

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



WEDNESDAY, SEPTEMBER 23, 2020

WE WILL START AT 1 PM EDT

Wildland Fires: Towards Improved Understanding and Forecasting of Air Quality Impacts

Day 1

Sessions are being recorded


WebEx Events: Engaging in the Conversation


PANELISTS: Speakers, Committee and Board Members, Staff

- Remain muted when not speaking; turn video/webcam on when appropriate
- View questions and comments submitted through Q&A
- View list of all attendees

ATTENDEES:

- Please open Participant, Chat, and Q&A panels as needed

 **Q&A Panel:** Questions can only be submitted by ATTENDEES and seen by PANELISTS. Answers will not be provided in writing. Only submit questions to “**all panelists**” for consideration.

 **Chat Panel:** Should be used minimally. Can be used by all to communicate with the host.



Floating panel view will make your panels separate windows, but it will put your video window into full screen behind them.



Grid is the recommended viewing option of speakers when the screen isn't shared.

WebEx Events: Engaging in the Conversation

LIVESTREAM:

- On event webpage. Listen-only viewing.

SEE WEBPAGE FOR:

- Agenda
- Speaker and Committee Member bios
- WebEx guidance
- Links to join via WebEx

Welcome and Goals

- Workshop context
- Planning committee membership
- Why this topic
- Workshop structure

BASC Summer Studies

- Every few years the Board on Atmospheric Sciences and Climate (BASC) organizes a workshop on a self-selected topic
- The purpose of these workshops is to facilitate discussion on a topic that might not otherwise be addressed via BASC board discussion forums or full studies - continuing or emerging community issues, technical issues, science-policy interface issues.
- This is the Board's opportunity to explore an issue in some depth and leave a record of those discussions.
- Workshop funded under Board core support from NASA, NOAA, and NSF- We are grateful for this support.

Workshop Planning Committee

A.R. (Ravi) Ravishankara, Chair, Colorado State University, Fort Collins, CO

Susan Anenberg, George Washington University, Washington DC

Michael T. Benjamin, California Air Resources Board, Sacramento AC

Narasimhan (Sim) Larkin, US Department of Agriculture Forest Service, Seattle WA

Luke P. Naeher, University of Georgia, Athens GA

Carsten Warneke, National Oceanic and Atmospheric Administration, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder CO

Christine Wiedinmyer, Cooperative Institute for Research in Environmental Sciences, University of Colorado Boulder, Boulder CO

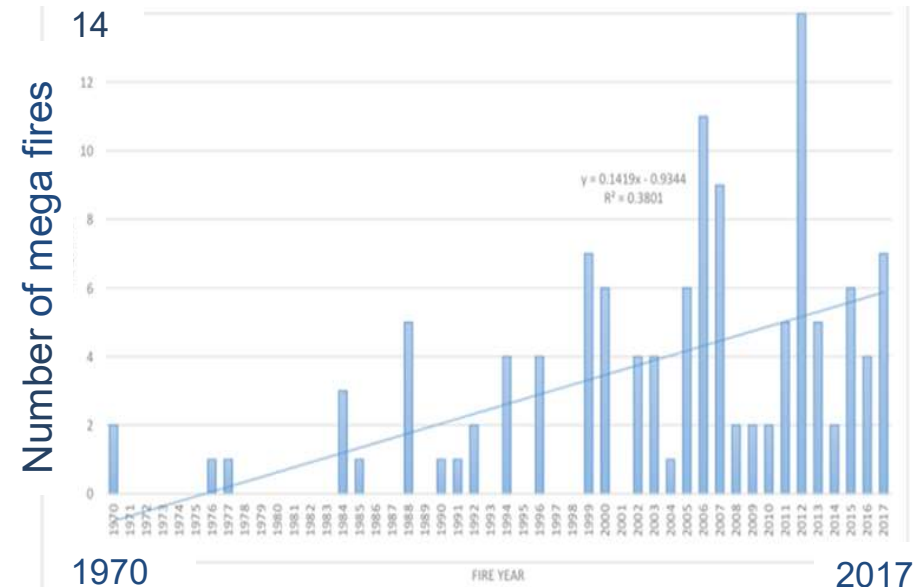
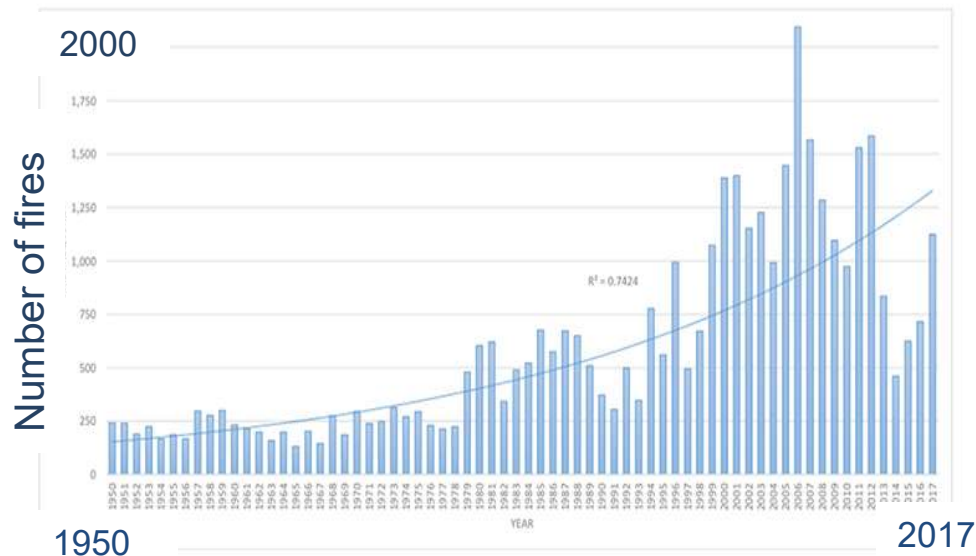
NASEM: April Melvin, Marilee Shelton-Davenport, Rita Gaskins

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Why this topic?

- Wildland fire are not new! However, there are visible changes and changes are anticipated- in burn area, locations, and duration)
- Increased development in the wildland-urban interface puts more people in harm's way.
- “Smoke” (effluents of burns) travels well beyond the source of the fire- from regional to national problem?
- Poor air quality from wildfires affects human wellbeing
- Wildland fires have many other consequences- to water supply and quality, release of CO₂ back into the atmosphere, etc.
- *This workshop: focus on the air quality-wildland fire intersection*

Why this topic?: Looking ahead



<https://climate.nasa.gov/blog/2830/six-trends-to-know-about-fire-season-in-the-western-us/>

- Increases in fires and mega fires (>100,00 acres)- climate change, shifts
- Implication for Adaptation + Mitigation
- Multiple stressor or confounding factors (e.g., smoke and corona virus)

Workshop goals

To bring together *atmospheric chemistry* and *health* research communities, *managers*, and *decision makers* to discuss knowledge and needs surrounding how wildfire smoke affects air quality and human health.

Explore opportunities to better bridge these communities, to advance the science and improve the production and exchange of information.

Workshop structure

Day 1: Where are we now?

Current state of the science and communication around atmospheric chemistry and transport of fire emissions, forecasting, measurement tools, and smoke health effects.

Day 2: Where do we want to be?

What is needed on the ground and how that translates into primary research needs within the atmospheric chemistry and health communities to better protect air quality and human health. What do we need to learn about air quality to mitigate, manage, and prevent health effects?

Day 3: How do we get there?

How we can improve the production and exchange of information about air quality and health effects between atmospheric and health communities and more broadly, as we look to future needs and capabilities for research and mitigation of health impacts.