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Social Capital and Cross-boundary Collaboration in Wyoming Wildfire Management Networks

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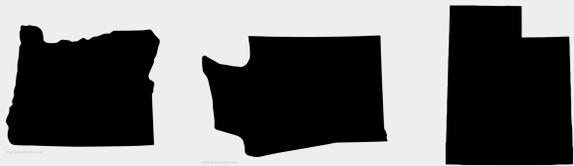
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Wildfire Collaboration: How do Social Connections Impact Action?

BACKGROUND

- Wildfire mitigation and response require cross-boundary coordination
- Collaborative management is often limited by differences in goals, financial obligations, and cultures
- Research Question: how does social capital impact cross-boundary collaboration in wildfire management networks?

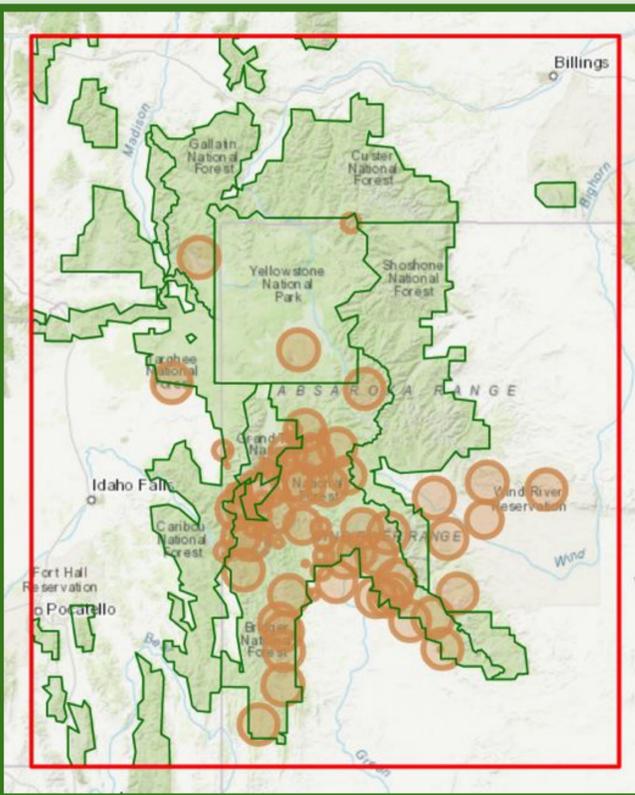


METHODS

- Survey wildfire practitioners in NW WY using snowball sampling
- Use social network analysis to create a network map
- Calculate social capital scores (degree and betweenness centrality)
- Identify central actors, peripheral actors, and brokers
- Compare network with similar data from UT and WA



Scan this QR code to see the project website with past results from WA and UT



MAIN QUESTIONS

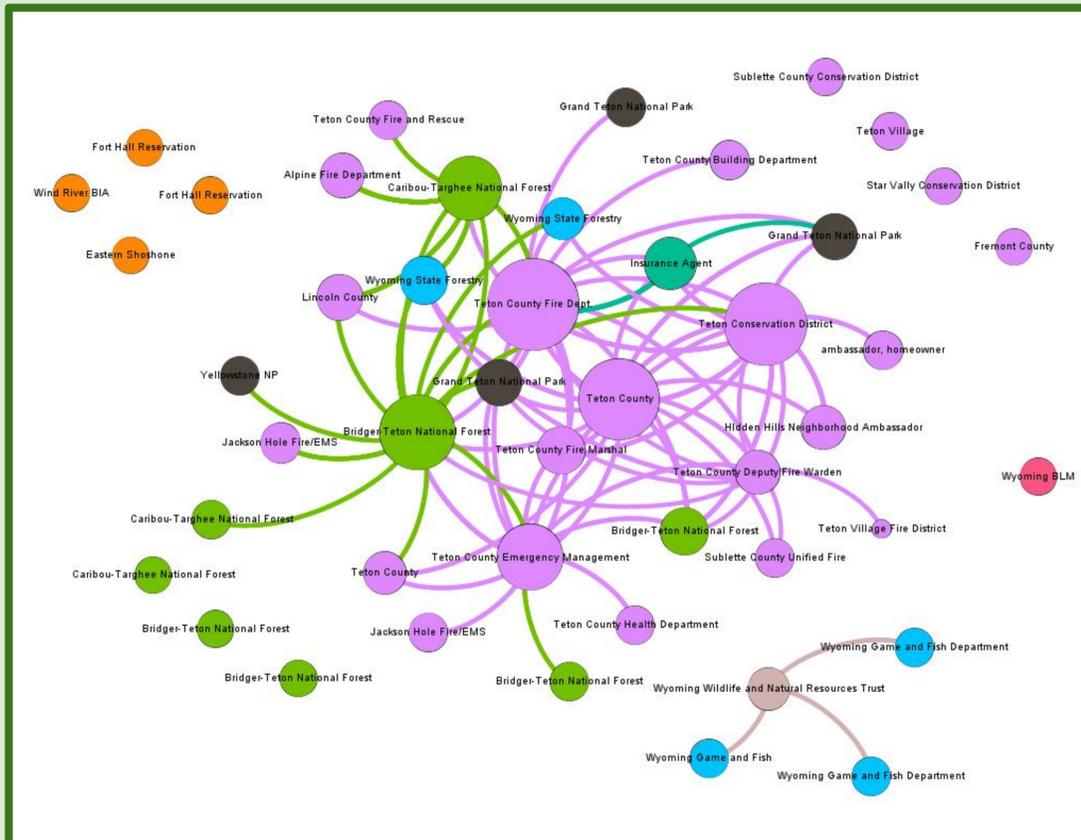
- Who works on wildfire in Northwestern Wyoming?
- What organizations **work together** and where is there division?
- How does the **social capital** of individual managers impact their **collaborative activities**?
- What **attitudes** do managers hold about wildfire and how could this impact collaboration?
- How do **jurisdictional and geographic boundaries** impact collaboration?

RESULTS

- 9 respondents
- 46 wildfire managers identified
- 23 different affiliations
- 105 locations

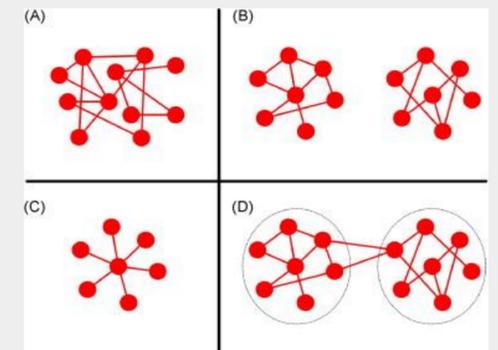
Map Key

- Local
- USFS
- State
- NPS
- Tribes
- BLM
- Private
- NGO



WHAT IS SOCIAL CAPITAL?

Networks, Norms and Trust



- A. High cohesiveness
- B. Low cohesiveness/high modularity
- C. Highly centralized (node with high degree centrality)
- D. High modularity, connected by bridging ties (node with high betweenness centrality)

COLLABORATION

Which of the following have managers engaged in **with members of other organizations** within the past two years?

- Shared information
- Participated in inter-agency meetings
- Collaborated on joint grant or funding proposals
- Collaborated to implement a project
- Participated in a wildfire-related interagency task force or partnership.
- Established or improved communication/collaboration mechanisms with other organizations
- Contributed to writing or updating a community wildfire protection plan
- Signed a memorandum of understanding regarding wildfire activities.

SOURCES

Bodin, Ö., & Crona, B. I. (2009). The role of social networks in natural resource governance: What relational patterns make a difference?
 Schultz, C. A., McCaffrey, S. M., & Huber-Stearn, H. R. (2019). Policy barriers and opportunities for prescribed fire application in the western United States.