Navigating the Chaos: Risk Analysis, Decision Support, and Community Hardening Frameworks for Catastrophic Wildfires

A lecture presented by

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As part of the 2026 FFERAL (Fire and Forest Ecology Random Lecture) Series jointly hosted by the California Fire Science Consortium and the Safford Lab at UC-Davis

Wednesday, January 28, 2026, 3:00 – 4:30 pm, Wickson Hall 1017 or via Zoom

Register for virtual event at https://tinyurl.com/u44ckfdv

Bio: Matt is the Vice President of Wildfire Risk Analytics at Pyrologix, a Vibrant Planet company. His work has pioneered new horizons in wildfire hazard and risk assessment, incident response planning, decision support, landscape fuels strategy, and performance measurement. His research interests focus primarily on risk, systems, strategy, and decision analysis. Ultimately, he aspires to inform and catalyze actionable science to address the wildfire and climate crises with urgency and dispatch. Prior to joining Pyrologix, he spent 14 years in the Human Dimensions Program at the USDA Forest Service Rocky Mountain Research Station, where he served as a core member of the National Fire Decision Support Center and the Wildfire Risk Management Science Team.

Lecture Abstract: The escalating frequency and damage of catastrophic fires are accelerating faster than social systems can adapt, presenting disruptive and systemic risks. What was once largely thought of as a wildlands and wildfire management problem—leading to fire control as the solution—needs to be understood as one where fire is both natural and inevitable, and with a shifted focus to structural vulnerability and ignition resistance of communities. Layered mitigation approaches are necessary, blending targeted fuels management with home and community hardening. So too are risk analysis and decision support approaches that are credible, scalable, and transparent. This talk will review progress in unraveling this challenge, with a focus on work done in partnership with the California Department of Forestry and Fire Protection.