

Regional Engagement Workshop Summary Report: Southwest Region

Table of Contents

Introduction	2
Workshop Structure	2
The Southwest Regional Engagement Workshop	2
Authors, Locations, and Staff	3
Overview and Topics of Discussion	3
Key Takeaways	4
Results	5
About the NCA	5
Appendix A: Workshop Agenda	6
Appendix B: List of Southwest Regional Chapter Authors	8



Introduction

The Fourth National Climate Assessment (NCA4), currently in development, will assess the science of climate change and its impacts across the United States. It will document climate change-related impacts and responses for various sectors and regions, with the goal of better informing public and private decision-making at all levels.

To ensure that the assessment is informed by and useful to stakeholders, engagement workshops were planned for each of the 10 NCA4 regions. These workshops provided stakeholders an opportunity to provide input to and exchange ideas with the chapter author team on key message formulation, share relevant resources, and give feedback on issues of importance to their region.

Workshop Structure

In an effort to maximize participation while easing travel burden, organizers are employing a ‘Hub and Satellite’ model for NCA4 Regional Engagement Workshops. A hub—or primary location—hosted stakeholders, the chapter author team, and NCA4 staff from the U.S. Global Change Research Program (USGCRP). Satellite locations throughout the region established remote connections to the hub for plenary presentations and discussion. Satellites were encouraged to hold break-out sessions on regional concerns and proposed topics for NCA4, reporting their discussions to the hub at a pre-determined time.

The Southwest Regional Engagement Workshop

On February 21, 2017, the NCA4 Southwest chapter team held its Regional Engagement Workshop. The objective of the workshop was to gather input from a diverse array of stakeholders throughout the Southwest to help inform the writing and development of NCA4, and to raise awareness of the process and timeline for NCA4.

The Center for Climate Adaptation Science and Solutions at the University of Arizona, in Tucson, AZ, served as the hub location with 77 attendees. Albuquerque, NM, Reno, NV, Salt Lake City, UT, Los Angeles, CA, Davis, CA, and Boulder, CO served as satellites (each with 10-20 people), and a number of stakeholders participated virtually (Figure 1). The event attracted participants from the entire region and across a wide range of professions including students, scientists, NGO staff, and local and state government staff.

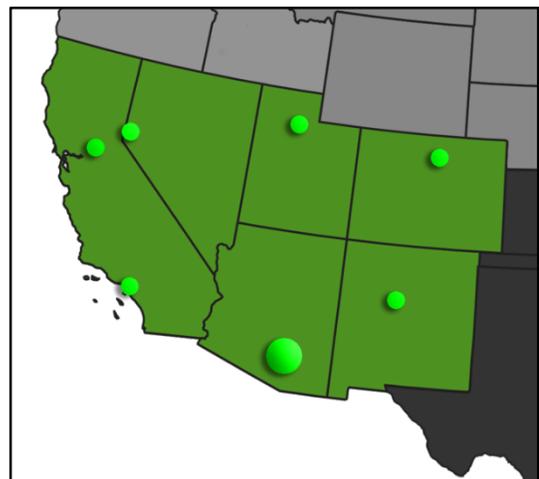


Figure 1. Map of the REW hub & satellite locations: Tucson, AZ; Albuquerque, NM; Reno, NV; Salt Lake City, UT; Los Angeles, CA; Davis, CA; Boulder, CO.

Authors, Locations, and Staff

Authors

- Patrick Gonzalez (National Park Service)
- Gregg Garfin (University of Arizona)
- Kristen Averyt (University of Colorado)
- Heidi Brown (University of Arizona)
- Keely Brooks (Southern Nevada Water Authority)
- Brad Udall (Colorado State University)
- Nancy Huntly (Utah State University)
- David Breshears (University of Arizona)
- Emile Elias (New Mexico State University)
- Helene Margolis (University of California at Davis)
- Julie Maldonado (University of California at Santa Barbara)

Satellite & Hub Hosts

- Tucson, AZ (Hub)
- Albuquerque, NM
- Reno, NV
- Salt Lake City, UT
- Los Angeles, CA
- Davis, CA
- Boulder, CO

USGCRP Staff

- Fred Lipschultz
- Chris Avery
- Tess Carter
- Susan Aragon-Long
- Mark Shimamoto

Overview and Topics of Discussion

The day began with a plenary meeting including all of the satellites. The plenary covered the core information required for the attendees to understand the NCA4 process, and the progress on the SW chapter in the context of the prior NCA. Dr. Fred Lipschultz, an NCA Senior Scientist, presented the overview of the NCA process, including the Key Messages from NCA3 for the region, followed by the Chapter Lead, Dr. Gregg Garfin, who described the NCA4 draft focal areas. All sites proceeded to the first of two breakout sessions to brainstorm and answer specific questions. After the breakout sessions, each site sequentially reported their high-level points to the entire audience. A panel session with the full SW author team then responded to audience questions. Finally, the audience was asked to provide feedback on how NCA4 could serve their needs, whether their organization or community was interested in being further engaged, and if so, how USGCRP and their regional partners could help facilitate.

In an open question-and-answer session, stakeholders were invited to provide comment to the author team and USGCRP staff on the report development process, as well as the substance of the Southern Great Plains chapter.

Participants shared specific questions, issues, ideas, resources, and case studies for each of the aforementioned focal areas. For each focal area, stakeholders were asked a series of questions around which to structure their responses.

Stakeholders were also given the opportunity to share thoughts on areas that were not covered by the previously-identified focal areas.

Key Takeaways

Stakeholders identified areas of opportunity and concern, case studies, and relevant regional information associated with each of the focal areas. This feedback was later distilled into key thematic takeaways for the chapter author team. These takeaways are summarized below.

ISSUES: Has the SW author team identified the right issues? What other issues are you confronting or addressing in your work? What is on the horizon—What are you anticipating? Major impacts that the NCA4 should shine a light on?

- Both the urban experience and the rural experience are hugely critical and not reflected in the current list of key messages. These need to be drawn out more explicitly throughout the chapter.
- Transboundary issues could be one major thing that is significant for the SW more than any other region. Issue everywhere, but probably sharper in the SW than anywhere else.
 - Colorado River as a text box addressing a range of topics
- Groundwater – where does it fit?
 - Threshold information, water quality, management needs
- Water vs. dust considerations – connections to snow, land use, ag, health, etc.
- Infrastructure including natural infrastructure
- Lack of focus on vulnerable communities including tribes
- Variability masking trends – connected to bouncing between extremes?
- Inland flooding and erosion

ACTIONS: Solutions, success stories, adaptation actions, mitigation initiatives, failure stories/learning stories, information on efforts to address current underlying vulnerabilities: What should we know about? What should the NCA4 highlight, or shine a spotlight on?

- Rainwater harvesting and emergency planning
 - Evaluations of impacts likely already exist
 - Water storage and conservation – variety of examples
- Consistent framework throughout chapter
 - E.g., long term monitoring, **collaboration** on solutions
- Economic valuation (including CIRA) important component
- Business growth – adaptation activities around energy
- UC and Cal State systems as good communicating entities
- Future savings and return on mitigation
- Incorporate governance conversation, institutional capacity, and traditional ecological knowledge (TEK) into the story
- Environmental justice – ex: Tucson tree planting in vulnerable communities; access to solar

- Cities as change agents
- Tucson food justice (cross-sectors)

Results

The feedback provided during this workshop serves as valuable input to the development of not only the Southwest chapter of NCA4, but of all chapters. This summary report is being shared with all NCA4 authors to inform the development of their chapters, as well. It will also be made publicly available on the NCA4 website (www.globalchange.gov/nca4). Over 100 stakeholders throughout the Southwest region participated in the day-long meeting, providing authors with a great deal of useful feedback – from concerns they face, to resources they use and specific case studies where communities are working to address the risks they face as a result of climate change. Responses from both authors and participants indicated that the workshop was not only positively received in and of itself, but it served to cultivate new relationships, research ideas and, hopefully, future collaborations across the Southwest.

About the NCA

The National Climate Assessment is the U.S. Government’s premier resource for articulating the risks posed to the Nation by climate change, as well as what is being and can be done to minimize those risks. It is an inter-agency effort, bringing together experts from the 13 Federal agencies of USGCRP, the broader Federal government, as well as hundreds of experts in the academic, non-profit, and private sectors.

Appendix A: Workshop Agenda

AGENDA

Date: February 21, 2017

Time: 9 AM-4:30 PM MST / 8 AM-3:30 PM PST (registration opens at 8:30 AM at Tucson hub)

Goals

- Orient participants to NCA4 process, Southwest Chapter requirements, chapter draft key message areas
- Capture participants' big picture ideas, comments, refinements to chapter ideas
- Assess participants' needs and wants for NCA4 and Sustained Assessment

Session 1 PLENARY

- 9:00-10:25 AM MST (8:00-9:25 PST) – Introduction to NCA4 and Southwest Chapter
 - What is the National Climate Assessment?
NCA mandate and goals
NCA4 process, outputs, and desired outcomes
 - Review NCA3 Southwest Chapter
 - Present NCA4 Southwest Chapter philosophy, proposed foci and key messages
 - Q&A (and through chat from satellites)

Break and transition to Breakouts – 10:25-10:45 AM MST (9:25-9:45 PST)

Session 2 BREAKOUT

- 10:45 AM-11:30 AM MST (9:45 AM-10:30 PST)
 - Brainstorming Breakouts
 - **ISSUES:** Have we identified the right issues? What other issues are you confronting or addressing in your work? What is on the horizon—What are you anticipating? Major impacts that we should shine a light on?

Transition to Next Breakout – 11:30-11:45 PM MST (10:30-10:45 PST)

Session 3 BREAKOUT

- 11:45 AM-12:30 PM MST (10:45-11:30 PST)
 - Brainstorming Breakouts
 - **ACTIONS:** Solutions, success stories, adaptation actions, mitigation initiatives, failure stories/learning stories, information on efforts to address current underlying vulnerabilities: What should we know about? What should we highlight, or shine a spotlight on?

LUNCH Break: 12:30 PM-1:30 PM MST (11:30-12:30 PST)

(Provided for Tucson attendees)

Session 4 PLENARY SESSION: Reporting back from each breakout group

- 1:30-2:30 PM MST (12:30-1:30 PST)
 - big picture ideas and top line stories, clear gaps or inspiring emerging initiatives, stories, efforts (3 minutes per breakout group, rapid-fire!)

Session 5 PLENARY Q&A

- 2:30 PM-3:30 PM MST (1:30-2:30 PST)
 - Subject matter expert panel question and answer – state of knowledge
 - **If you have limited time to join this meeting, this is the time to send your questions via chat**

Session 6 WRAP-UP

- 3:30 PM-4:30 PM MST (2:30-3:30 PST)
 - How would you like NCA4 to serve you?
 - Sustained assessment: Is your organization or community interested in being engaged? How can USGCRP and your regional partners help facilitate this?

Appendix B: List of Southwest Regional Chapter Authors

Coordinating Lead Author: Patrick Gonzalez, National Park Service

Chapter Lead: Gregg Garfin, University of Arizona

Authors:

- Nate Mantua (NOAA)
- Kristen Averyt (University of Colorado)
- Skyli McAfee (The Nature Conservancy)
- Heidi Brown (University of Arizona)
- Keely Brooks (Southern Nevada Water Authority)
- Brad Udall (Colorado State University)
- Nancy Huntly (Utah State University)
- David Breshears (University of Arizona)
- Jenny Lester Moffitt (California Department of Food and Agriculture)
- Emile Elias (New Mexico State University)
- Helene Margolis (University of California at Davis)
- Julie Maldonado (University of California at Santa Barbara)
- Beth Rose Middleton (University of California at Davis)

USGCRP staff:

- Tess Carter, NCA Program Coordinator
- Fred Lipschultz, NCA Senior Scientist
- Mark Shimamoto, NCA Health Lead