

# A Regional Approach to Climate Change Adaptation

## San Luis Obispo County

Population: 269,637 (2010)

## Fresno County:

Population: 930,450 (2010)

### Summary:

Climate change is a global phenomenon that has the potential for severe local impacts to natural and social systems, both exacerbating existing problems and imposing new ones. By the year 2050 scientists expect that temperatures will increase 1.8 to 5.4 degrees Fahrenheit in California, precipitation will decline 12-35%, there will be an increased frequency and duration of wildfires, and the sea level is expected to rise by 14 inches. Based upon these projections, it becomes clear that climate change mitigation is no longer enough. Adaptation is the critical next step if California cities and counties are to be prepared for the potentially devastating impacts of climate change.

Key stakeholders, elected leaders, county planners, land managers, public health officials, and concerned citizens in Fresno and San Luis Obispo Counties developed a suite of regionally-specific climate change adaptation strategies that will help the counties adapt to the impacts of climate change in a way that comprehensively addresses their natural and socioeconomic systems.

They did this with the help of the Local Government Commission which played the role of convener and introduced local government involvement. Scientists from Geos Institute<sup>1</sup> identified climate change impacts in the regions and focused on threats to ecosystems. Social Science Researcher, Susanne Moser, identified climate change impacts and vulnerabilities to human and economic systems. These findings helped shape the strategies developed by key stakeholders. This work was made possible through a grant from the Kresge Foundation.

## Adaptation Strategies Across Socioeconomic and Natural Systems in Fresno and San Luis Obispo Counties



### Adaptation and Vulnerability

Climate change “**adaptation**” refers to actions that communities, governments, and individuals can take to reduce their vulnerability to climate change impacts.

### 3 Components of Vulnerability:

“Climate change will most impact those individuals and systems that have both the greatest **exposure** and **sensitivity** to climate change impacts, in addition to the lowest **adaptive capacity**.”

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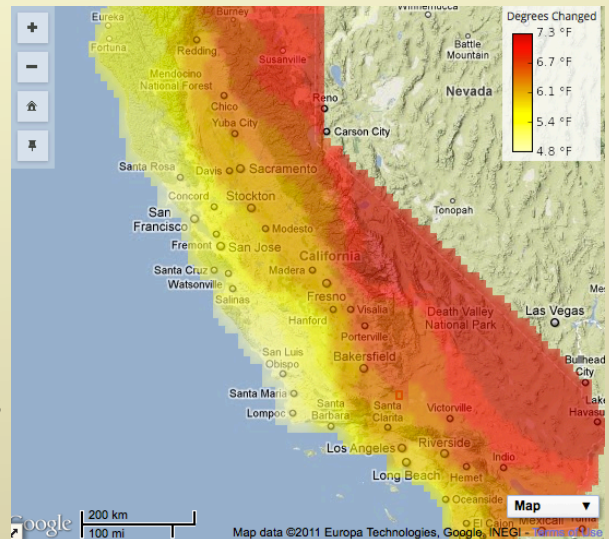
## The Rest of the Story:

To help identify and address underlying local vulnerabilities in San Luis Obispo and Fresno County, the Local Government Commission and GEOS worked with key representatives, local elected officials, city and county staff and the public to help develop and implement adaptation strategies.

The strategies cohesively consider economics, health, culture, social needs, transportation, infrastructure, ecosystem services, and natural resources. The hope was that by identifying and addressing underlying vulnerabilities early and integrating strategies across the different sectors of society, county leaders could:

- Reduce conflict among diverse interests for limited resources
- Increase communication
- Lower overall costs
- Increase the resilience, of both the community and the resources it depends on, to climate change
- Prepare for the impacts of climate change in a way that provides benefits across multiple sectors and systems

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## Process:

- ◆ **Talk to Local Leaders to Build Initial Support**
- ◆ **Identify Regional Climate Impacts and Vulnerabilities:** In both Fresno and San Luis Obispo County, Susanne Moser and GEOS identified regional impacts and vulnerabilities related to water, agriculture, transportation, public health, coastal and marine resources, infrastructure, and natural systems.
- ◆ **Stakeholder Meetings:** Key experts and stakeholders in the region representing multiple sectors came together to assess the threats of climate change and develop strategies to address those threats. As they developed strategies, they also made sure to consider economics, cultural and social needs. For example, strategies in San Luis Obispo County included working with the agricultural industry to improve conservation efforts, identifying and targeting vulnerable populations for public health and emergency preparedness outreach, encouraging low impact development, and reassessing coastal land use policies.
- ◆ **Elected Official Briefings:** Forums were held in both counties which included elected officials, city managers, and County Administrative Officers to provide information about the expected regional threats of climate change and the recommendations developed at the stakeholder meeting.
- ◆ **Public Workshop:** Research on climate change impacts and strategies developed at the stakeholder meeting was presented at a public workshop in San Luis Obispo and time for public feedback was provided.
- ◆ **Presentation to Board of Supervisors:** The adaptation strategies were presented to the San Luis Obispo Board of Supervisors.
- ◆ **Final Report:** The final report summarizes local vulnerabilities and projected climate change impacts to natural and socioeconomic systems, recommended adaptation strategies, barriers to action and key opportunities.
- ◆ **Implementation:** Both San Luis Obispo County and Fresno County are looking for ways to integrate strategies from this project into current and future planning efforts. Specifically, they are looking at ways to integrate strategies into public health efforts, regional transportation plans, climate mitigation or adaptation plans, general plan updates and energy plans.

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## Lessons Learned:

### ***Build Local Support First and Find the Local Champions***

Strong political support and engagement helps ensure adoption and implementation. Local elected officials that are willing to champion the effort provide local knowledge and encourage greater support among key decision makers.

### ***Encourage Strong and Diverse Stakeholder Engagement***

The cross-pollination that happens when different stakeholders come together is key to developing a robust and comprehensive adaptation plan. Additionally Stakeholders help to identify leverage points within their sector.

### ***Integrate a Strong Public Outreach Component***

Public outreach allows an opportunity to share adaptation strategies and get input from the public. It is important to adapt this process to the area's political climate and general support of climate change efforts.

### ***The Importance of Messaging***

Well thought out messaging plays a key role in gaining broad support. Framing the discussion around economic vitality and focusing on existing issues that are expected to be exacerbated by climate change helps avoid politically polarizing discussions.

### ***Humanize***

Climate change efforts to date have focused primarily on environmental consequences. By discussing the human consequences and implications of climate change, you can connect with a broader range of people.

### ***Utilize Supportive Local Media***

Supportive local media can help inform the public and gain community level support.

### ***Build on Current Opportunities***

Action can be taken with fewer resources by building on current opportunities. This can include incorporating adaptation policies into General Plan updates, Climate Action Plans, or zoning codes and ordinances. It is also important to take advantage of available funding opportunities.

### ***Phase in Adaptation Strategies***

Given the current economy and uncertainty related to the exact impacts of climate change, it is best to phase adaptation strategies based on degree of certainty, costs, and benefits.



“The resulting plan provides a comprehensive blueprint for the future and gives confidence that we can protect public health, the environment and our local economy by acting on its recommendations. I was honored to be part of such an inspiring and fruitful collaborative process.”

-Larry Allen, Air Pollution Control Officer, San Luis Obispo County Air Pollution Control District



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## Implementing the Adaptation Strategies:

The initial efforts are a great step towards improving the sustainability of both regions. The counties, regional governments and cities within have the additional opportunity to address climate change adaptation by integrating the appropriate strategies developed through this process into current and ongoing planning efforts.

San Luis Obispo County is now trying to find ways to integrate strategies from this project into current and future planning efforts including their Climate Action Plan, Regional Transportation Plan, upcoming Sustainable Community Strategy and efforts at the County Public Health Department. Stakeholders in Fresno County are also looking for ways to incorporate adaptation strategies into future and ongoing planning efforts.



“I feel that this is one of the most important issues facing not only the country but the world. We need to be clear about the possible consequences.”

-Jan Marx, Councilwoman, City of San Luis Obispo

## Other Local Climate Change Adaptation Efforts in California:

There are several other adaptation efforts occurring throughout California. Links to more information about their efforts are listed below.

### **Chula Vista:**

<http://www.chulavistaca.gov/clean/conservation/Climate/ccwg1.asp>

**San Francisco Bay Conservation and Development Commission:** [http://www.bcdc.ca.gov/planning/climate\\_change/climate\\_change.shtml](http://www.bcdc.ca.gov/planning/climate_change/climate_change.shtml)

### **Other Helpful Links:**

**Georgetown Climate Center:** <http://www.georgetownclimate.org/adaptation/clearinghouse>

**Climate Adaptation Knowledge Exchange:** <http://www.cakex.org/case-studies>

**California Climate Change Portal:** <http://www.climatechange.ca.gov/adaptation/>

**Cal-Adapt:** <http://cal-adapt.org/>

**Governor’s Office of Planning and Research-Climate Change:** [http://opr.ca.gov/m\\_climatechange.php](http://opr.ca.gov/m_climatechange.php)

**Learn More:** Kate Meis, Associate Director at the Local Government Commission, can be reached at [kmeis@lgc.org](mailto:kmeis@lgc.org).

Visit <http://lgc.org/issues/climatechange.html> for more information and to view the reports developed for this project.