Climate Change Preparedness
*From Assessment to Action*

Coastal Habitat Conservation in a Changing Climate
Emily Young, PhD, The San Diego Foundation
**Community Foundations as Partners for Action**

**Mission:** *To improve the quality of life within all of our communities by promoting and increasing responsible and effective philanthropy.*

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Environment Program Vision

To ensure that all generations enjoy clean air, safe water, wildlife and access to green spaces and natural areas
Context for Local Climate Action

- Federal inaction
- State and Regional Leadership
Climate Initiative Strategy

Four-Pronged Approach

1. Research
2. Community Engagement
3. Policy Engagement
3. Public Awareness

$1.5 million invested to date
Research

Regional Focus 2050 Study

11 follow up scientific studies

Public Opinion Research *(Sept 2010)*

Clean Jobs Report *(Dec 2010)*
IN 2050, IF CURRENT TRENDS CONTINUE...

Sea level will be 12-18 inches higher.

San Diego’s climate will be hotter and drier.

We will face a severe water shortage.

Wildfires will be more frequent and intense.

Public health will be at risk, especially among our elderly and children.

Native plant and animal species will be lost forever.

We will not be able to meet our energy needs.

By 2050, our population is expected to grow by 30% to 4.5 million people. More people competing for fewer resources will further magnify the effects of climate change described in this report.
Coastal Flooding & Built Environments
Coastal Flooding & Adaptation Planning

San Diego Bay at Present

– Dr. Rick Gersberg, SDSU
Coastal Flooding & Adaptation Planning

2100: 2m (6.5 ft) Sea Level Rise & 100-Year Flood

– Dr. Rick Gersberg, SDSU
While a majority of voters believe global warming is a “proven fact”...

..there is even broader support among all voters for implementing laws designed primarily to reduce greenhouse gas emissions.
At the same time, voters are concerned about many potential impacts of global warming – especially on water supplies.

Reduction of our water supply: 65% Ext./Very Conc., 15% S.W. Conc., 10% Not Too Conc., 10% Don’t Bel./DK/NA

Increased risk of severe fires: 56% Ext./Very Conc., 22% S.W. Conc., 12% Not Too Conc., 10% Don’t Bel./DK/NA

Threats to human health, including more cases of asthma and other respiratory diseases: 54% Ext./Very Conc., 17% S.W. Conc., 16% Not Too Conc., 13% Don’t Bel./DK/NA

Loss of jobs: 52% Ext./Very Conc., 16% S.W. Conc., 19% Not Too Conc., 13% Don’t Bel./DK/NA

Loss of coastal lands and beaches as sea levels rise and erosion increases: 47% Ext./Very Conc., 24% S.W. Conc., 19% Not Too Conc., 10% Don’t Bel./DK/NA

Higher costs to the public to deal with the impacts of global warming: 46% Ext./Very Conc., 24% S.W. Conc., 20% Not Too Conc., 10% Don’t Bel./DK/NA

Loss of native plants and animals: 43% Ext./Very Conc., 26% S.W. Conc., 22% Not Too Conc., 9% Don’t Bel./DK/NA

Decreased energy supply to meet energy needs: 43% Ext./Very Conc., 26% S.W. Conc., 19% Not Too Conc., 12% Don’t Bel./DK/NA

Heat waves: 38% Ext./Very Conc., 23% S.W. Conc., 26% Not Too Conc., 13% Don’t Bel./DK/NA
A Strong Economy and Healthy Environment Go Together

We can have a clean environment and a strong economy at the same time without having to choose one over the other.

Sometimes a clean environment and a strong economy are in conflict and we must choose one over the other.

Both/Neither/Don’t Know

77% 18% 5%
Public Opinions on Climate Change

American Climate and Environmental Values Survey (EcoAmerica 2011)

- Climate change is happening: 90%
- Climate change is harmful to people: 70%
- We should do something about climate change even if it isn't perfect: 60%
- Solving climate change problems now will cost less than if we wait until later: 50%
Lessons Learned from Research

• We can’t afford to wait to address climate change
• There is economic opportunity in doing so
• There is high public support to do so
Community Engagement

Climate Initiative Advisors

Scott Peters, *Climate Initiative Chair*
David Engel, *Climate Initiative Vice-Chair*
Scott Anders, *USD Energy Policy Initiative Center*
Bill Anderson, *City of San Diego* (former)
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*
Community Engagement
Lesson Learned from Community Engagement

Philanthropy has a role:
• Convening an honest dialogue
• Providing scientific and policy resources that governments cannot
• Distilling policies and plans to address climate change
Policy Engagement

- Emissions inventories
- Risk management for sea level rise
- Planning for a diminished water supply
Policy: Where We Were: 2006

- **US Mayors/Climate Action Registry**
  - Del Mar

- **Greenhouse Gas Inventories**
  - Chula Vista and San Diego

- **Local Climate Action Plans**
  - Chula Vista and San Diego

- **Other Regional Plans**
Policy: Where We Are: 2011

- **US Mayors/Climate Action Registry**
  - 13 Local Governments Committed, including Carlsbad, Coronado, Chula Vista, Del Mar, El Cajon, Encinitas, Imperial Beach, La Mesa, National City, San Diego, Solana Beach, Vista, and the County.

- **Greenhouse Gas Inventories**
  - All 19 Local Governments (Seven cities’ inventories will be finished by February 2011), as well as Port of San Diego and San Diego County Water Authority

- **Local Climate Action Plans**
  - Chula Vista and San Diego. Plans for the County of San Diego, Del Mar, Encinitas, Escondido, National City, Solana Beach, and Vista in development

- **Other Regional Plans**
  - Port of San Diego: Mitigation Adaptation Plan
  - SANDAG: SB375 Sustainable Communities Strategy; Regional Climate Action Strategy
  - San Diego County Water Authority: Master Plan
Lesson Learned from Policy Engagement

Finding the right answer is important, but implementing policies to address climate change requires broad public awareness and support.
Public Awareness

- $1M National Science Foundation award
- *Our Greater San Diego Vision*
- Building a strong economy and healthy environment for the future
Looking Ahead
The San Diego Foundation’s *Environment Program*

Thank You!