



The San Diego
Foundation
A foundation for your passion

San Diego Regional Focus 2050 Study

The San Diego Foundation's Climate Initiative

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Background

Dramatic shift in public awareness and attitudes

Greening of business

State & local initiatives

Leadership is local





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Emerging Role of Community Foundations in Climate Action

Increase public awareness & support for local climate action

Work with local governments to address climate change

Develop and support positive “green” economic growth opportunities in our region

Vehicles: *Research, Convenings, Grantmaking & Donor Engagement*



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Relevant Projects: Focus 2050 Study

Understand the unknown costs and risks associated with a changing climate

What will our region look like in 2050 if current trends continue?
(King County model)

Build sense of urgency around agreed upon set of facts





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Relevant Projects: Focus 2050 Study

Approach: Disaggregate California data & trends to local level

Topics:

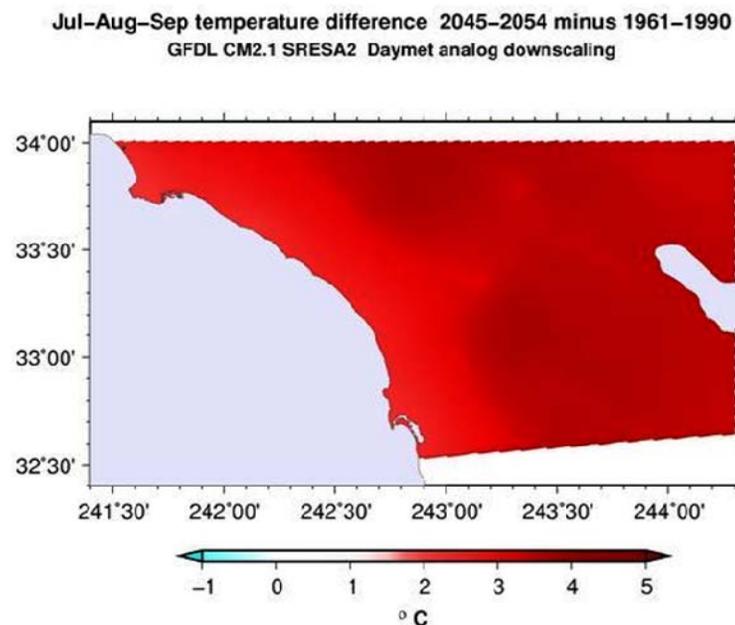
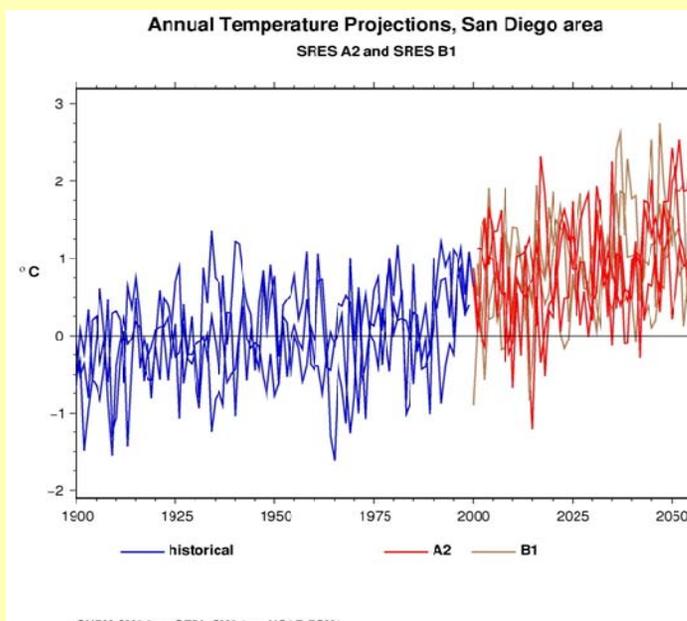
- Climate change
- Population growth
- Land use and transportation
- Energy
- Water
- Public health
- Biodiversity and habitat



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Key Findings

Summers will be hotter, particularly in the inland areas, and on average, San Diego's daytime temperature will be 1.5 to 4.5°F higher than today.

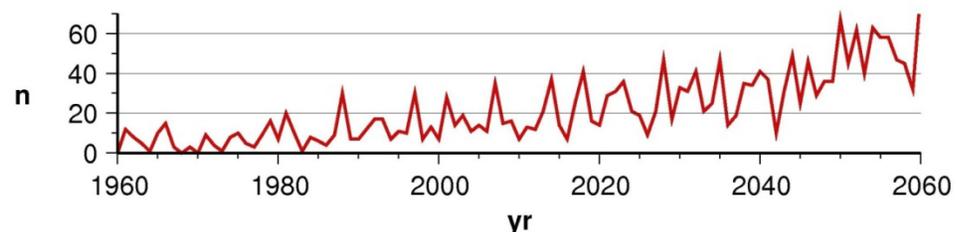




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Key Findings

All climate simulations indicate that heat waves will increase in frequency, magnitude, and duration. Extreme warm temperatures will likely begin in June and continue into September.



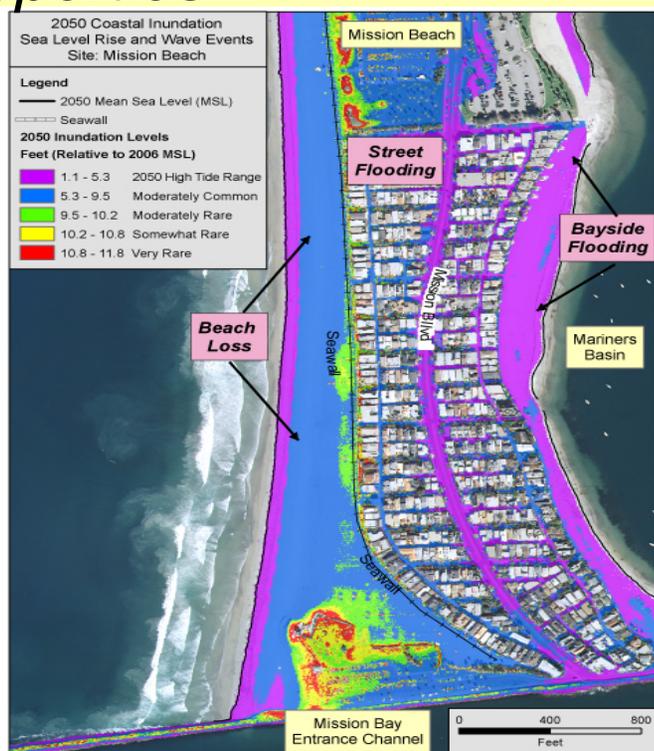
This simulation illustrates a threefold increase in the overall number of hot days (exceeding 76 °F) for each year 1960 through 2060 in Chula Vista.



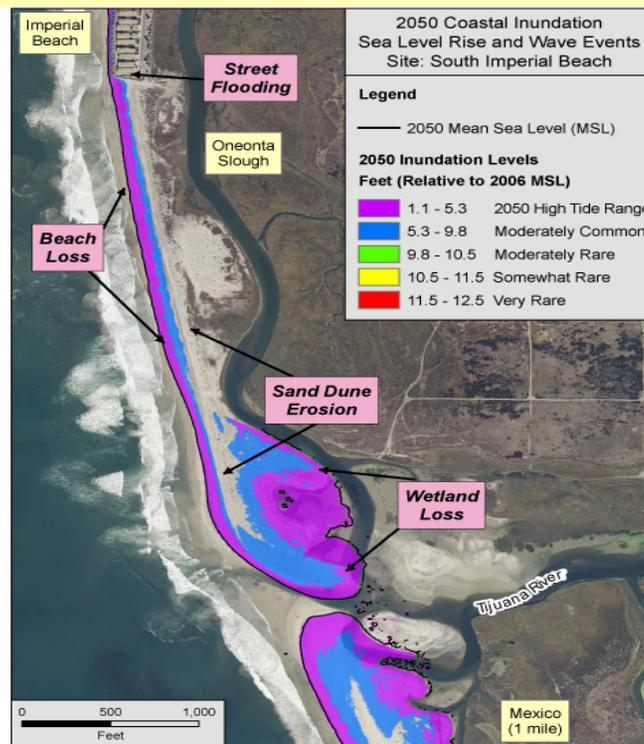
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Climate Initiative

Sea level is projected to rise by as much as 12-18 inches, which combined with tidal and storm surges, will cause harm or loss of our sandy beach areas, wetlands, coastal commercial, municipal, and residential properties



Mission Beach



South Imperial Beach



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Key Findings

Despite plans for water conservation, desalinization, and recycling, demand for fresh water will outstrip supply by 2050, with growing potential for conflicts

Sacramento-San Joaquin Delta





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Key Findings

Increased heat and air pollution will take a toll on public health, particularly for the elderly, who will comprise almost a ¼ of the population by 2050.



- Analysis has shown a 10° F increase in temperature leads to 3% increase in deaths on any given day
- Heat waves have claimed more lives in California in the past 15 years than any other disaster events
- San Diego ozone levels, already above federal standards, will potentially increase by 2050



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Key Findings

Plant and animal habitats in San Diego, one of our nation's biodiversity hotspots, will be increasingly threatened due to...

- *climate change too rapid for some species to adapt*
- *increased wildfires*
- *habitat fragmentation and urban sprawl*



Scripps Coastal Reserve



Coast Horned Lizard



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Key Findings



Thorne's Hairstreak Butterfly



Cactus Wren

*Wildfires will become more frequent
and intense.*

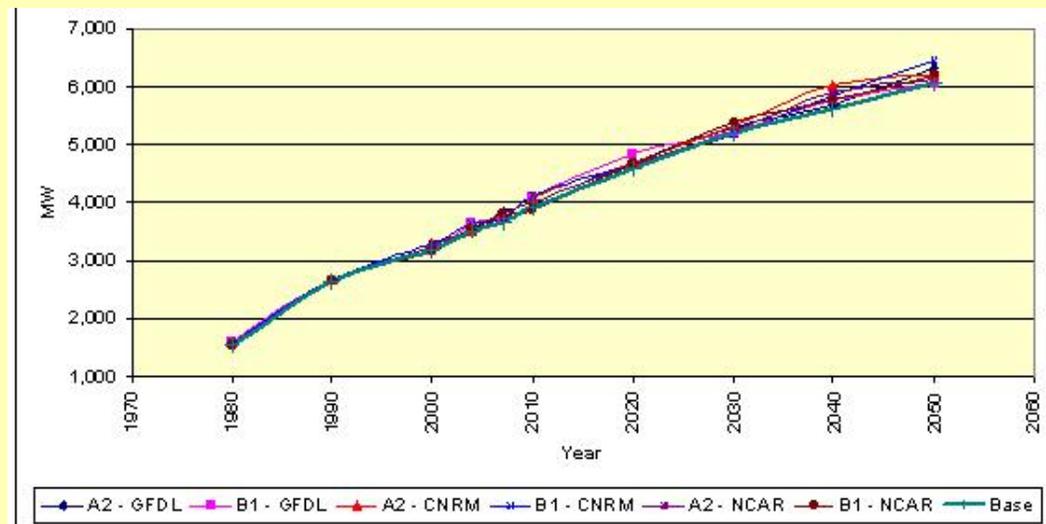




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Key Findings

Rising temperature will raise peak electricity demand, which combined with increasingly frequent extreme heat events, will make managing regional demand even more challenging



Peak Electricity Demand Forecast to 2050



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Implications:

The San Diego region is uniquely vulnerable to the impacts of climate change

Local government action on climate change must include climate change preparedness (adaptation) planning

Potential preparedness options

Technical assistance to cities to advance regional climate action efforts



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Additional Relevant Projects:

Additional localized climate research

Interviews with mayors and city managers

Benchmarking with other cities

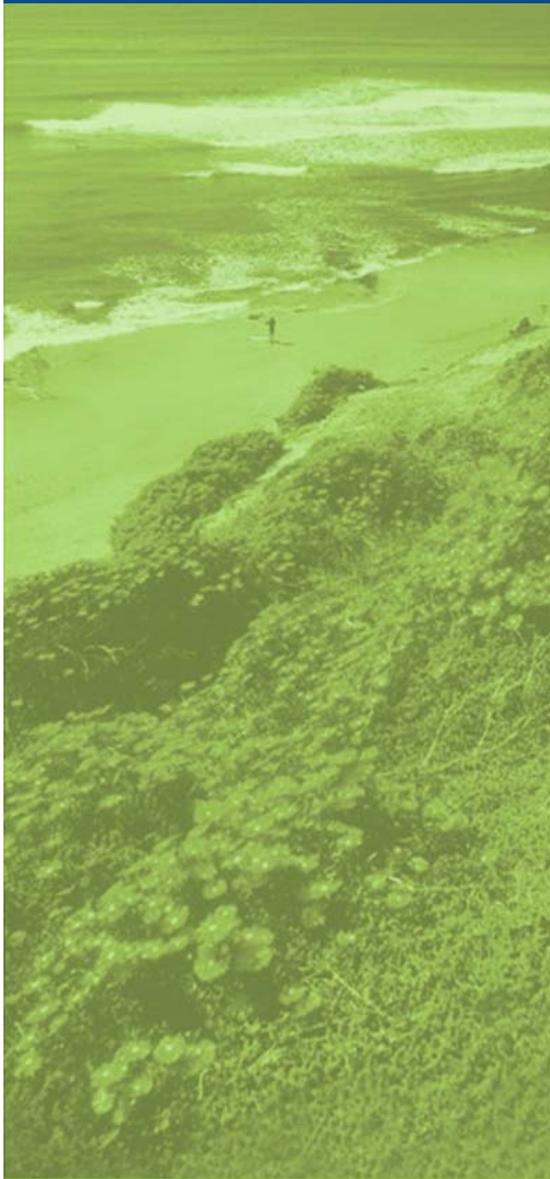
Bank of America partnership

- Increase awareness, support government action, and build green business opportunities



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