

Decision Making in the
Context of Full Suppression
and Managed Wildfires on
Federal Lands, USA

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Research Background

What was the motivation?

- ➤ In Western American forests (and elsewhere), there is a well-known fire deficit
- > The deficit is most pronounced in characteristic wildfire outcomes
- > U.S. land management policies created this situation
- > The U.S. fire management paradigm is exacerbating the problem
 - Favors short term risk avoidance
 - Lacks incentives to expand beneficial wildfire practices
 - Lacks accountability for negative wildfire outcomes
 - Has left open the opportunity for change



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Research Background

What was the motivation?

➤ If fire managers know that more fire needs to be allowed to burn on the landscape in order to improve the overall condition and services that the landscape provides...

...why is it not happening

more?

- > This is a social question
- ➤ This tension (paradox; misalignment?) was the basis for several research studies.

A Mixed Methods Literature Review and Framework for Decision Factors That May Influence the Utilization of Managed Wildfire on Federal Lands, USA Stephen D. Fillmore, Sarah M. McCaffrey, and Alistair M.S. Smith. 2021 Fire 4, no. 3: 62.



Within the available scientific literature, what factors have been considered in the managed fire decision-making process?

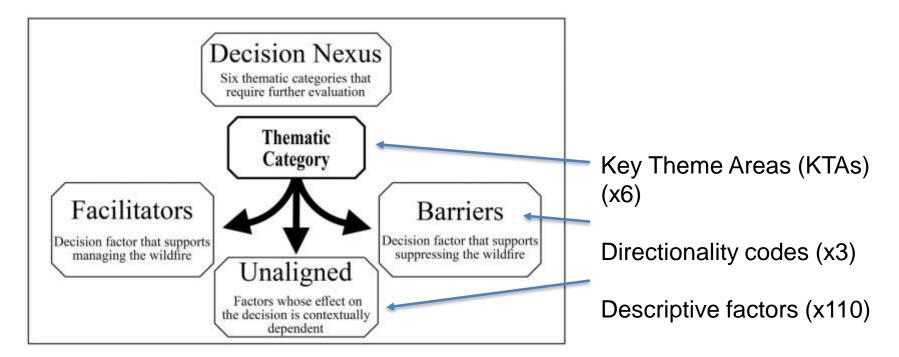
How do they affect the decision made?





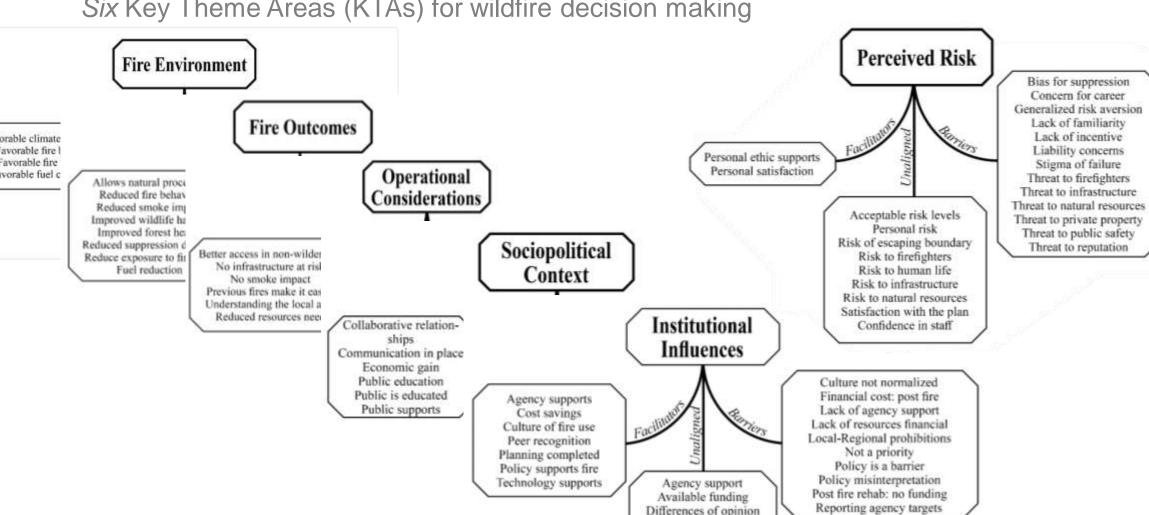
Methods and analysis

- Comprehensive literature review: >8,000 titles
- Eventually found 23 papers that met criteria all pre-2009*
- Qualitative data analysis (coding):





Six Key Theme Areas (KTAs) for wildfire decision making



Fire cause Policy details



- More barriers than facilitators to managing a fire
- Managed fire is viewed as 'riskier'
- Risk overcoming and lack of incentive
- The importance of culture



Decision Factors and Framework for Full Suppression and Managed Wildland Fires after the 2009 US Federal Policy Update



Research complete; final edits underway

Stephen D. Fillmore, Sarah McCaffrey, Rachel Bean, Zander Evans, Jose Iniguez, Andrea Thode, and Alistair M.S. Smith

- Among Agency Administrators and fire managers, what factors are being considered in the wildfire decision-making process,
- > How do they affect the decisions that are made?



Methods and Analysis

- Sample frame: U.S. Forest Service nationwide
- 44 semi-structured interviews; 15 fires
- Summer 2021 Time of fire
- Analyzed using qualitative analysis software
- Hybrid deductive/inductive thematic coding



- > Started with the same 6 KTAs
- > 82 of the original 110 still present
- 68 new factors emerged
- Net increase of 40 factors (110 -> 150)

Just as complicated; likely even more so now



Much more comfort, or even preference, with large planning areas

- Sociopolitical realities
 - The public is too afraid of fire to handle the truth
 - The public can get behind not killing firefighters
 - What the public doesn't know won't hurt them
 - Sociopolitical risk avoidance
 - Decision making bandwidth



- > Risk
 - Originally, only 2 Facilitators...both very personal; now many more
 - Risk sharing across the organization
 - Internal tensions -> Culture overrides all



An interesting tension set has emerged

- The easy out is to put it out, however...
- Direct suppression on large fires is falling out of favor, and ...
- Agency initiatives are pushing for the use of fire, but...
- More fire means exposure to liability, injuries, uncertainty
- Therefore, they have found comfort in indirect tactics, fire is on the ground, with a planned end state.
- And everyone is satisfied



Conclusions and future work

- > Start exploring the KTAs in more detail
- Help inform policies and incentives that allows wildfire to be an acknowledged tool in landscape resilience
- Weave wildfire social science into the technocratic approaches being forwarded to address the US 'Wildfire Crisis'

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