

US EPA ARCHIVE DOCUMENT

# ADAPTING TO CLIMATE CHANGE IN CHULA VISTA



***EPA Webcast: Climate Impacts & Risk Communication***  
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# Climate Adaptation Planning with...



**NO MONEY**



**NO EXPERIENCE**



# OUTLINE

- **In the beginning...**

  - CV statistics

  - Past climate work

- **Impacts, vulnerabilities,  
& risk ... oh my!**

  - Focus areas

  - Planning phases

  - Planning matrix

- **I wish that someone  
had told me...**

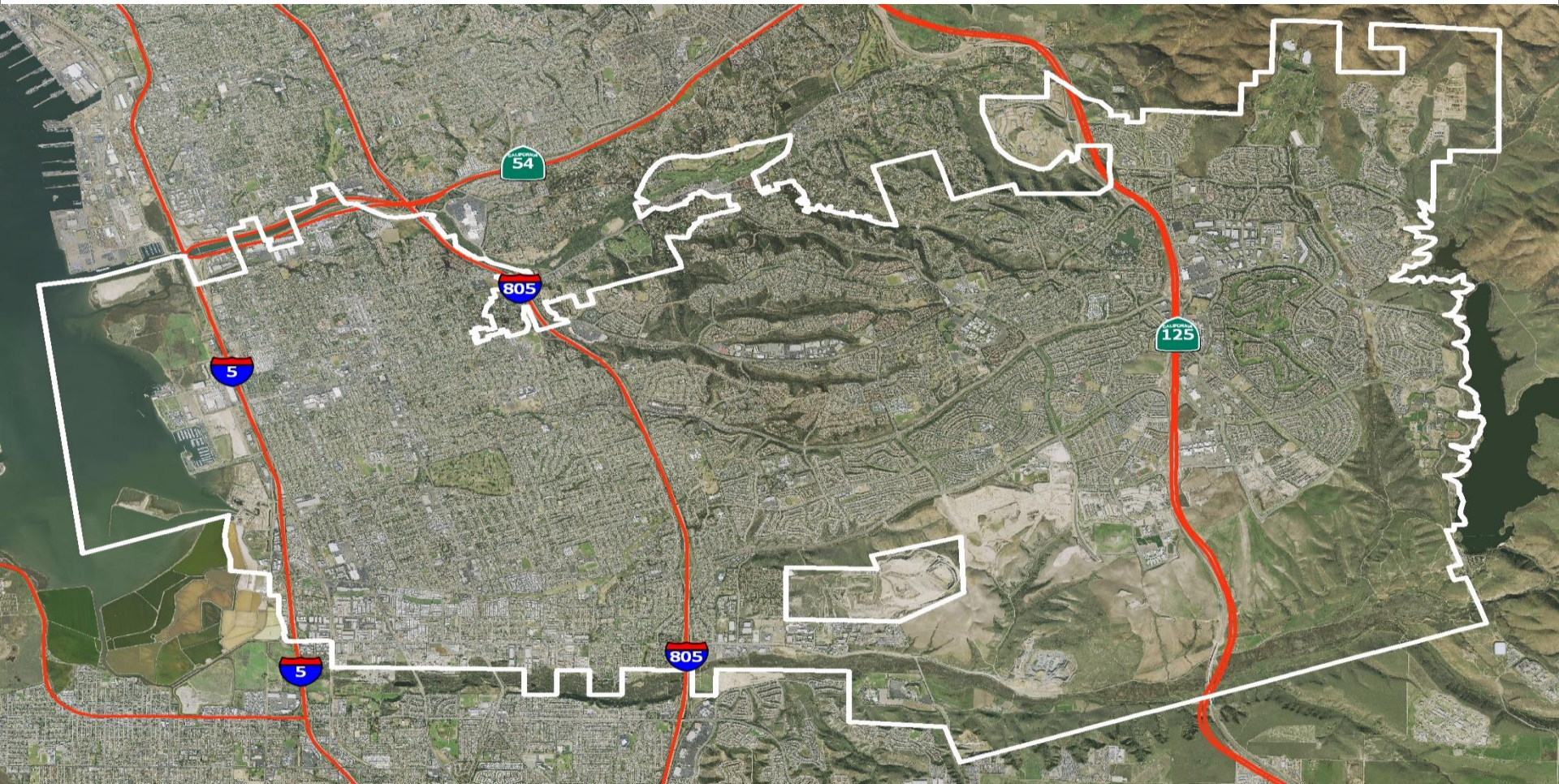
  - Lessons learned





# CHULA VISTA STATISTICS

- 231,000 population
- Diverse landscapes
- Future growth → 85,000 residents & 27,000 homes





# EARLY CLIMATE WORK

- ICLEI Charter Member (1994)
  - Original CO<sub>2</sub> Reduction Plan (1996)
  - Climate Change Working Group
- Mitigation actions (2007)
- Adaptation planning (2010)



# CURRENT CLIMATE MITIGATION STRATEGIES

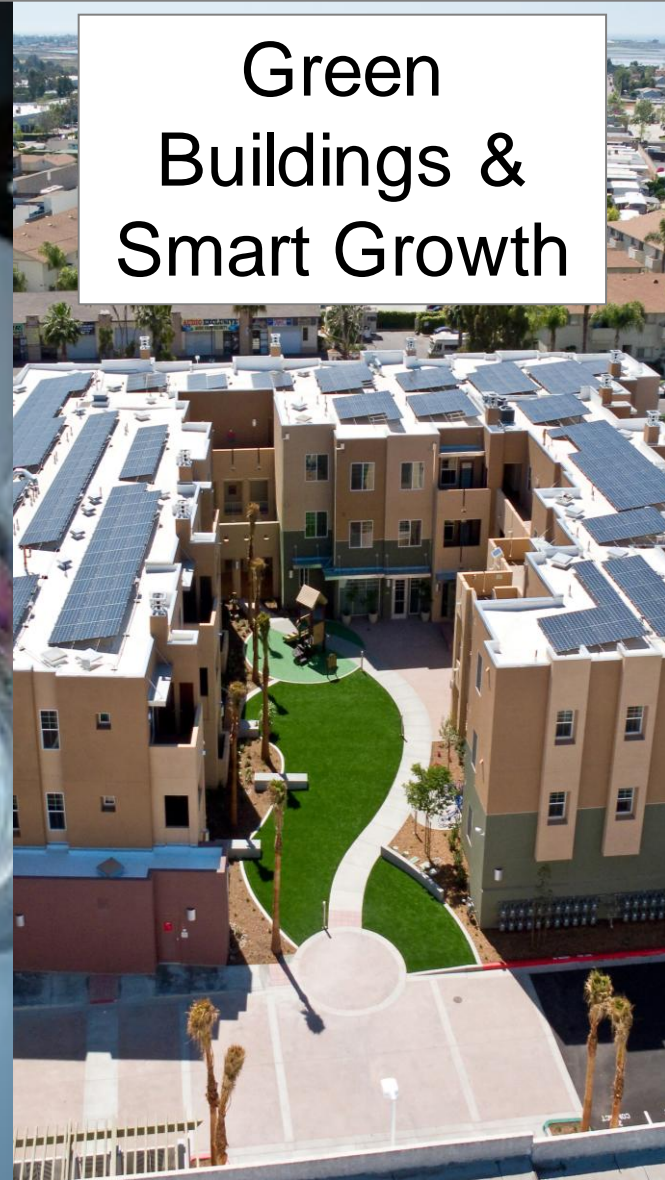
Alternative  
Transportation



Efficiency &  
Solar Retrofits



Green  
Buildings &  
Smart Growth

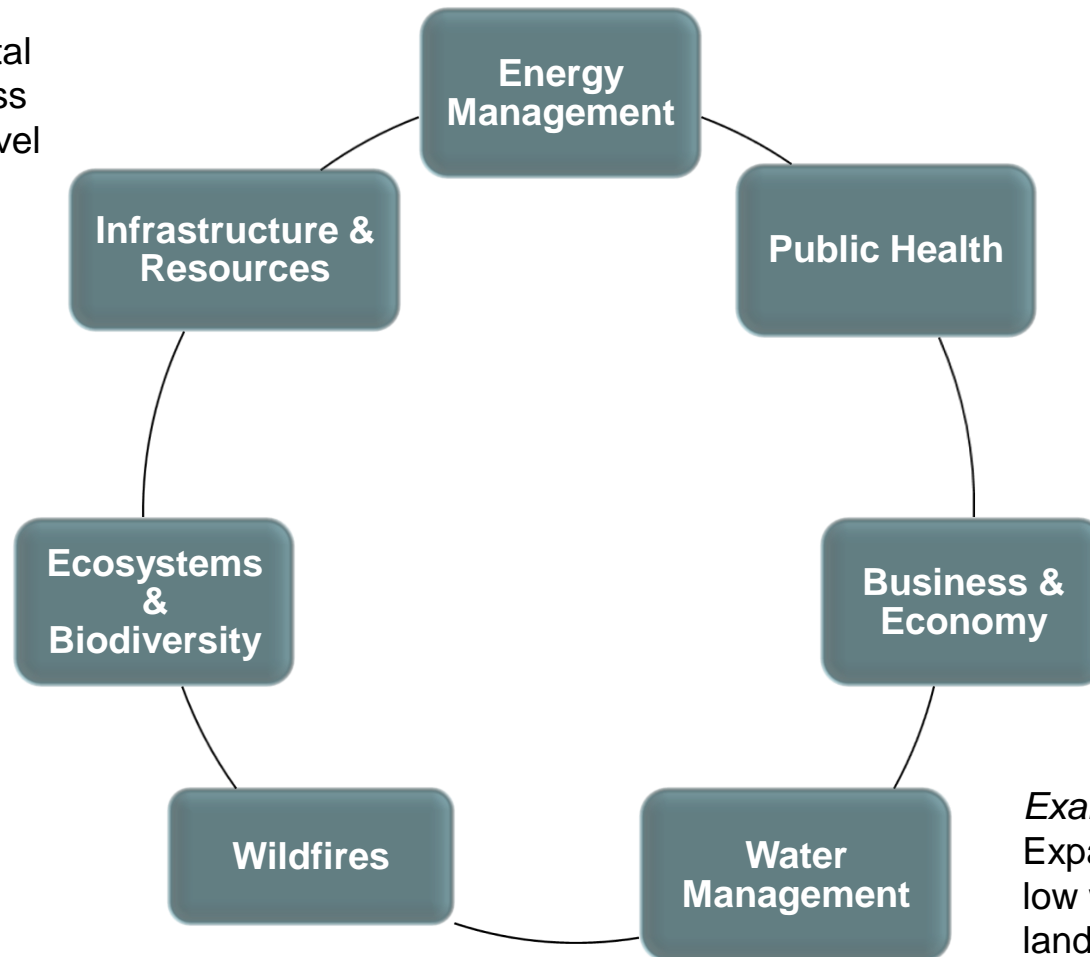


# CLIMATE ADAPTATION PLANNING PROCESS

- 7 focus areas
- Guiding principles

## *Example*

Require all new coastal development to assess vulnerability to sea level rise.



## *Example*

Ensure public health system is prepared for more frequent heat waves & public is educated on consequences of excess heat.

## *Example*

Expand efforts to encourage low water use in home landscaping.



# CLIMATE ADAPTATION PLANNING PROCESS

- 3 planning phases
- Initial criteria
- **Don't duplicate/contradict current mitigation work!**

## 1. Information Gathering

- Guest presenters
- Best available data
- Public forum



## 2. Risk Analysis & Measures Evaluation

- Climate Adaptation Planning Matrices
- Risk = likely x consequence
- Local researchers
- Initial criteria



## 3. Strategies Selection

- Commission meetings
- Council presentation

# CLIMATE ADAPTATION PLANNING PROCESS

## • Planning matrix for each focus area

### Chula Vista Climate Change Impacts & Adaptation Options

#### ENERGY

IMPACT TO SAN DIEGO REGION		VULNERABILITY			ADAPTATION OPTIONS	CRITERIA		
		Pressure on Local Systems & Services	Risk*			City Jurisdiction?	Fiscally Feasible?	Complement Current Measures?
Average annual temperatures 1.5-4.5° F hotter, additional summertime warming	A	Higher peak demand and transmission inefficiencies in summertime (when cooling needs are greatest) make stable and adequate supplies increasingly challenging	HIGH Likelihood: 5 Consequence: 5 TOTAL: 25	1	Adopt a building energy rating and disclosure program	YES	YES	YES
				2	Require LEED or equivalent standards for residential, commercial, industrial projects to increase energy efficiency	YES	YES	NO (Duplicative)
				3	Promote on-site generation or energy storage (including thermal) to offset peak energy needs	YES	YES	NO (Duplicative)
				4	Establish a building retrofit program to reduce energy consumption during periods of peak demand	YES	YES	NO (Duplicative)
				5	Implement time-of-use or peak demand energy pricing (SDG&E already does for commercial and industrial customers)	NO	YES	YES
				7	Enroll all municipal facilities in demand response programs (if applicable)	YES	YES	YES
				8	Identify emergency centers as priorities for onsite renewable energy sources to reduce susceptibility to lapses in the conventional energy supply	YES	YES	YES
				9	Update emergency response plans to account for increased potential for black outs in summertime	YES	YES	YES
	B	Increasingly expensive energy costs expose vulnerable populations to expend higher proportion of income on energy	MEDIUM Likelihood: 5 Consequence: 3 TOTAL: 15	10	Develop outreach and incentives appropriate for energy efficiency/renewable energy upgrades in the rental market where there are split incentives for property-owner and electricity rate payer (renter)	YES	YES	NO (Duplicative)
				11	Target outreach of existing efficiency upgrade programs and incentives to low-income neighborhoods and small businesses	YES	YES	NO (Duplicative)
				12	Target urban heat island mitigation programs in low-income neighborhoods, who have proportionately harder time cooling homes	YES	NO	YES

\*RISK = Likelihood of an Impact X Consequence of the Impact; each factor scored from 1 to 5 and overall risk was categorized as "Low" (1-7 total score), "Medium" (8-15 total score), and "High" (16-25 total score).



# CLIMATE ADAPTATION RECOMMENDATIONS

- Some strategies are also mitigation measures

A composite image showing a blue corrugated metal roof in the upper half and a white, reflective surface, likely a cool roof, in the lower half.

Cool Paving &  
Roofs

A photograph of a large, leafy green tree in a grassy park area. The tree's shadow is cast long and dark on the grass in the foreground. In the background, a city skyline is visible under a clear blue sky.

Shade Trees

A close-up photograph of a single water droplet falling into a pool of water, creating concentric ripples. The background is a solid blue color.

Water Reuse

# LESSONS LEARNED

- Engage stakeholders (try an open house format!)
- Stress preparedness/lower risk & co-benefits
- Avoid analysis paralysis
- Focus on area of influence & actionable items
- Integrate into existing plans & programs





 *Just Do It...*

