

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

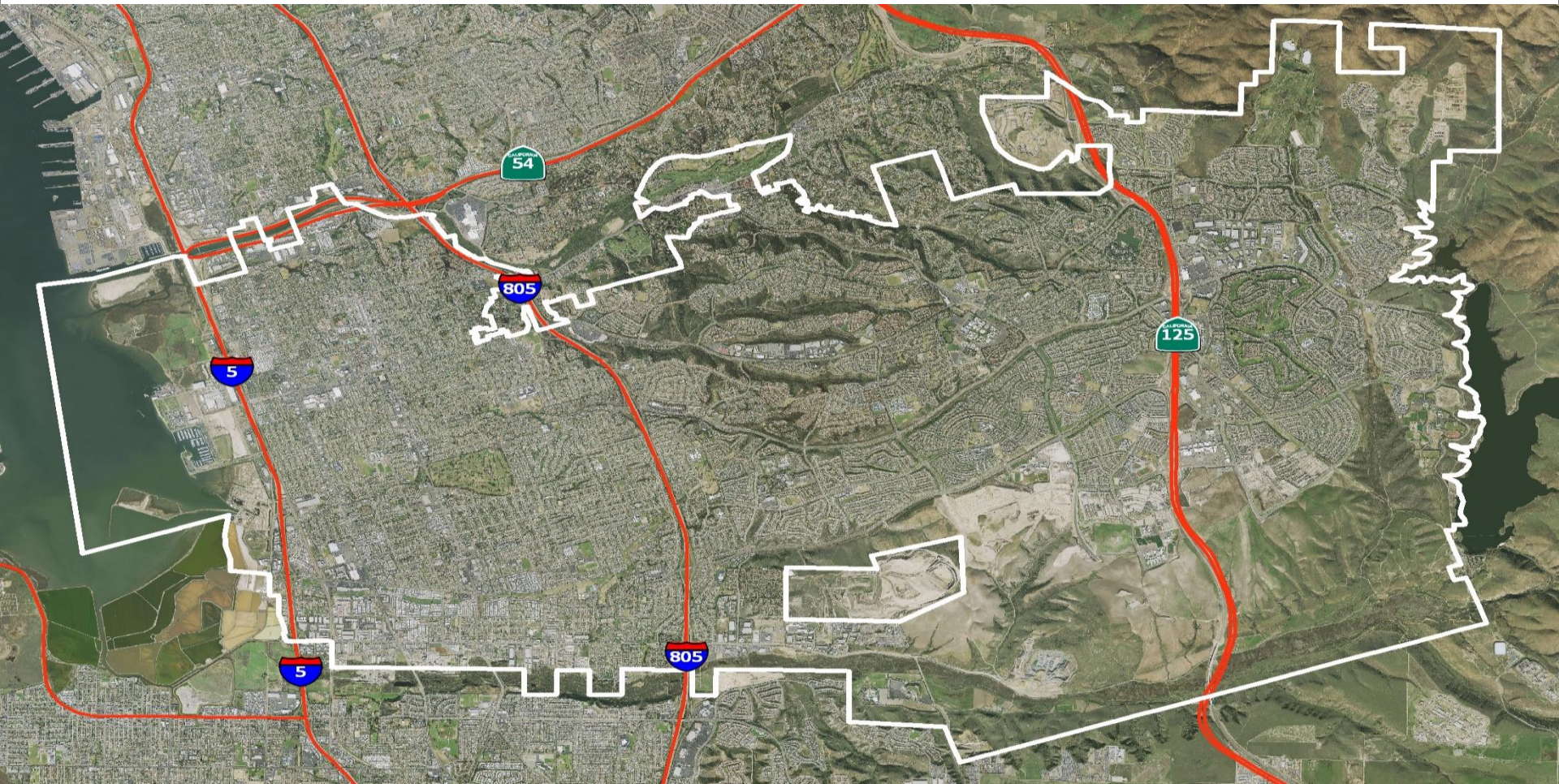
OUTLINE

- **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 CO₂ Reduction Plan (1996)
- Climate Change Working Group
 - Mitigation actions (2007)
 - Adaptation planning (2010)



CURRENT CLIMATE MITIGATION STRATEGIES

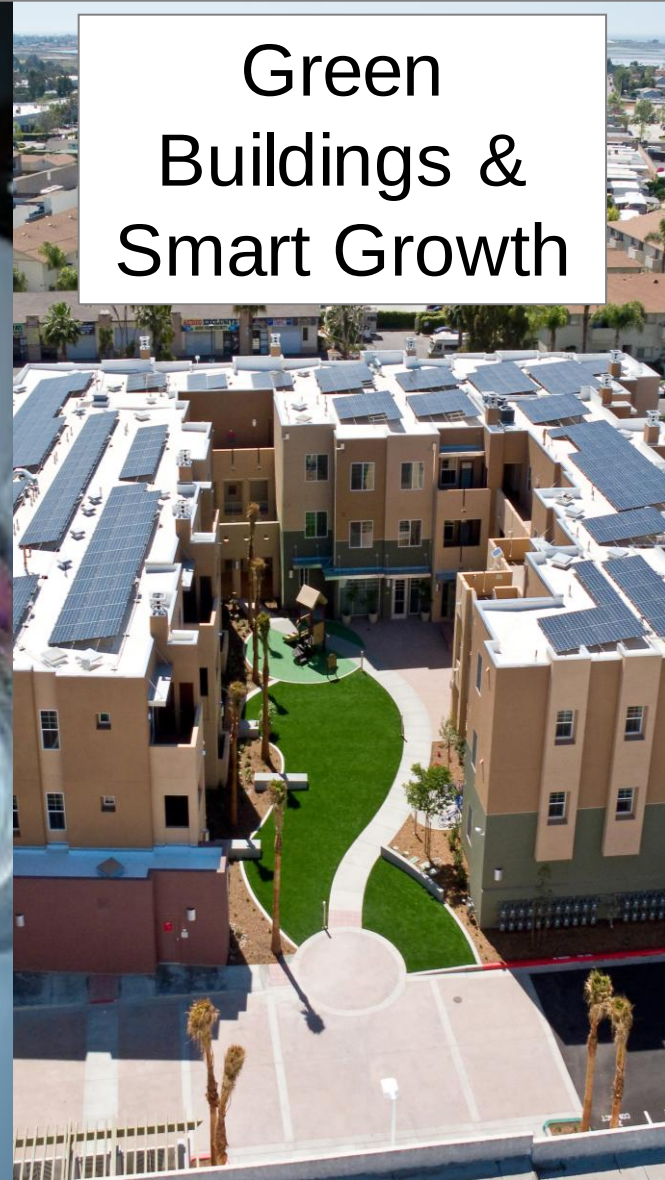
Alternative
Transportation



Efficiency &
Solar Retrofits



Green
Buildings &
Smart Growth

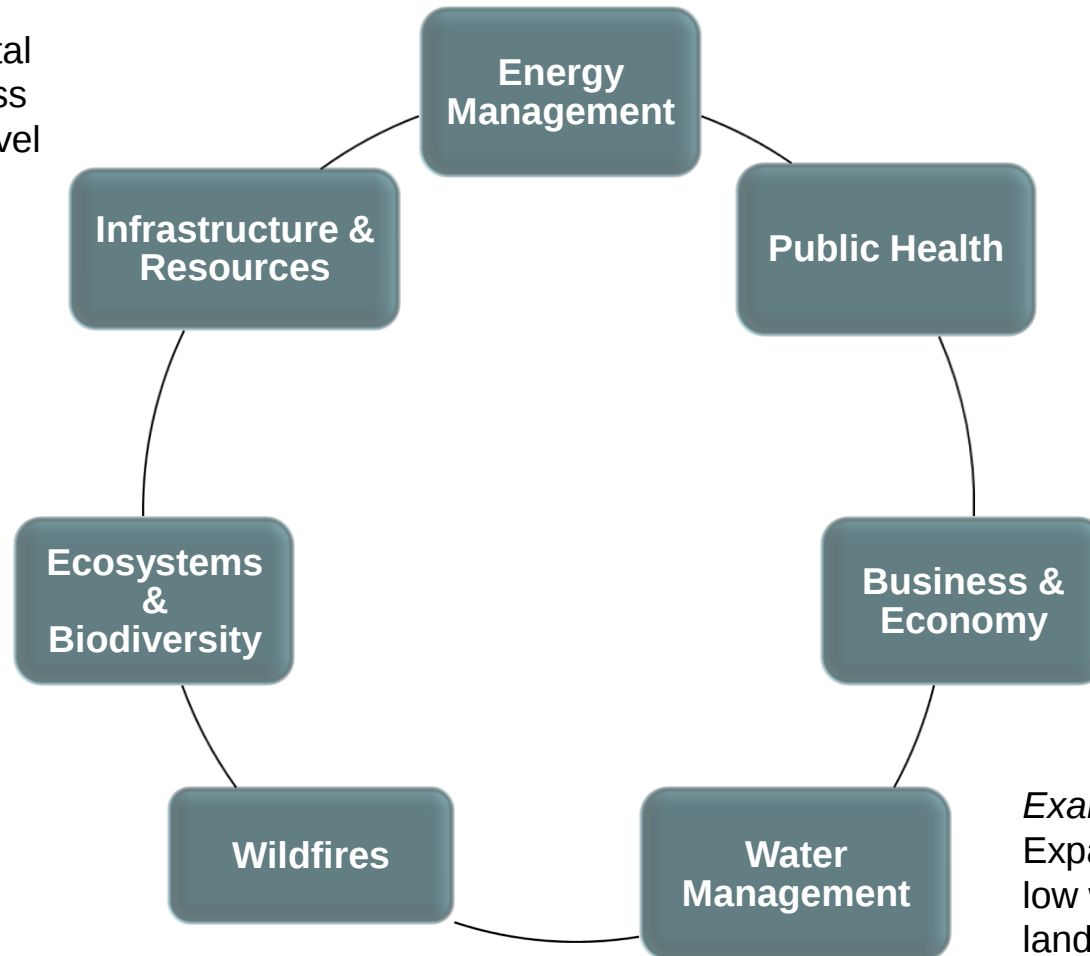


CLIMATE ADAPTATION PLANNING PROCESS

- 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

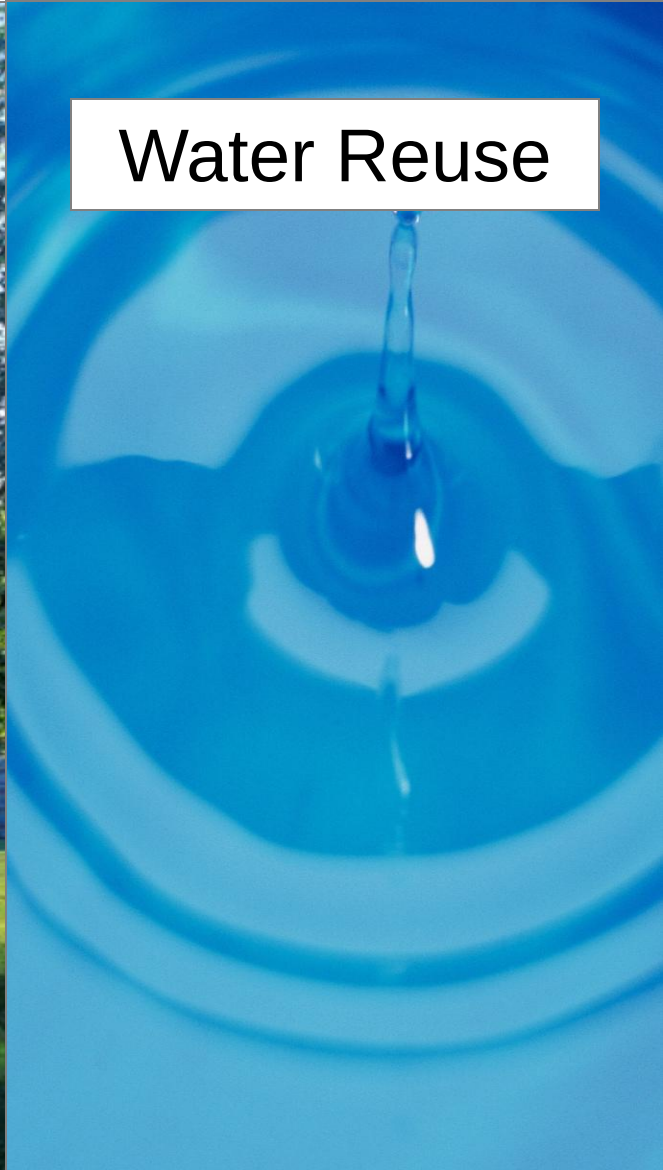
- Some strategies are also mitigation measures

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 onto the grass in the foreground. In the background, a building and other trees are visible under a clear 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...*

