scientists and natural resource managers
- Provides relevant information to support sustainable ecosystems
- Crosses jurisdictional, political and management boundaries

California Landscape Conservation Cooperative

What the CA LCC is not

- Does not supplant existing conservation partnerships. It builds on and fosters existing partnerships.
- Does not purchase property or fund restoration. It provides enhanced scientific tools for smart decision-making.
- Is non-regulatory. Partners participate on a volunteer basis.

Delta tidal marsh

California Landscape Conservation Cooperative

CA LCC Goals

- **Foster collaboration and integration of science and management.**
- **Support development of technical products for natural resource management.**
- **Facilitate information acquisition, interpretation, translation, exchange and availability.**
- **Communicate information within and outside the LCC Community.**

California Landscape Conservation Cooperative

Science Delivery

- **Funded more than 25 collaborative science projects in last three years**

- **CA LCC funding leveraged partner contributions twice over to provide relevant and applied science to natural resource managers**

USFWS Bay Checkerspot Butterfly

California Landscape Conservation Cooperative

Project Example

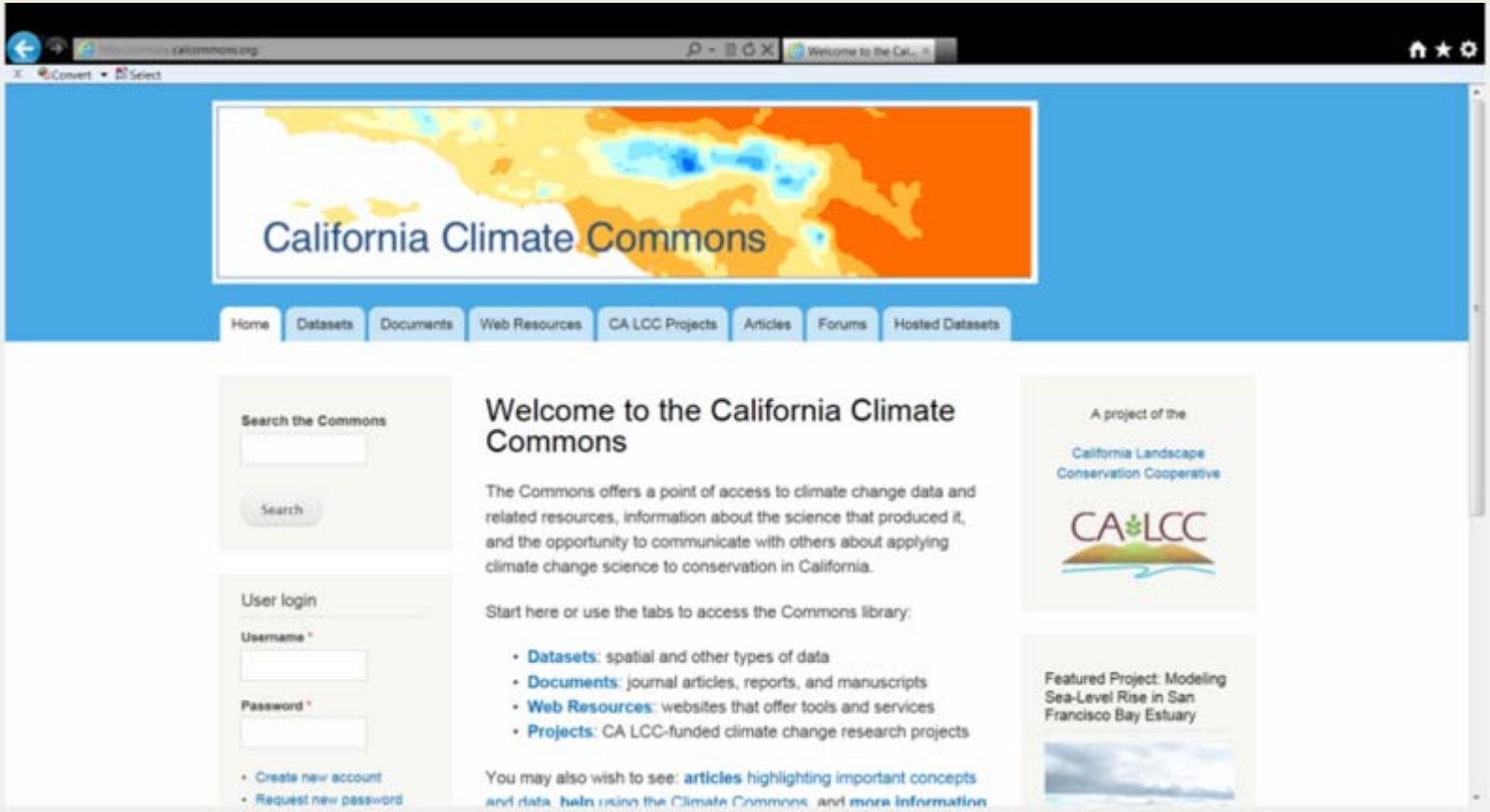
Project Example

Climate Commons

- http://climate.calcommons.org/
- On-line clearinghouse for data sources and services
- Access to tools – hosting and download apps
- Creates an online environment for communication

California Landscape Conservation Cooperative

Climate Commons



Current CA LCC Project - Climate Adaptation Project for the Sierra Nevada

Photos: Sierra Forest Legacy

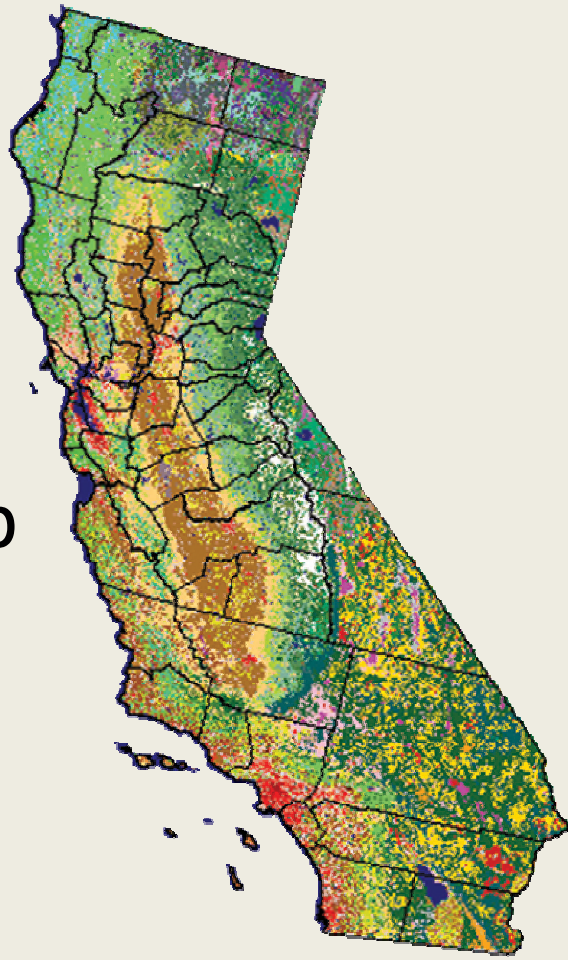
Project Objectives

1. Assess the vulnerability of a suite of focal resources to climate change;
2. Use spatial analysis and expert input to prioritize conservation areas or actions; and
3. Identify implementable management responses to climate change in the Sierra Nevada.

Photo: Jonny Armstrong

Work Plan

1. Convene committees
2. Select focal resources
3. Vulnerability assessment workshop
4. Spatial analysis
5. Adaptation planning workshop
6. Finalize products



Work Plan – Steps 1 & 2

1. Convene science and stakeholder committees
2. Develop common list of focal resources
   - FS developed initial list
   - TACCIMO compared list to existing FS management plans
   - Stakeholder Advisory Committee to revise focal resource list

Photo from Jonny Armstrong

Work Plan – Step 3

3. Vulnerability Assessment Workshop (March 5-7, 2013)

A. PRE-WORKSHOP

- TACCIMO – lit review of sensitivity, adaptive capacity for focal resources
- TACCIMO, Geos Institute – downscaled climate data (exposure)

B. WORKSHOP

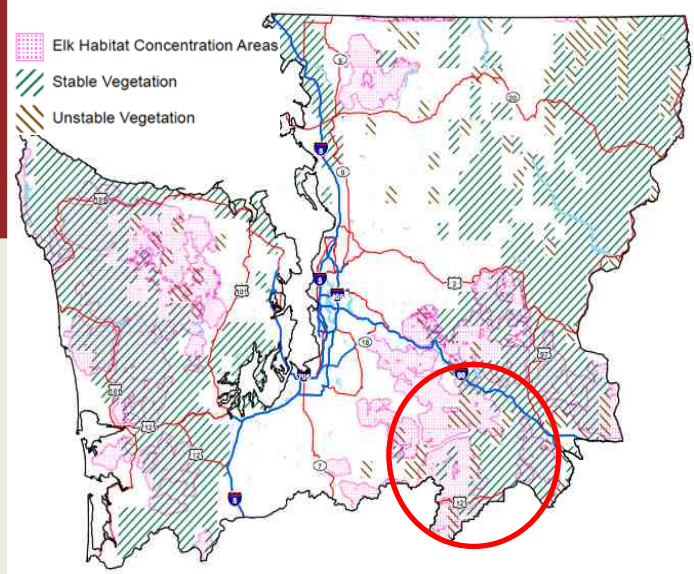
- Basic vulnerability assessment training
- Identify management decisions
- Use expert elicitation process to assess vulnerability of focal resources

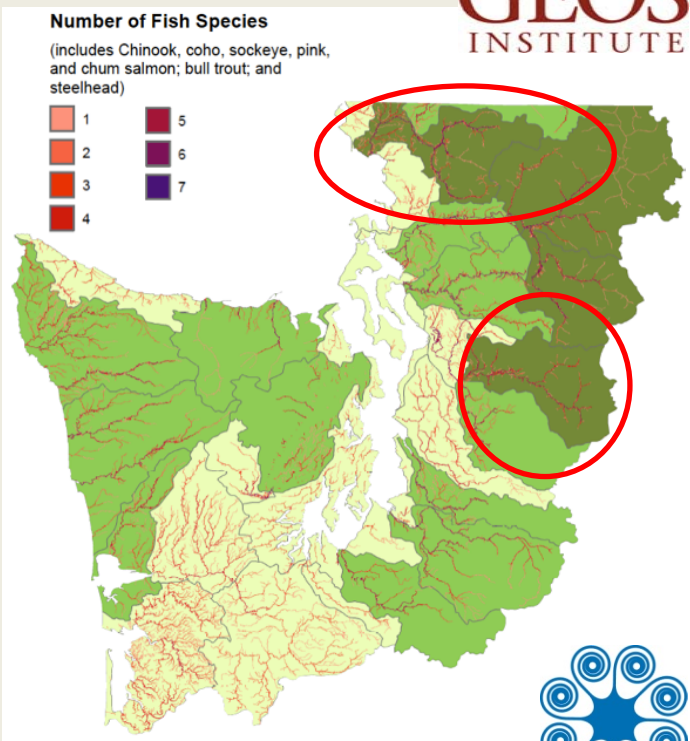
C. POST-WORKSHOP

- VA products (narratives, scores, climate impacts maps) will be posted online
- Workshop support page for all materials

Work Plan – Steps 4 & 5

4. Spatial Analysis
   - CBI to create maps intended to facilitate the development of adaptation approaches
5. Adaptation Planning Workshop (May 2013)
   - Review VA and spatial analysis results
   - Provide basic adaptation training
   - Develop adaptation strategies and prioritize areas or actions
   - Identify approaches that extend across boundaries as well as complementary action opportunities



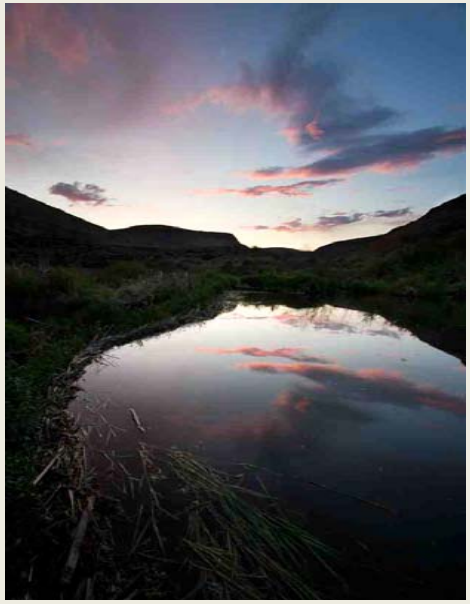


GEOS INSTITUTE

Work Plan – Step 6

6. Finalize Products
   - Online resource of vulnerability assessment findings
     - Narratives, scores, peer-reviewed resources
   - Comparative maps (digital, pdf)
   - Online resource of adaptation strategies for focal resources and the region
   - Workshop support pages
     - Presentations, handouts, worksheets, etc.

Photo: Jonny Armstrong



Products will be available online (through CA LCC, EcoAdapt, Data Basin)

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Example: Bay Area Ecosystems Climate Change Consortium

or BAECCC www.baeccc.org

Bringing together scientists, natural resource managers and planners to sustain nature's benefits in the face of accelerating climate change

- NOAA Gulf of the Farallones and Cordell Bank National Marine Sanctuaries
- NOAA Coastal Services Center
- US Fish & Wildlife Service
- PRBO Conservation Science
- US Geological Survey
- CA Coastal Conservancy
- CA Dept of Fish and Game
- National Park Service
- Bay Conservation and Development Commission
- SF Bay Joint Venture
- SF Estuary Partnership
- Upland Goals Project
- Bay Area Open Space Council

Project Example: Preparing for SLR & Extreme Storms Along SF Bay Area's Outer Coast & SF Bay

Funded by NOAA SARP and NPS

Project Leads

- USGS constructing seamless digital elevation model
- PRBO developing web-based tool and interactive maps
- GFNMS managing team and leading stakeholder participation

Project Objectives

- Assess vulnerabilities to SLR & increased storm intensity and stakeholder information needs from Point San Pedro to Point Reyes.
- Map vulnerabilities at the scale necessary for management.
- Conduct workshops and communicate the findings in accessible, user-friendly formats to apply to local adaptation and response strategies.

Project Example: Climate Change Technical Update of 1999 *Baylands Ecosystem Habitat Goals*

Funded by State Coastal Conservancy

Project Partners include:

STATE OF CALIFORNIA Coastal Conservancy

U.S. FISH & WILDLIFE SERVICE

SAN FRANCISCO BAY JOINT VENTURE

bcdc

BAY AREA | OPEN SPACE COUNCIL

Project Objectives include:

- Provide updated habitat restoration and protection goals for next decade- including sites that can accommodate wetland transgression upslope.
- ID management strategies for more resilient marshes (e.g., improve sedimentation dynamics).
- ID long term science gaps and management needs to implement recommendations.
- Develop recommendations for “living shorelines”- using habitats to reduce shoreline erosion.

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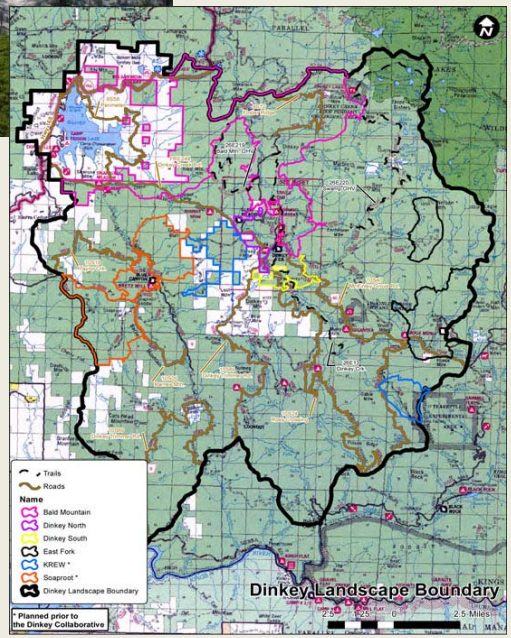
Diana Craig, USDA Forest Service

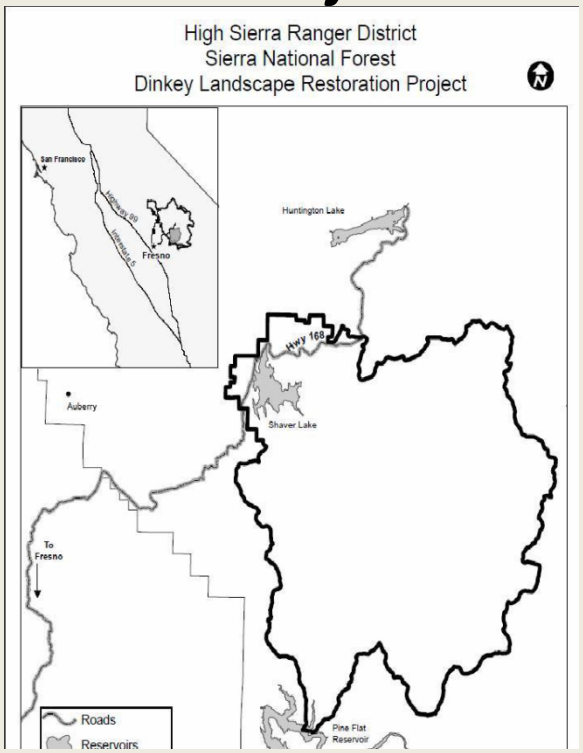
- The purpose of the **Collaborative Forest Landscape Restoration Program** (CFLRP) is to encourage the collaborative, science-based ecosystem restoration of priority forest landscapes.
- The Collaborative Forest Landscape Restoration Program expands collaborative landscape partnerships to:
  - *encourage ecological, economic, and social sustainability;*
  - *leverage local resources with national and private resources;*
  - *facilitate the reduction of wildfire management costs, through re-establishing natural fire regimes and reducing the risk of uncharacteristic wildfire;*
  - *demonstrate the degree to which various ecological restoration techniques achieve ecological and watershed health objectives; and,*
  - *encourage utilization of forest restoration by-products to offset treatment costs, to benefit local rural economies, and to improve forest health.*

EXAMPLE FROM CALIFORNIA: Dinkey Landscape Restoration Project

Partners:
-California Department of Fish and Game
-Center for Collaborative Policy
-Cold Springs Rancheria
-Defenders of Wildlife
-John Muir Project
-Highway 168 Fire Safe Council
-North Fork Mono Tribe
-San Joaquin Valley Air
-Pollution Control District
-Sierra Club
-Sierra Forest Legacy
-Sierra Forest Products
-Sierra Nevada Conservancy
-Southern California Edison
-The Wilderness Society
-U.S. Forest Service
-University of California, Merced
-Yosemite/Sequoia Resource Conservation and Development Council



Dinkey Collaborative Forest Landscape Restoration Project



- 154,000 acres in the southern Sierra Nevada (Fresno County, Sierra National Forest)
- Science-based ecological restoration strategy
- Restoration of key features of diverse, fire-adapted forests, including
  - heterogeneity at multiple scales,
  - reduced surface and ladder fuels,
  - terrestrial & aquatic habitats for sensitive species
- Fostering a landscape that is resilient to uncharacteristic wildfire, insect and disease, climate change, drought, invasive species, and air pollution.

Dinkey Collaborative Forest Landscape Restoration Project

- Restoration treatments are collaboratively developed to achieve multiple goals:
  - reduce hazardous fuels
  - retain and promote large tree and denning/nesting structures needed by Pacific fisher and California spotted owl
  - promote stand and landscape heterogeneity
  - provide sufficient natural regeneration of shade-intolerant tree species for the creation of future fire-adapted forests
- Provide current and future habitat for sensitive wildlife species by fostering ecosystem resilience, resistance, and adaptation to future wildfires and accelerated climate change impacts.

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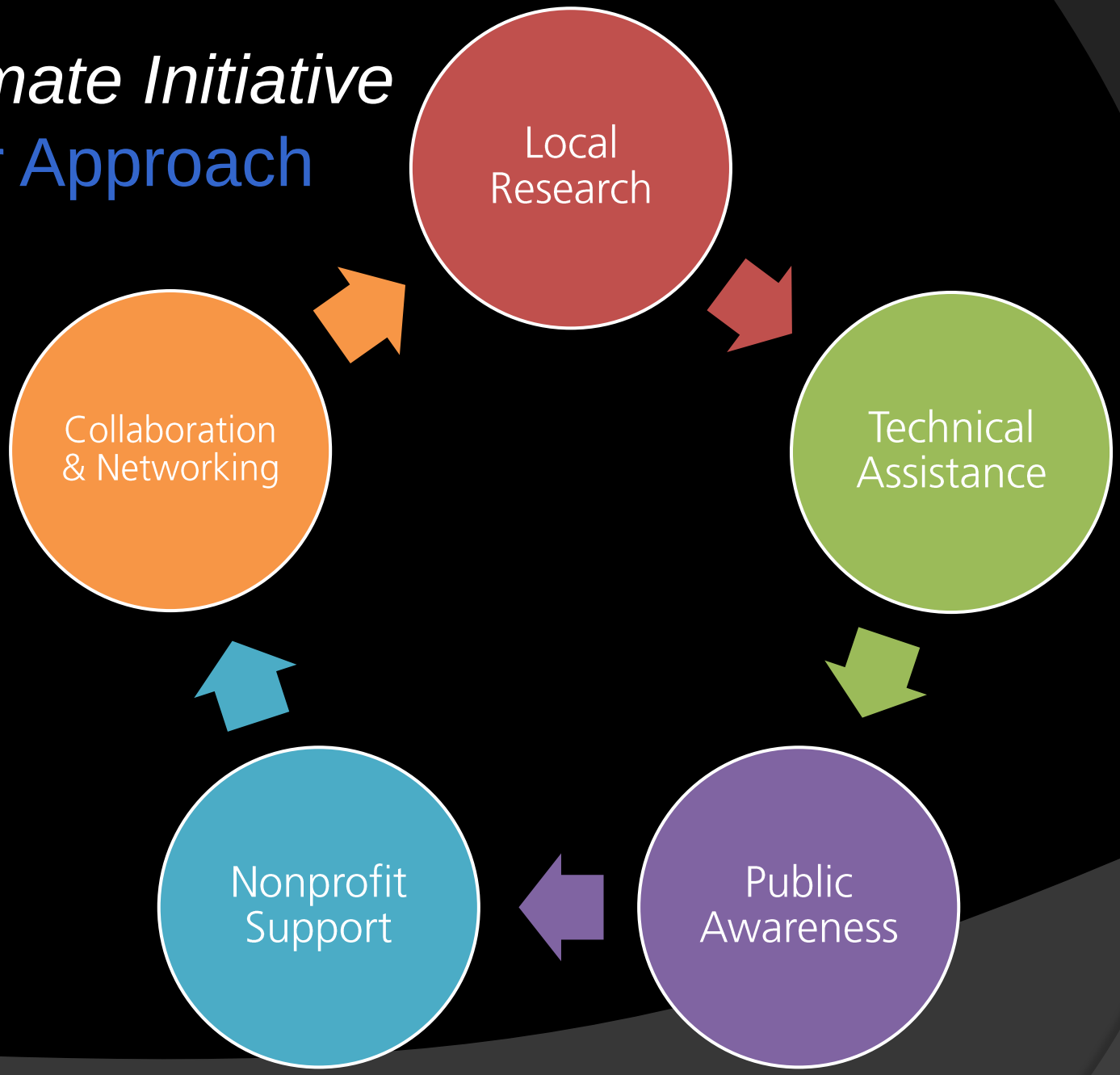
Together,
we can do more!

The San Diego Foundation's *Climate Initiative*

Climate Initiative
Our Advisors

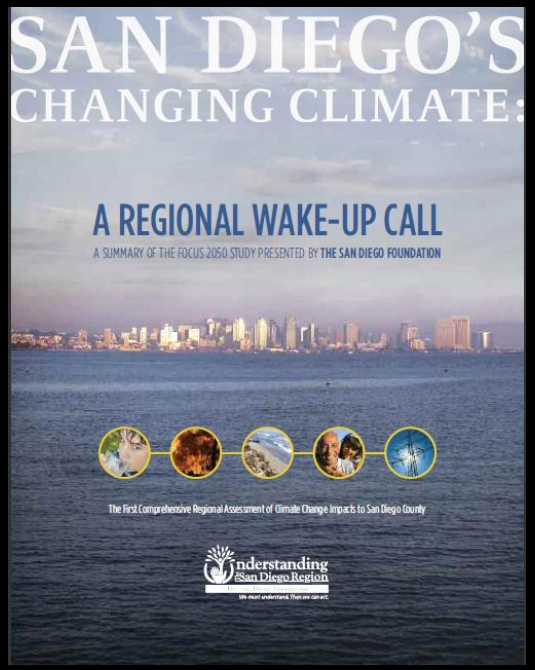
Lisa Bicker, *Climate Initiative Chair*
David Engel, *Climate Initiative Vice-Chair*
Scott Anders, *USD Energy Policy Initiative Center*
Bill Anderson, *City of San Diego*
Risa Baron, *San Diego Gas and Electric*
Frank Belock, *SD County Water Authority*
Laurie Berman, *Caltrans*
Lisa Bicker, *CleanTECH San Diego*
Lisa Briggs, *Sempra Energy*
Jason Foster, *SD County Water Authority*
Gary Gallegos, *SANDAG*
Molly Gavin, *Qualcomm*
Judy Forrester, *Bank of America*
Jill Gravender, *SAIC*
Ben Haddad, *California Strategies*
Andy Hamilton, *Air Pollution Control District*
Brian Holland, *ICLEI-Local Governments for Sustainability*
David Hauser, *City of Carlsbad*
Lisa Hildebrand, *City of Carlsbad*
Robert Kard, *Air Pollution Control District*
Debra Kelley, *American Lung Association*
Bob Leiter, *Consultant to SANDAG*
Andrew Martin, *SANDAG*
Andrew McAllister, *Center for Sustainable Energy*
Michael Meacham, *City of Chula Vista*
Devon Muto, *County of San Diego*
Patricia McCoy, *Imperial Beach City Council (retired)*
Linda Pratt, *City of San Diego*
Jim Sandoval, *City of Chula Vista*
Cheryll Stewart, *SD County Water Authority*
Muggs Stoll, *SANDAG*

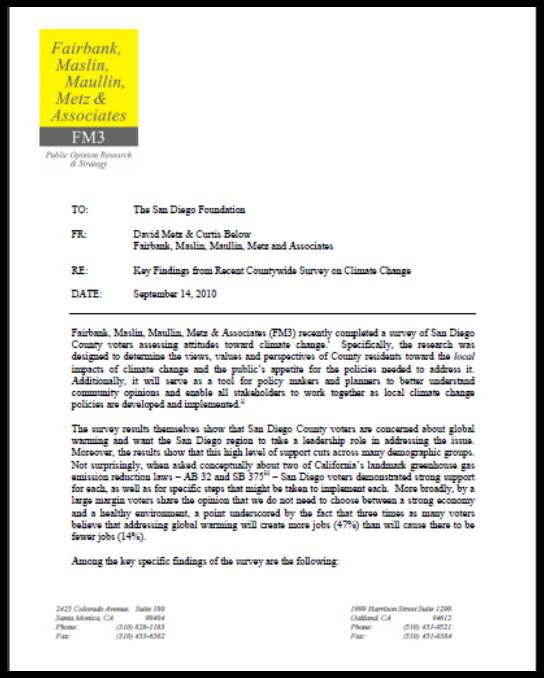
Climate Initiative
Our Approach



The San Diego Foundation's *Climate Initiative*

Research





Fairbank, Maslin, Maullin, Metz & Associates
FM3
Public Opinion Research & Strategy

TO: The San Diego Foundation

FR: David Metz & Curtis Below
Fairbank, Maslin, Maullin, Metz and Associates

RE: Key Findings from Recent Countywide Survey on Climate Change

DATE: September 14, 2010

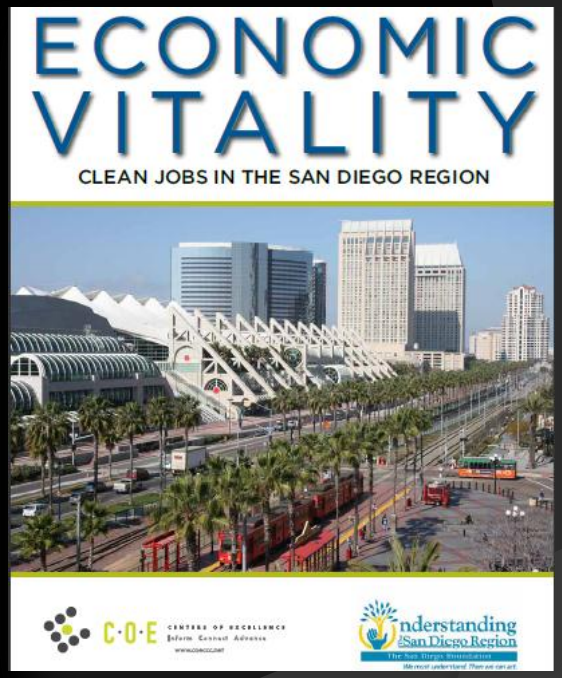
Fairbank, Maslin, Maullin, Metz & Associates (FM3) recently completed a survey of San Diego County voters assessing attitudes toward climate change.[1] Specifically, the research was designed to determine the views, values and perspectives of County residents toward the *local* impacts of climate change and the public's appetite for the policies needed to address it. Additionally, it will serve as a tool for policy makers and planners to better understand community opinions and enable all stakeholders to work together as local climate change policies are developed and implemented.[2]

The survey results themselves show that San Diego County voters are concerned about global warming and want the San Diego region to take a leadership role in addressing the issue. Moreover, the results show that this high level of support cuts across many demographic groups. Not surprisingly, when asked conceptually about two of California's landmark greenhouse gas emission reduction laws – AB 32 and SB 375[3] – San Diego voters demonstrated strong support for each, as well as for specific steps that might be taken to implement each. More broadly, by a large margin voters share the opinion that we do not need to choose between a strong economy and a healthy environment, a point underscored by the fact that three times as many voters believe that addressing global warming will create more jobs (47%) than will cause there to be fewer jobs (14%).

Among the key specific findings of the survey are the following:

2425 Colorado Avenue, Suite 180
Santa Monica, CA 90404
Phone: (310) 828-1183
Fax: (310) 453-6362

1999 Harrison Street Suite 1290
Oakland, CA 94612
Phone: (510) 451-9521
Fax: (510) 451-0384

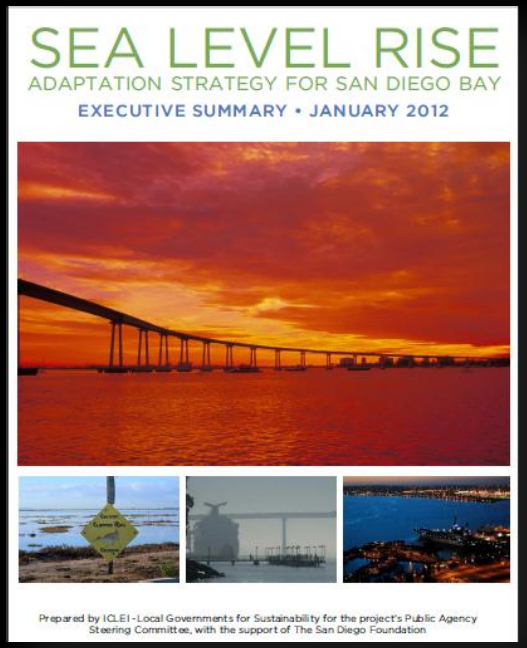


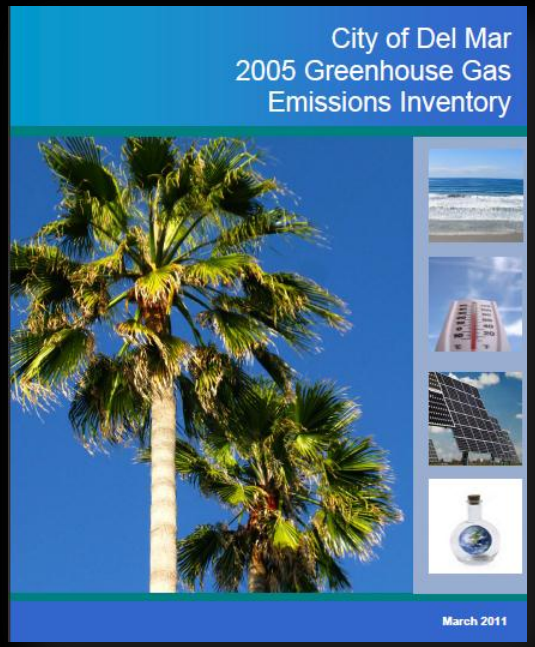
The San Diego Foundation's *Climate Initiative*

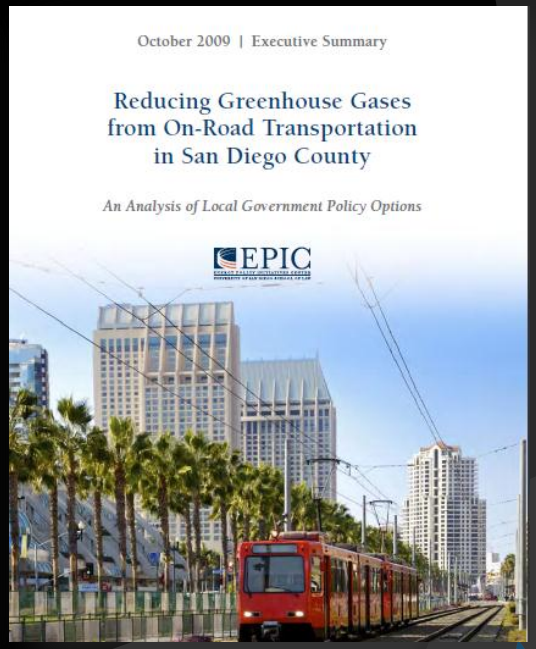
Technical Expertise

ICLEI Local Governments for Sustainability USA

EPIC ENERGY POLICY INITIATIVES CENTER UNIVERSITY OF SAN DIEGO SCHOOL OF LAW







The San Diego Foundation's *Climate Initiative*

Public Awareness

7 in 10 agree San Diego should take a leadership position in setting goals to reduce emissions

OUR GREATER SAN DIEGO VISION

SAN DIEGO REGIONAL Climate Education Partnership

The San Diego Foundation's *Climate Initiative*

Nonprofit Support

Move SD

WALK SanDiego

ENVIRONMENTAL HEALTH COALITION
EMPOWERING PEOPLE. ORGANIZING COMMUNITIES. ACHIEVING JUSTICE.

Breakthrough Communities

AMERICAN LUNG ASSOCIATION® JOB

EHL

EQUINOX CENTER

The Nature Conservancy
Protecting nature. Preserving life.™

American Lung Association

The San Diego Foundation's *Climate Initiative*

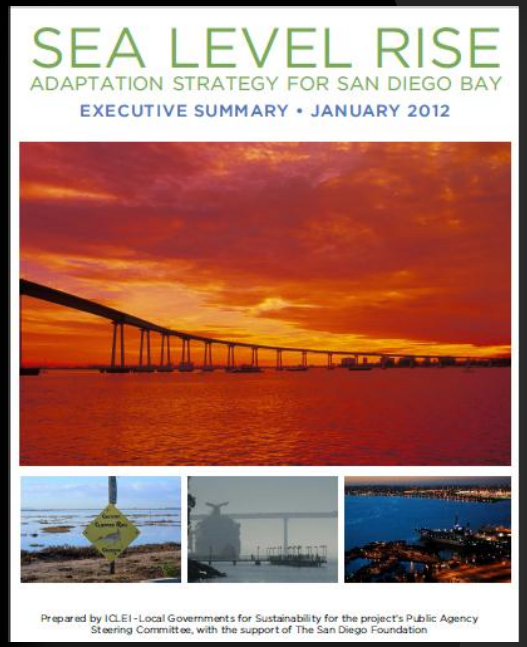
Collaborations

Mitigation

- SDG&E Local Government Partnerships
- SANDAG Energy Roadmap Program
- CleanTECH San Diego Streetlight Working Group

Adaptation

- Sea Level Rise Adaptation Strategy for San Diego Bay
- San Diego County Water Authority and Scripps Institution of Oceanography



Climate Action Planning: 2006

Greenhouse Gas Emissions Inventory

- 2 Local Governments Performed Inventories

Climate Action Plan

- 2 Local Governments with Adopted Climate Action Plans

Climate Action Planning: 2012

Greenhouse Gas Emissions Inventory

- 19 Local Governments Performed Inventories

Climate Action Plan

- 9 Local Governments Working on or Adopted Climate Action Plans

Public Agencies

- Port of San Diego: *Climate Mitigation and Adaptation Plan*
- San Diego County Water Authority: *Climate Action Plan*
- SANDAG: *Regional Climate Action Strategy; Sustainable Communities Strategy*
- Tijuana River National Estuarine Research Reserve: *A vulnerability assessment and adaptation strategy*
- US Navy Region Southwest

Climate Initiative Partners

Bank of America

QUALCOMM

THE KRESGE FOUNDATION

Beyster Family, Blasker-Miah Rose, Engel, Hattie Ettinger Conservation, Hervey Family and Orca Funds, as well as the Zell Family Foundation

SDGE A Sempra Energy utility

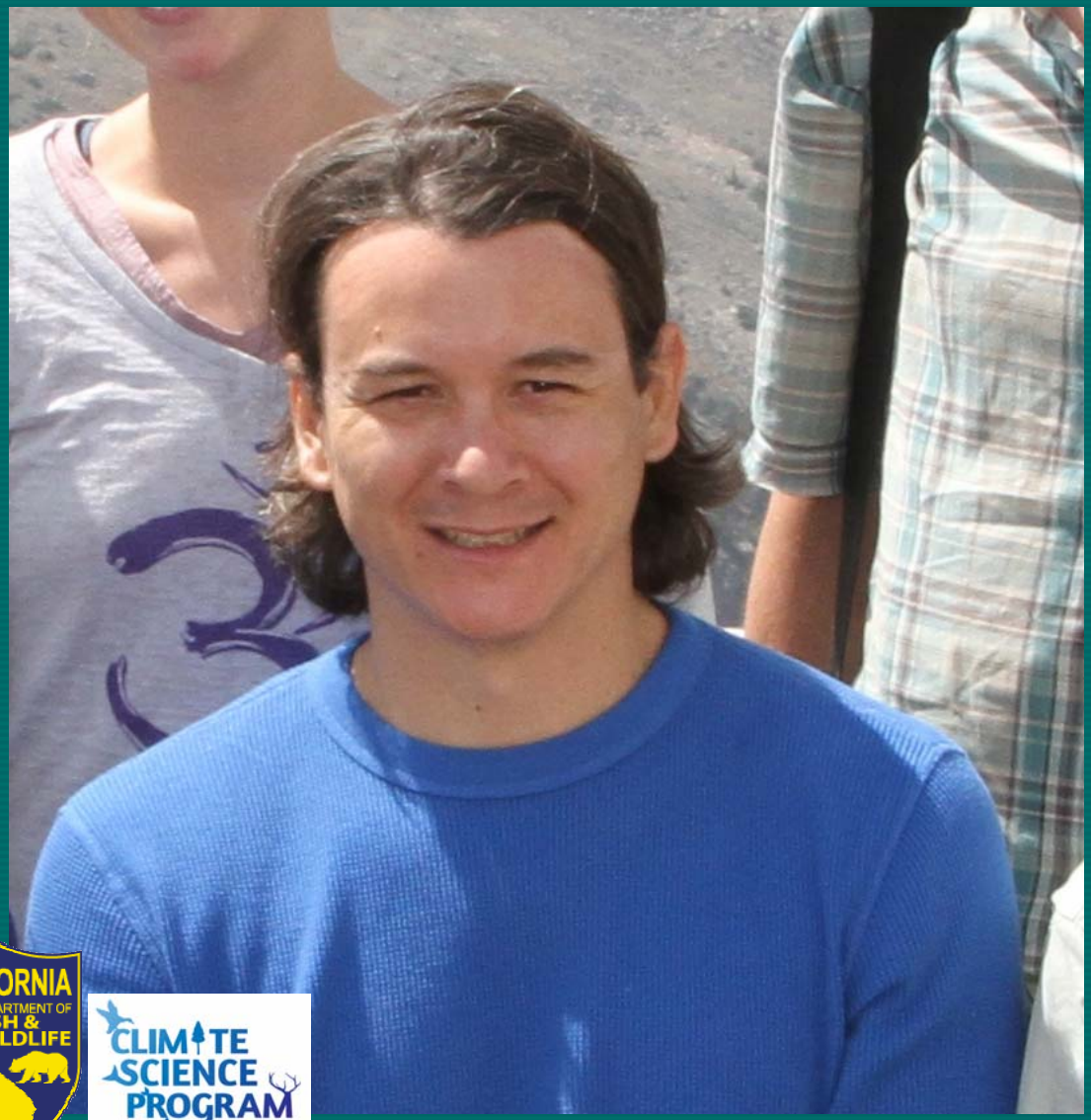
funders' network FOR SMART GROWTH AND LIVABLE COMMUNITIES

KAISER PERMANENTE

The San Diego Foundation's *Climate Initiative*

www.sdfoundation.org/CivicLeadership/Programs/Environment/Climate.aspx

CDFW Climate College: Lecture #6



Doug Parsons

National Park Service

February 12, 2013
1:00 - 2:00PM

Climate Literacy and Education