

Skill Building for Effective Climate Risk Communication

March 31, 2022

J4-3/31, Diane Mas



Climate Communication

- Key Concepts in Climate Communication
- Building a Common Climate Communication Vocabulary
- Example



KEY CONCEPTS IN CLIMATE COMMUNICATION



One Size Does Not Fit All





The 6 Americas

https://climatecommunication.yale.edu/about/projects/global-warmings-six-americas/







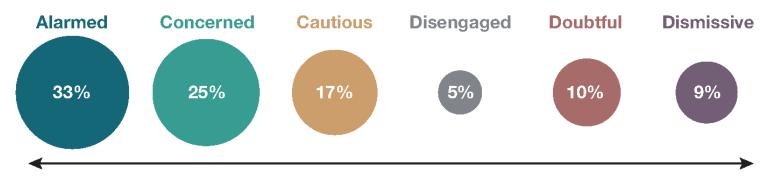








The 6 Americas



Highest Belief in Global Warming Most Concerned Most Motivated Lowest Belief in Global Warming Least Concerned Least Motivated

September 2021 (*n*=1,006)

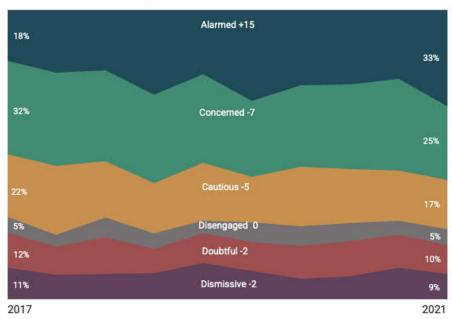






The 6 Americas

Global Warming's Six Americas: Five Year Trend



Data from 10 waves of the Climate Change in the American Mind national survey. June 2017 – September 2021. (n = 11,664).









Understanding Your Audience

- > Priorities and Concerns Differ
- Communication Must Also







Understanding Your Audience

- Meeting them where they are
- What is meaningful? Impactful? Challenging?
 - Continuity of operations
 - Avoidance of loss/damages
 - Safety Concerns
 - > Investor satisfaction
 - Community relations



Understanding Your Audience







QUESTIONS?



BUILDING A COMMON CLIMATE COMMUNICATION VOCABULARY



Climate Communication Vacabulary

- Climate Hazard
- > Exposure
- Sensitivity
- Vulnerability
- > Risk

- Adaptation
- Adaptive Capacity
- Resilience
- Sustainability



Climate Hazard

A physical process or event that can harm human health, livelihoods, or natural resources

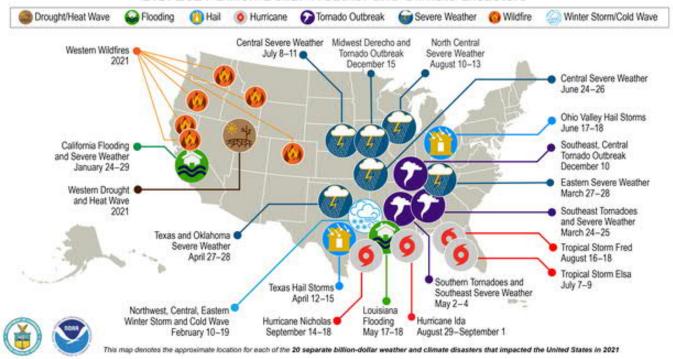
Common Weather and Climate-Related Hazards		
☐ Avalanche	☐ Heat Wave	☐ Riverine Flooding
Coastal Flooding	Hurricane	Strong Wind
☐ Cold Wave	Ice Storm	☐ Tornado
□ Drought	Landslide	Wildfire
☐ Hail	☐ Lightning	Winter Weather



https://toolkit.climate.gov/steps-to-resilience/explore-hazards

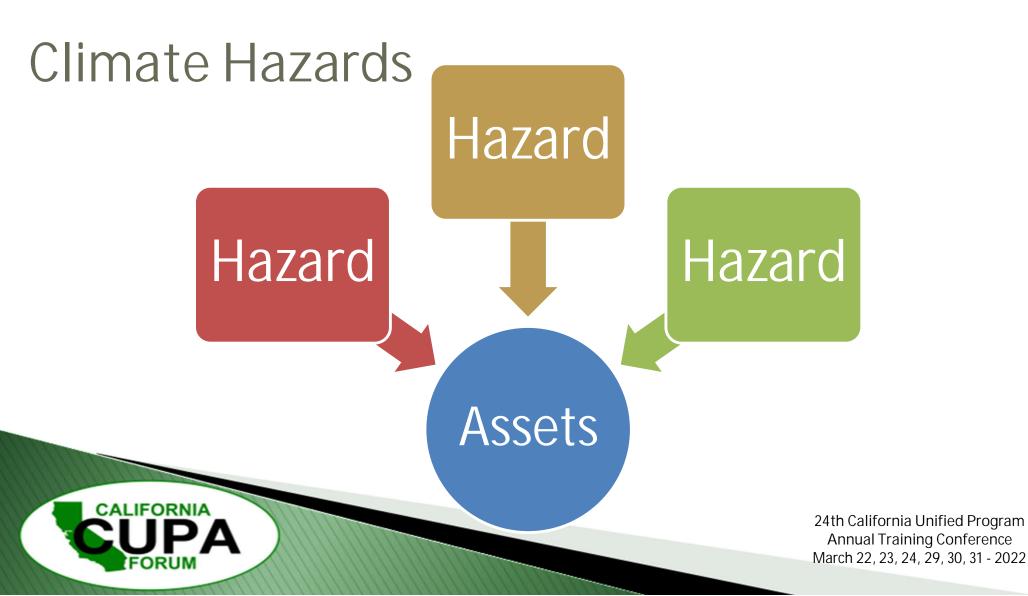
Climate Hazard

U.S. 2021 Billion-Dollar Weather and Climate Disasters





https://toolkit.climate.gov/steps-to-resilience/explore-hazards

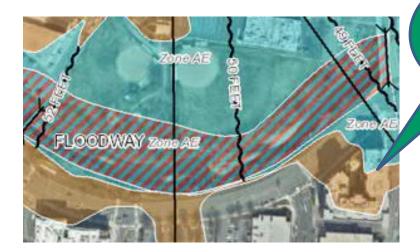


Exposure

Presence (location) of people, livelihoods, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected by physical events and which, thereby, are subject to potential future harm, loss, or damage.



Exposure



Those in a floodplain are exposed to flooding.



Lavell et al., 2012



24th California Unified Program Annual Training Conference March 22, 23, 24, 29, 30, 31 - 2022

Bare skin is exposed to frostbite.

Sensitivity

The degree to which a system is affected, either adversely or beneficially, by climate variability or change. The effect may be direct (e.g., a change in crop yield in response to a change in the mean, range or variability of temperature) or indirect (e.g., damages caused by an increase in the frequency of coastal flooding due to sea level rise).



Sensitivity

Marsh and swamp area are less sensitive to flooding.



Structures are sensitive to flooding.





Vulnerability

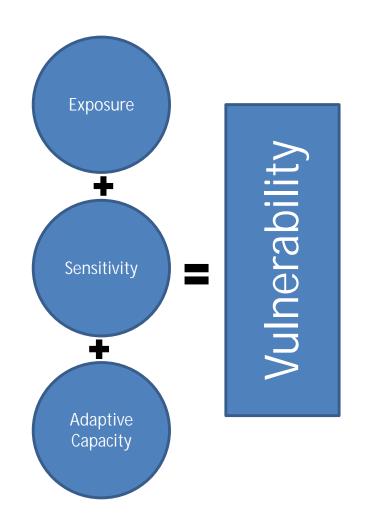
The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed; its sensitivity; and its adaptive capacity.



Vulnerability

Trees with leaves on (sensitivity, adaptive capacity) are more vulnerable to snow loads (exposure).







Risk

Risks are threats to life, health and safety, the environment, economic well-being, and other things of value. Risks are often evaluated in terms of how likely they are to occur (probability) and the damages that would result if they did happen (consequences).



Risk







Adaptation

Adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects.



Adaptive Capacity

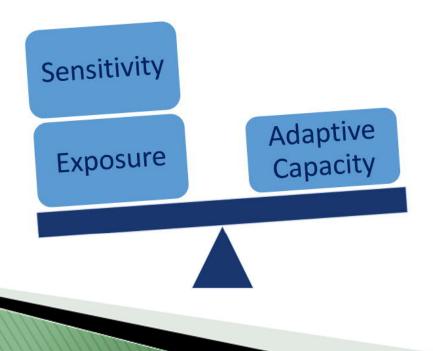
> The ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.



Adaptive Capacity

CALIFORNIA

+ Vulnerability -



Resilience

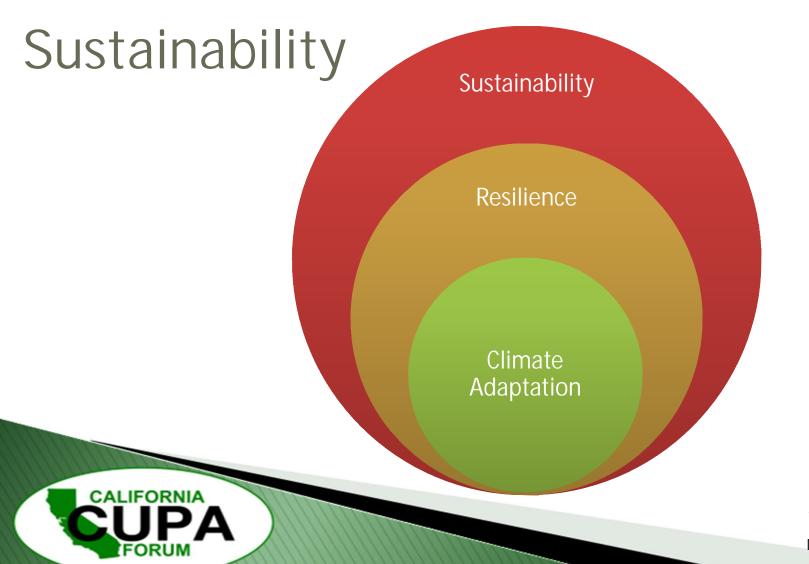
Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.



Sustainability

The long-term goal of meeting the needs of the present without compromising the ability of future generations to meet their own needs.





Climate Communication Vacabulary

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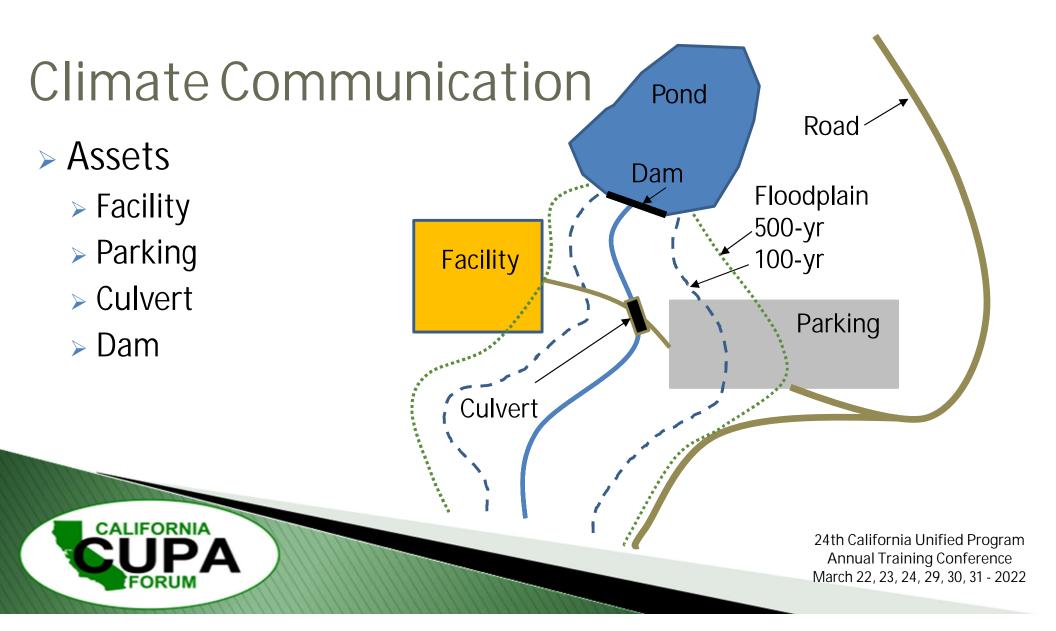


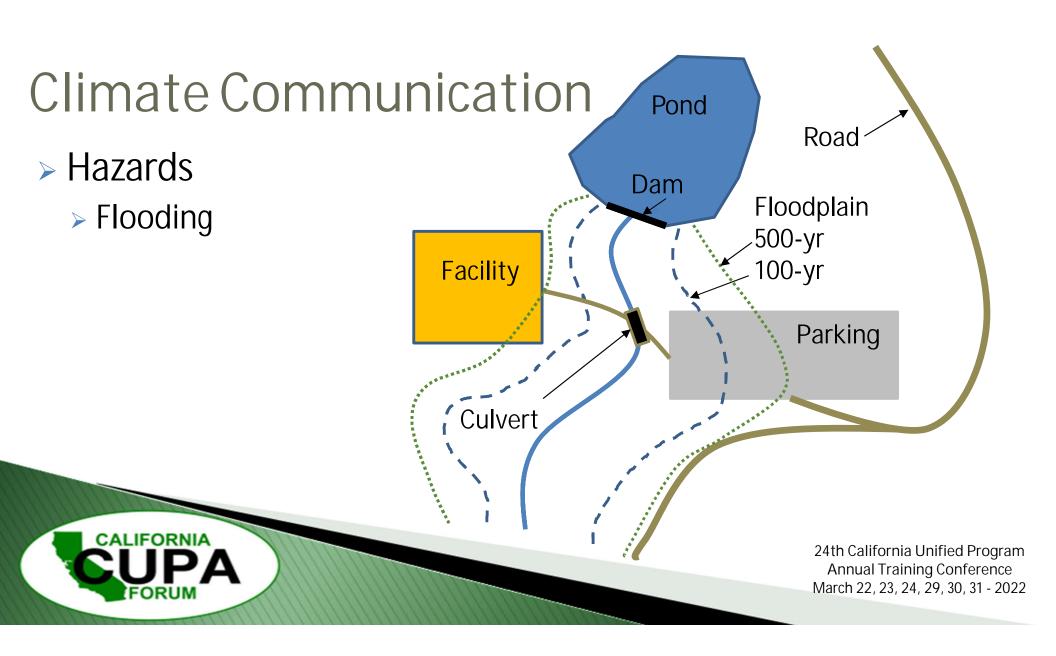
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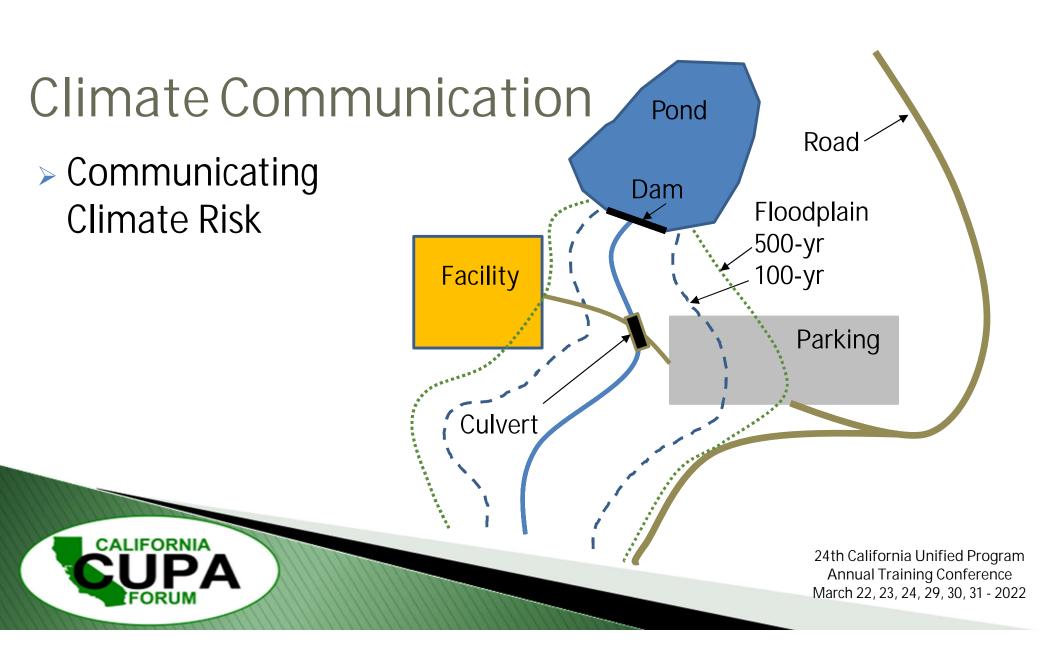


EXAMPLE











ANY QUESTIONS?

Diane Mas Fuss & O'Neill, Inc 413-348-9738 dmas@fando.com

