

ADAPTING TO CLIMATE CHANGE IN CHULA VISTA



EPA Webcast: Climate Impacts & Risk Communication
Brendan Reed, Environmental Resource Mgr.



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

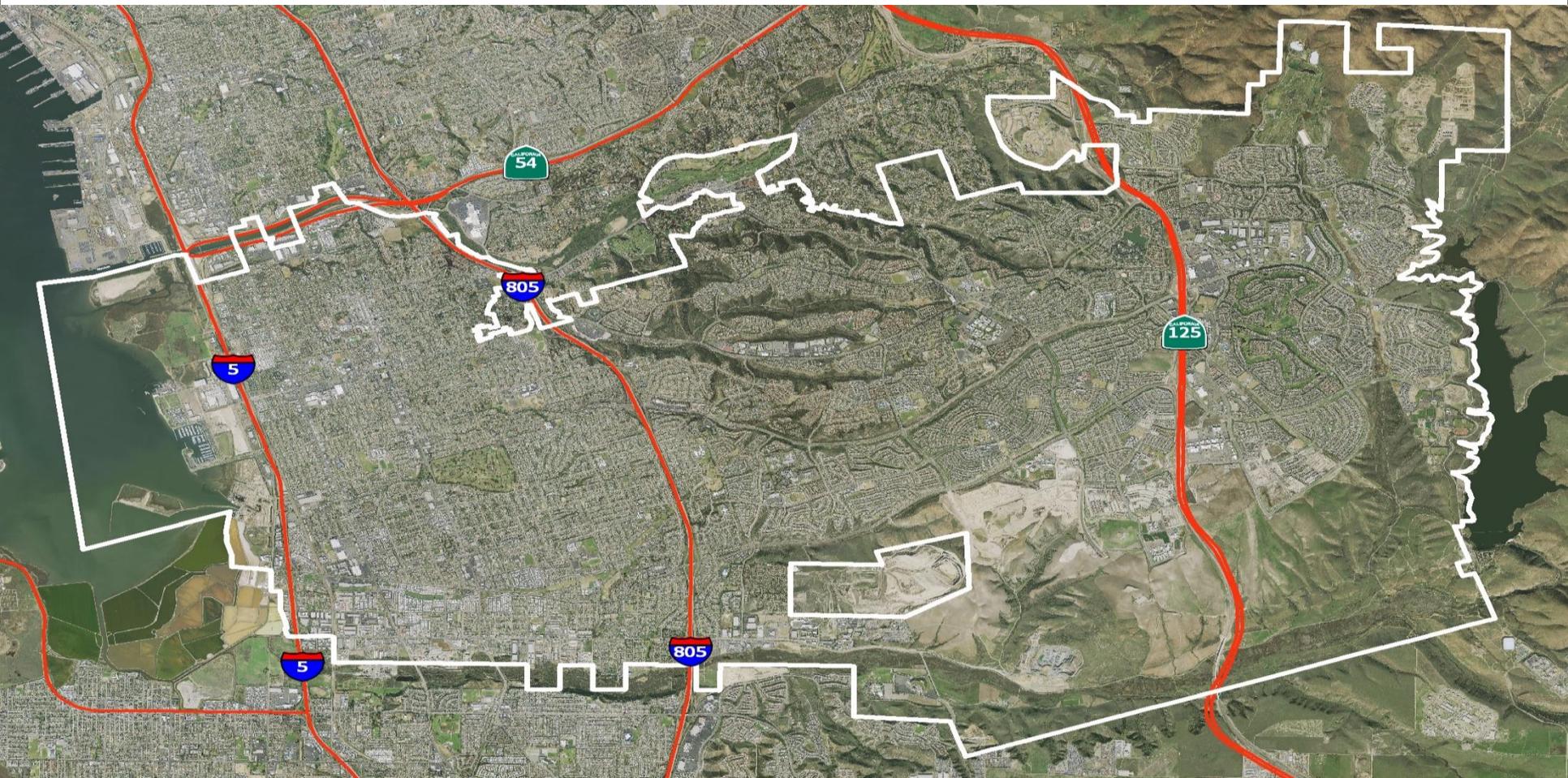
- **I wish that someone
had told me...**

 - 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)



The Climate Registry



CURRENT CLIMATE MITIGATION STRATEGIES

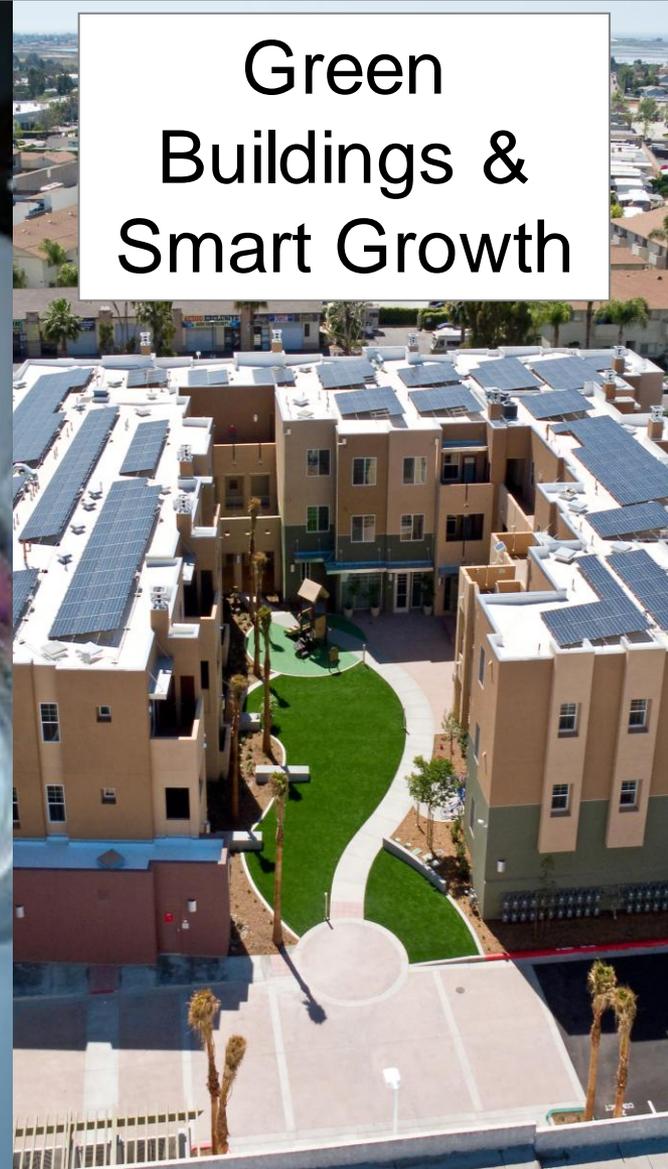
Alternative
Transportation



Efficiency &
Solar Retrofits



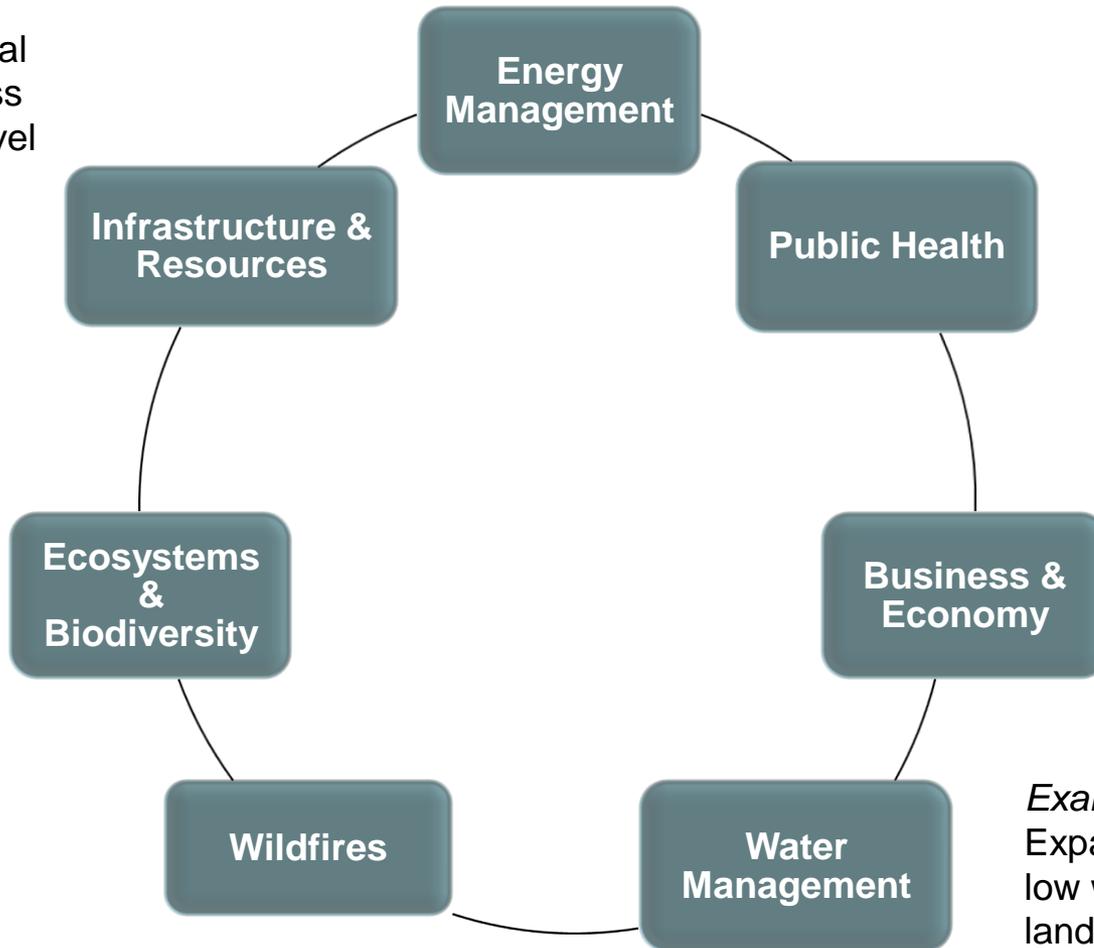
Green
Buildings &
Smart Growth



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	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
			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
	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 close-up photograph of a roof with blue corrugated metal panels and a white surface, illustrating cool paving and roofing strategies.

Cool Paving &
Roofs

A photograph of a large, leafy green tree in a grassy park area, casting a shadow on the ground, illustrating shade trees.

Shade Trees

A close-up photograph of a water droplet falling into a pool of water, creating ripples, illustrating water reuse.

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...*

