What Limits Use of Fire as a Management Tool on National Forests?

Perspectives of Forest Service Line Officers

- Senior Leader Program Team Members

National Priority 4: Improving the condition of forests and grasslands

Addressing Internal Barriers to the Use of Large Scale Fire for Forest Restoration

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Top Two Limiting Factors….

Prescribed Fire (Rx)

- 3 Most often mentioned factors

1. Burn window
2. Implementation resources
   - Almost 20% these were the two main barriers : "*Small burn windows Lack of personnel on burn day*".
3. Planning resources(NEPA and burn plans)
   - $ To hire specialists or demands to work on other priorities (timber)

"*Lack of shelf stock and not enough resource specialists*".

Top Two Limiting Factors….

Prescribed Fire (Rx)

- Mentioned by less than 20% of respondents
  - smoke issues
  - social license
  - internal concerns (generally risk aversion, suppression culture)
  - other larger scale priorities/considerations (mainly timber and WUI)

Top Two Limiting Factors….

Large scale Rx-

Similar to Rx with a few shifts. Topics that come up more often compared to Rx:

- Increased complexity creating a limiting factor:
  - Duration– uncertainty of resource availability, smoke concerns, impacts on accomplishing work on other priorities.
  - Larger scale–availability of personnel with skills for larger burns and of helicopters,
- Consideration of other land use issues/impacts (grazing, inholdings, checkerboard, ESA).

Top Two Limiting Factors….

Wildland Resource Benefit

- Resource availability dominant barrier - most statements making reference to PL 4/5.
- Internal concerns more commonly raised, particularly re support for WRB
  - culture (both in terms of suppression and specialists),
  - risk management/aversion, and
  - lack of incentives.

  Culture…culture…culture! Internal resistance from specialists. A quiet reluctance to assume risk from line.
- Social (public, industry) acceptance raised more often than for Rx.

Initial Takeaways

Cross Cutting Themes

1) Clear desire for supportive **consistent** leadership = being told to burn more but…

- Not provided resources to accomplish
- Support varies depending on fire season (within and between)
- Lack of confidence that will have support if something goes wrong.

"I believe that our agency needs to make Rx burning a priority and issue direction to that effect. The agency needs to take ownership of this and provide direction and training to our employees. That's when things will change."

Initial Takeaways

- 2) Desire for creation of "**larger scale prescribed burn organization**"
  - Larger scale means similar mechanisms as with suppression
    - Share resources
    - Logistics
    - Hazard pay
- 3) Importance of **partnerships**
  - Key for any larger scale burning
  - Facilitates communication
  - Creates capacity and flexibility needed for larger burns

Beware the 'imagined public'

Overall findings do not support many of the Conventional Wisdoms or Narratives about public response to fire management

- Sampling bias
- Confirmation bias

False Narrative #1 –

Individuals don't understand the high fire risk

Reality – Vast majority of people know they live in high fire risk areas

- **Decision to take protective action (defensible space, evacuation) also depends on other factors**
  - Risk tolerance/aversion
  - Trade-offs with benefits (nature, privacy, etc.)
  - Self-efficacy (time, $, etc.)
  - Response efficacy

False Narrative #2

"Smokey has taught the public to think all fire is bad"

Reality – Consistent evidence that:

- Individuals in fire prone areas have a good (often quite sophisticated) understanding of fire ecology, including beneficial role of fire.

- 80% see prescribed fire and thinning as an appropriate management tool
  - Roughly 30% give strong approval and another 50% give qualified approval
  - Clear preference for active forest management

False Narrative #3 –

People don't take responsibility

Reality - Strong sense of ***shared responsibility***

- **People recognize their responsibilities** – expect to reduce risk on own property
  - Generally ~ 2/3+ have undertaken some type of mitigation
  - Recognize that risk is shared – concerned about actions on adjacent properties – particularly public lands
- **Expectations of government agencies** (local, fed, etc.)
  - Take care of their land
  - Education: Help understanding risk (fire behavior) and specifics on how to mitigate
  - Maybe help with some larger scale obstacles (disposing of materials)

False Demographic *Narratives*

No consistent evidence that:

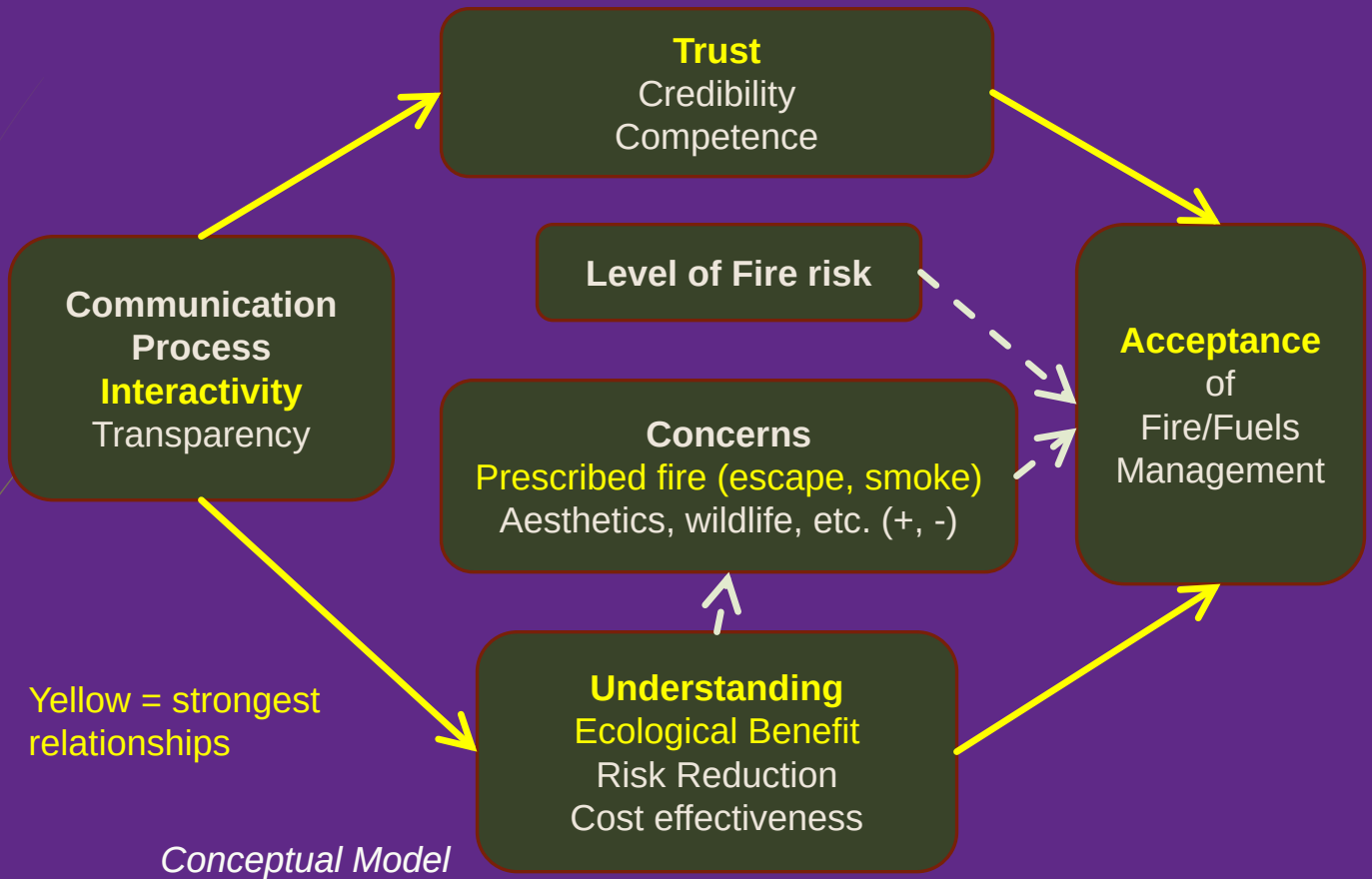
- *New residents* are less aware and/or active in relation to fire mitigation
- *Part-time residents* are less likely to understand fire risk than full-time residents *(main issue appears to be time)*
- *Experience* with fire will have a consistent effect
- *Basic demographic* characteristics (gender, income, education, etc.) have a meaningful effect.
- There are meaningful regional differences

Actual Influential Dynamics

- Knowledge: Better understanding of a practice is associated with higher acceptance/action
  - **Ecological benefits of a practice particularly important**
    - Concern about negative outcomes (smoke, escape) can influence…..but decrease with increased knowledge of ecological benefits
- Trust: Trust in information provider or treatment implementer predicts acceptance
- Interactive /Shared information exchange is associated with behavior change

Fire/Fuels Management Public Acceptance Model

(Thinning, Prescribed Fire, WFU)



Yellow = strongest relationships

Conceptual Model
McCaffrey -Feb 2012

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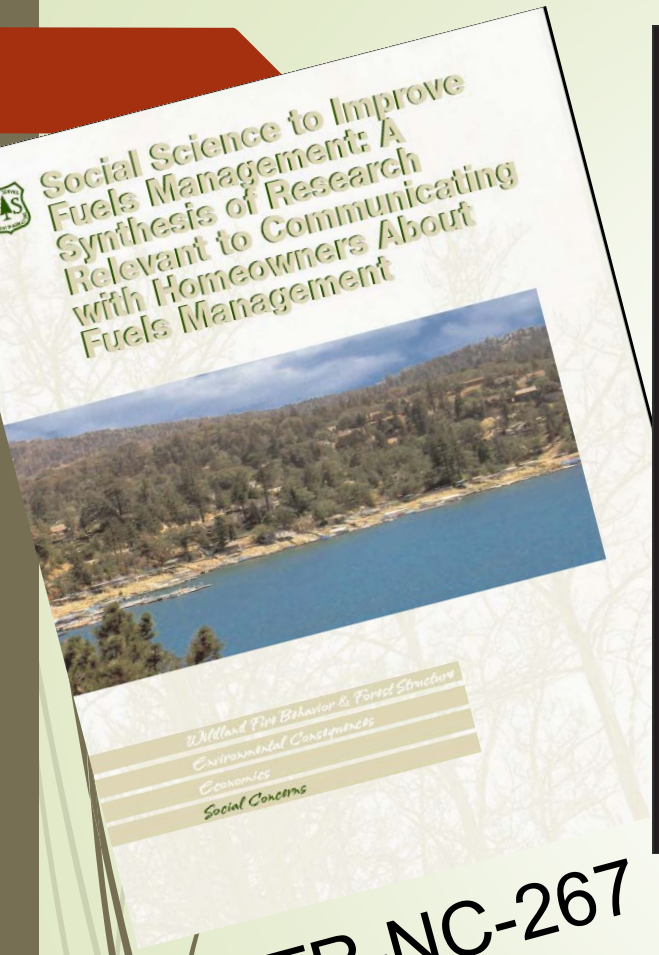

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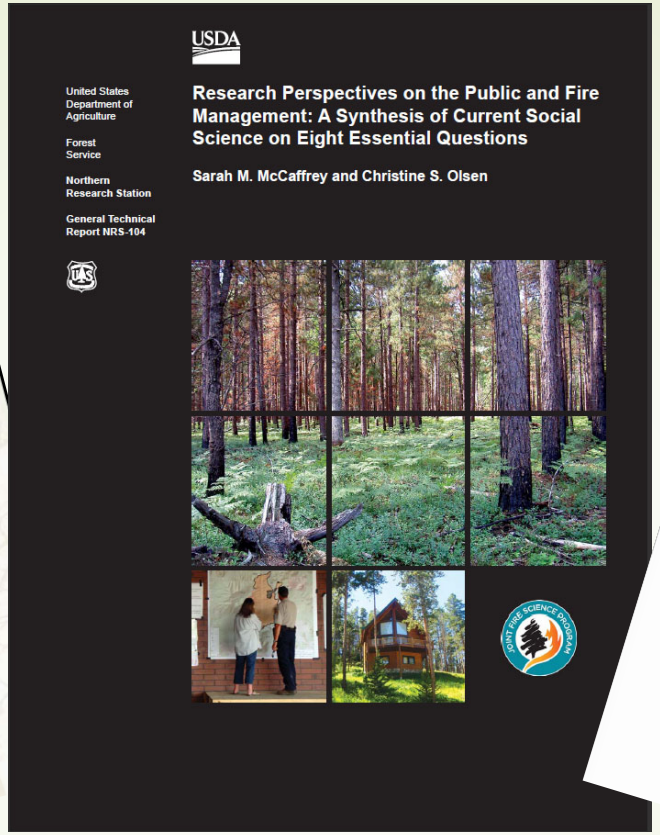

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