

# Toward Climate Resilience:

*A Framework and Principles for Science-Based Adaptation*

Erika Spanger-Siegfried, Union of Concerned Scientists

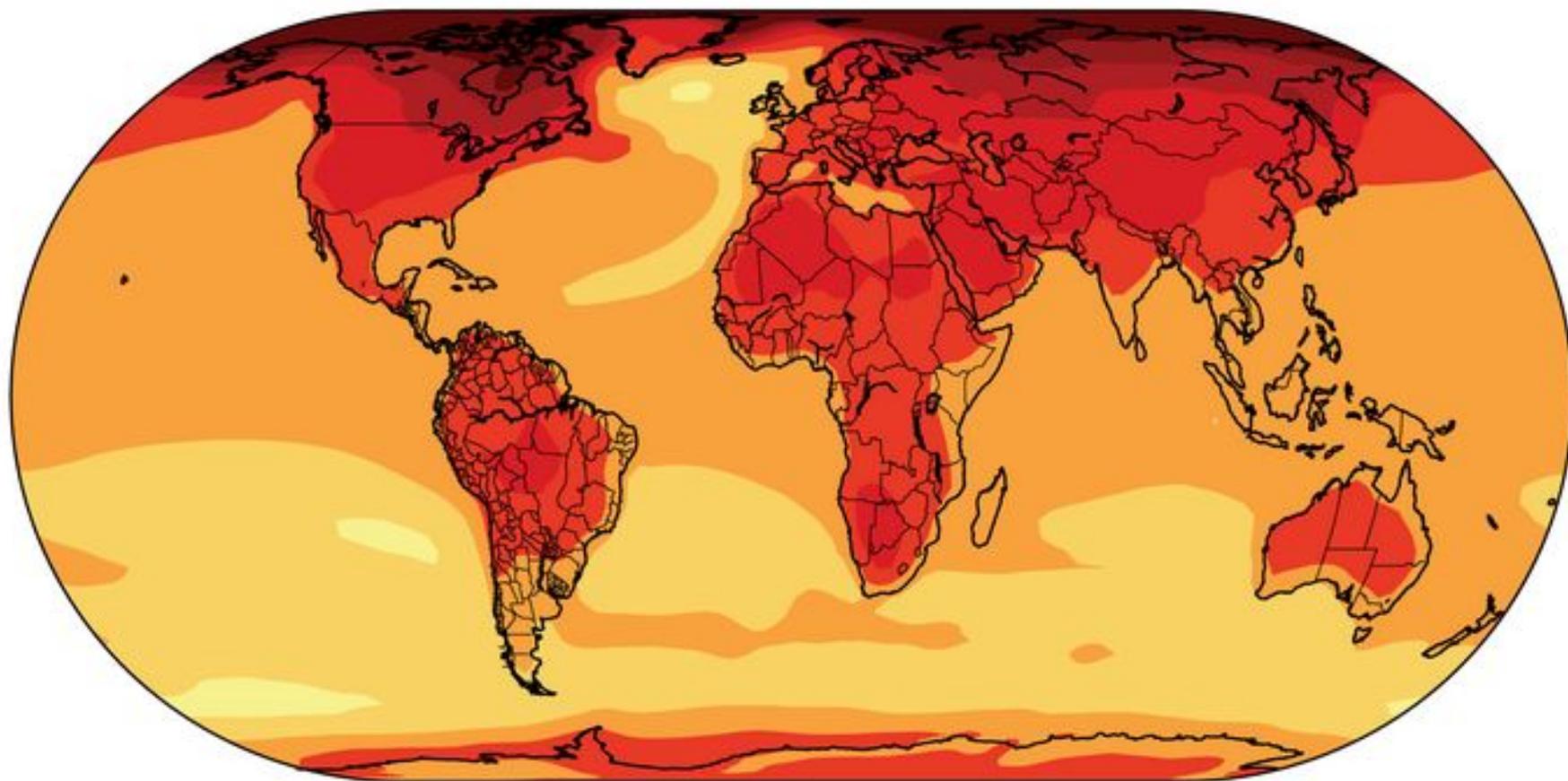
Science for a  
and healthy planet  
and safer world.

[ Union of  
Concerned Scientists



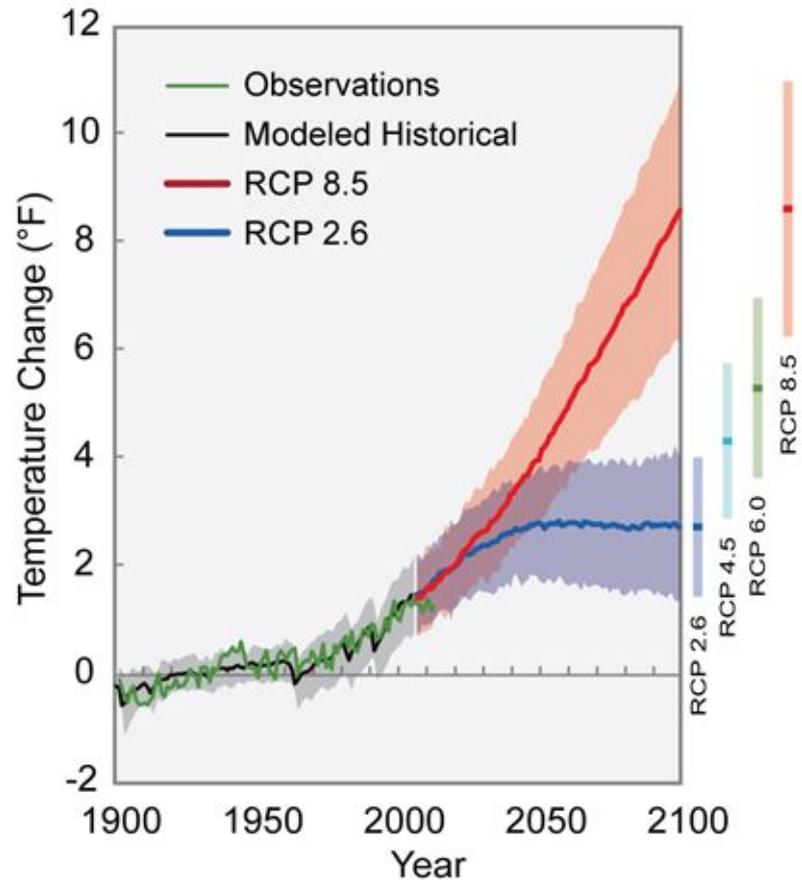
RAPID EMISSIONS REDUCTIONS (RCP 2.6)

CONTINUED EMISSIONS INCREASES (RCP 8.5)



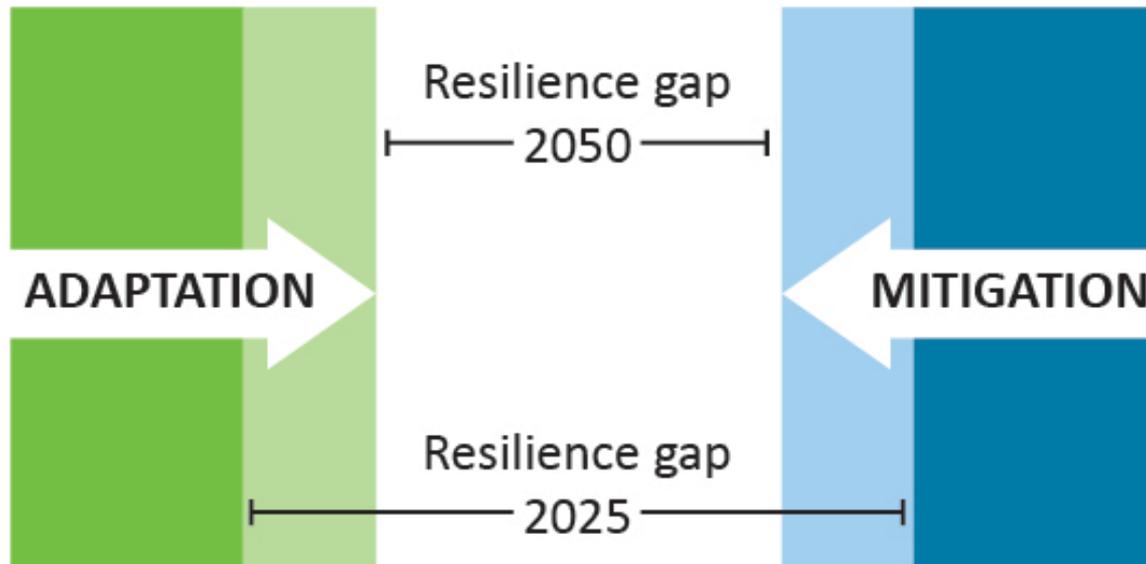
Temperature Change (°F)

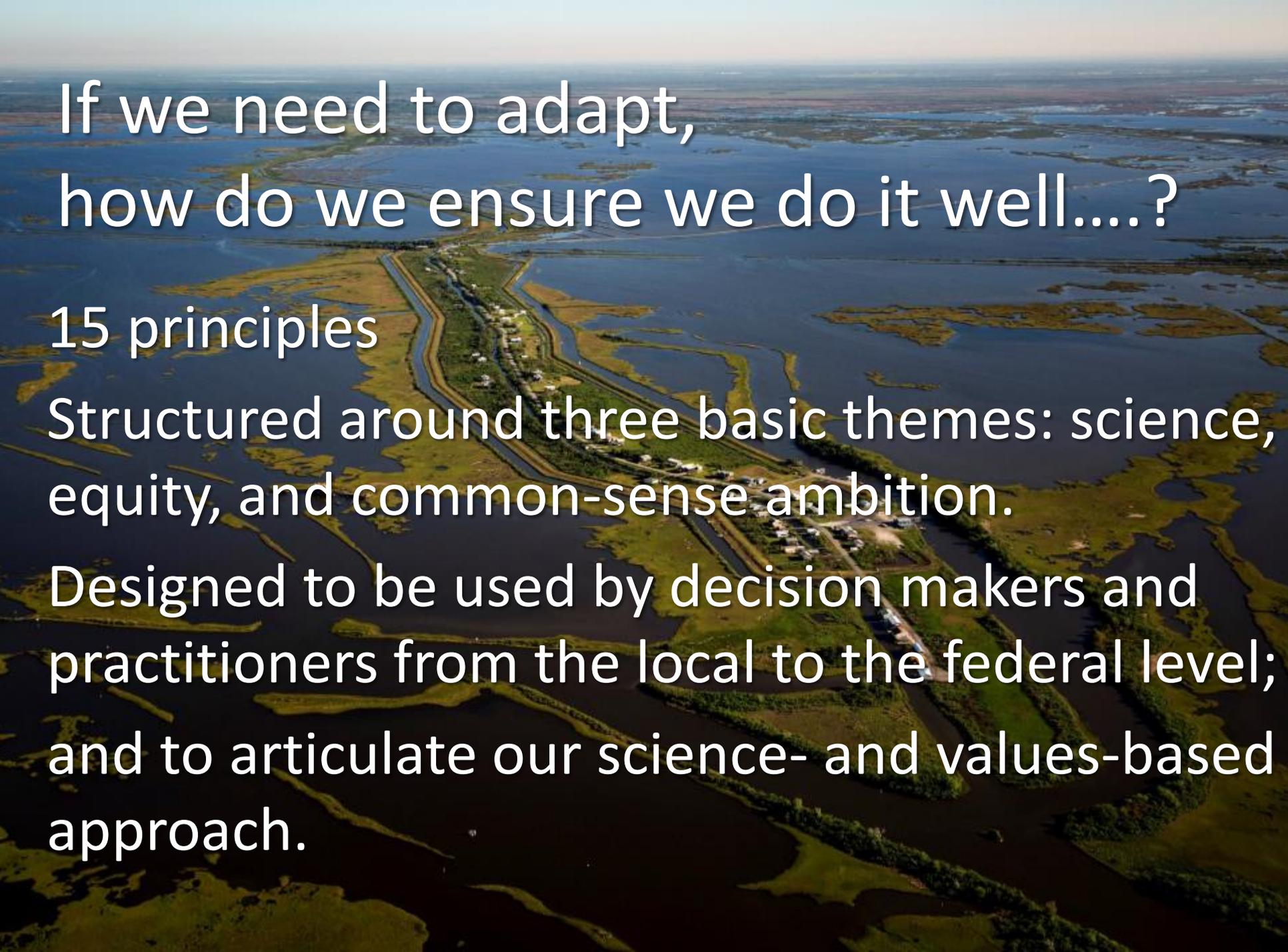




# [ Climate impacts in a warming world







If we need to adapt,  
how do we ensure we do it well....?

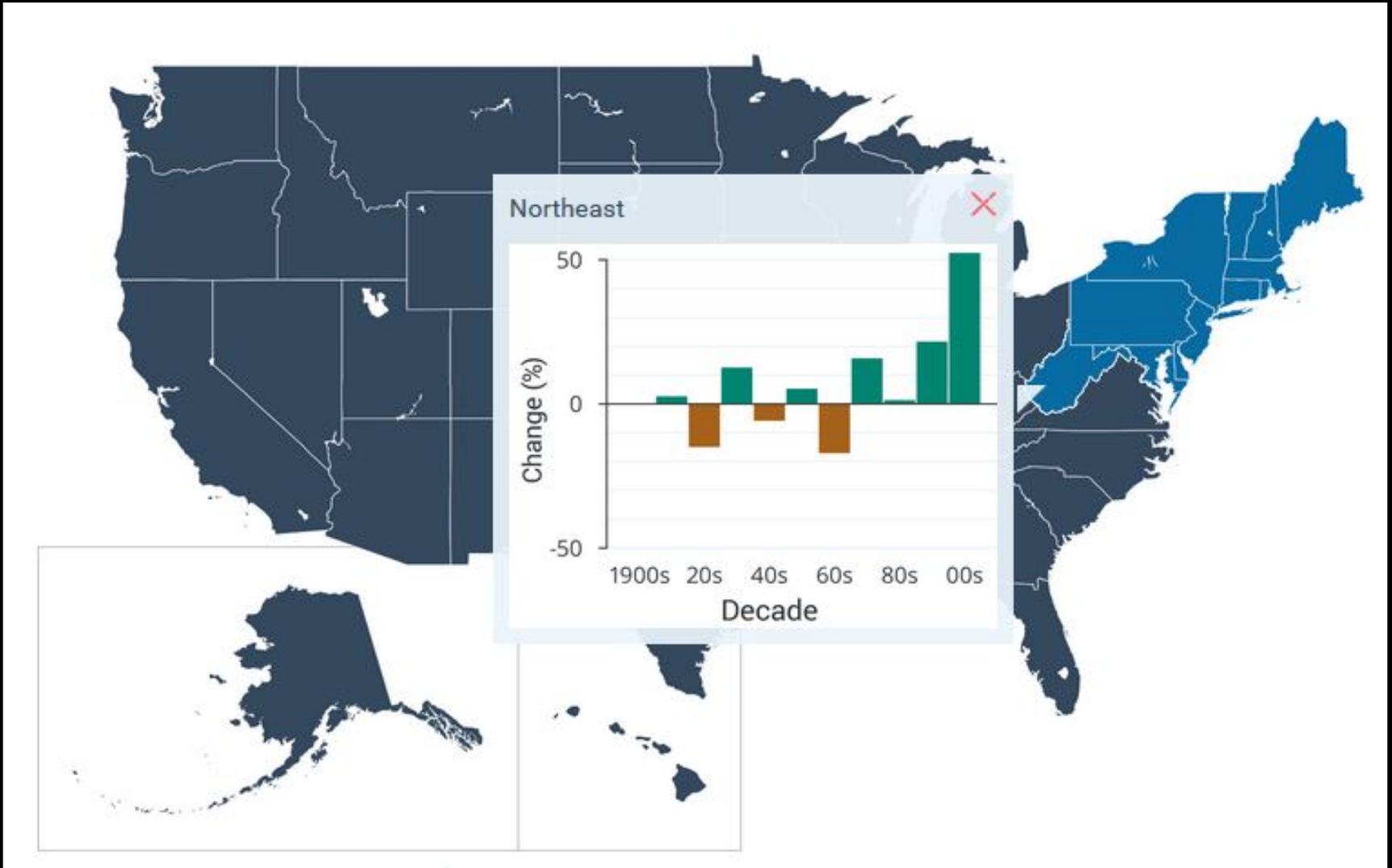
15 principles

Structured around three basic themes: science, equity, and common-sense ambition.

Designed to be used by decision makers and practitioners from the local to the federal level; and to articulate our science- and values-based approach.

[ Use rigorous science

# 1. Consider projected climate conditions.



# { 2. Use systems thinking



**{ 3. Match scope of planning to  
magnitude of projected change**



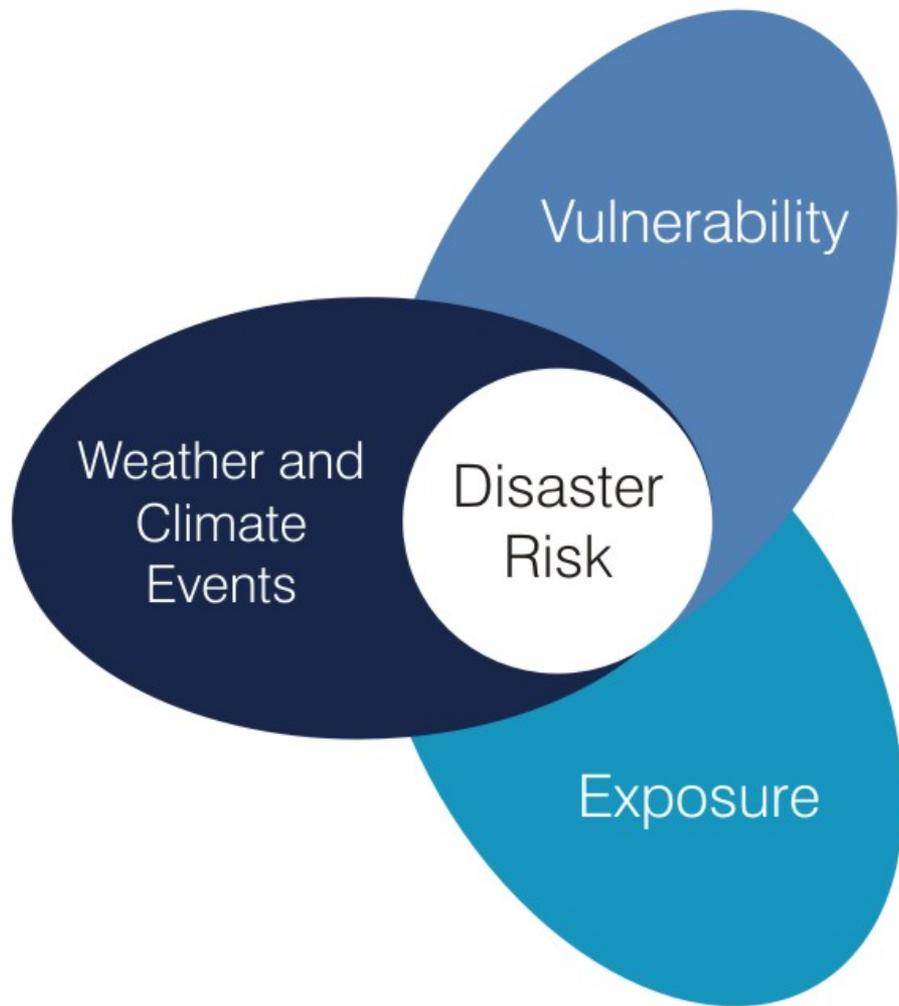
# { 4. Aim for robust decisions and policies



# { 5. Create opportunities to revise { and change course



[ Support equitable  
outcomes



6. Ensure costs of responding to climate change and benefits of resilience-building are equitably shared



# { 7. Decide with, not for



# { 8. Minimize harm and maximize options



# { 9. Equip and empower local experts



# { 10. Maximize transparency, accountability, and follow-through



[ Apply ambitious  
common sense

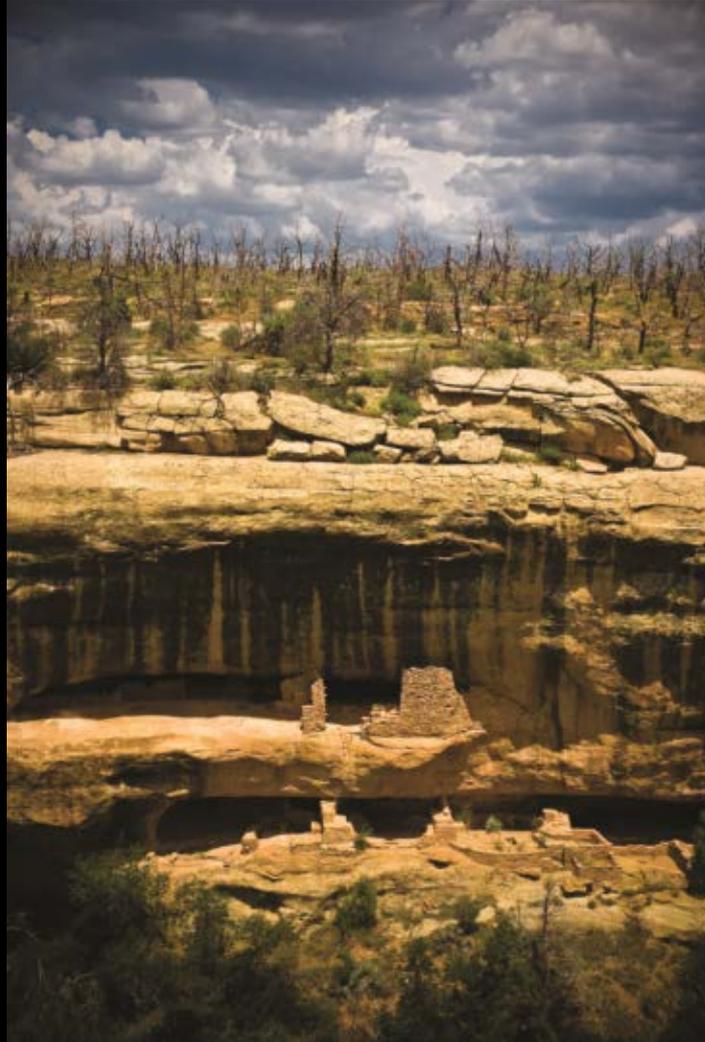
# { 11. Weed out maladaptation, { both existing and proposed



# { 12. Consider the costs of inaction



# 13. Work to protect the things citizens cherish



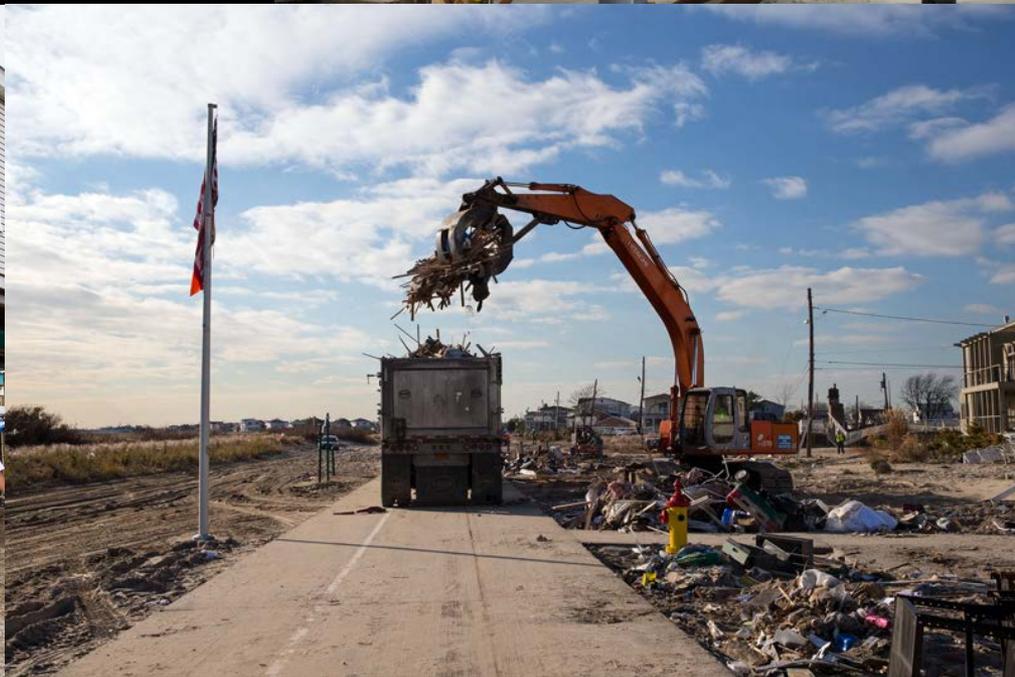
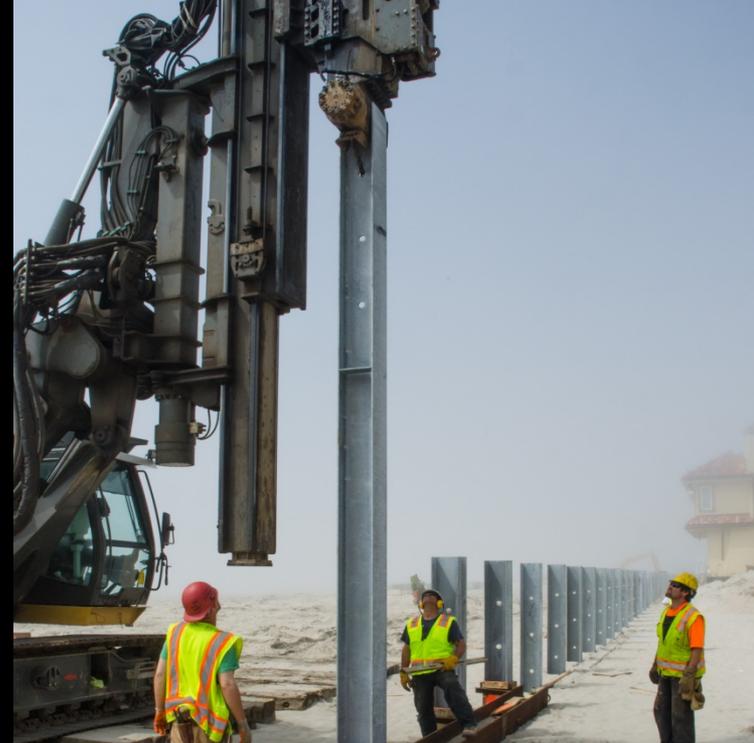
# { 14. Reflect a long-term vision



# { 15. Appreciate limits to adaptation { and push mitigation



# Adapt and Learn....





Thank You

Extra Slides

