BOUNDARY-SPANNING FOR COLLECTIVE ACTION:
MANAGING WILDFIRE RISK IN THE WEST

Emily Jane Davis, Tony Cheng, and Darren McAvoy

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MANAGING WILDFIRE RISK

All the activities associated with mitigation and reduction of wildfire risk, and suppression of wildfire.

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MANAGING WILDFIRE RISK

How much of your current work load involves managing wildfire risk?

- 100%
- A majority of what I do, but not 100%
- About half my time
- Less than half my time
- Not at all

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COMMON REFRAIN: WE MUST...

- Treat more acres
- Go faster
- Work across ownership boundaries
WE NEED...

Time

Money

Technology

Capacity

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WE ALSO NEED...

- **Collective action**: multiple affected actors working together

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WE ALSO NEED...

- Collective action: multiple affected actors working together
  - Trust
  - Social license
  - Networks

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How do we durably bridge organizations—given their diverse missions and mandates, structures, and ways that they act—for collective accountability and action in managing wildfire risk?
Are you familiar with the concept of “boundary spanning”?

☐ Yes

☐ No
LEARNING OBJECTIVES

- Recognize types and functions of boundary-spanning for collective action

- Identify potential applications for your own efforts
ROADMAP

1. A typology of boundary-spanning attributes
2. About the project
3. Case studies: Managing fire for water
4. Case studies: Co-managing suppression
5. Implications and applications

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1. TYPOLOGY OF BOUNDARY-SPANNING ATTRIBUTES
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Settings

Conducive broader drivers/enablers
Concepts

Framings that sustain common meanings and goals

Uncharacteristic wildfire

Fire-adapted communities

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Objects

Material items that bridge gaps, transfer resources
People/organizations

That work to create and sustain connections

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Activities

Performance of related or collective tasks
1. Boundary-Spanning Attributes

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TYPOLOGY

S - Settings
C - Concepts
O - Objects
P - People/organizations
A - Activities
2. ABOUT THE PROJECT
2. About the Project

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**CASE STUDIES: LARGE LANDSCAPES**

- Recent histories of:
  - Large fires with multiagency response
  - Collaboration and partnerships

- Variability in:
  - Socio-ecological context
  - Spatial footprint
  - Ownership patterns
DATA COLLECTION

2. About the Project

Document analysis → Interviews → Mapping

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2. About the Project

DATA COLLECTION

Document analysis → Interviews → Mapping

100 interviews

Coding in NVivo

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3. MANAGING FIRE FOR WATER
3. Managing Fire for Water

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CASE STUDIES
3. Managing Fire for Water

FOCUSING EVENTS

Large, severe wildfires affecting water supplies

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3. Managing Fire for Water

Please credit Davis, Cheng, and McAvoy 2020
EXISTING ORGANIZATIONS

3. Managing Fire for Water

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EXISTING ORGANIZATIONS

...not well-connected - working in ‘parallel’ but not in coordinated manner

3. Managing Fire for Water

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ACTIVITIES

- Mapping and assessment processes
- Potential Operational Delineations
- Monitoring
- Concerted prescribed fire
- Managing wildfire for resource objectives

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3. Managing Fire for Water

Science-based framework and tools
Integrates local fire ground knowledge
Communication device across org boundaries

ACTIVITIES

e.g., Potential Operational Delineations

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3. Managing Fire for Water

OBJECTS

- Comprehensive plans prioritizing water sources
- Wildfire mitigation and suppression plans
- MOUs, agreements, collaborative charters

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3. Managing Fire for Water

Collectively-developed plans as ‘boundary objects’ expressions of shared vision and commitment.
3. Managing Fire for Water

Please credit Davis, Cheng, and McAvoy 2020

CONCEPTS

Focused watershed restoration

Collective investment

Restoration principles
CONCEPTS

Wildfire risk mgmt exceeds any one entity’s capacity

Shared risk, shared responsibilities, shared investment

Investments in preventative mitigation and planning >>
Costs of uncontrolled fire
Water fund, water protection partnership
Fireshed coalitions or efforts
Cross boundary rx workforces

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3. Managing Fire for Water

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Focusing events occur

Existing organizations

Existing settings

They spur

New or reworked activities

New or reworked objects

Which necessitate

New or reworked concepts

New or reworked orgs

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3. Managing Fire for Water

Please credit Davis, Cheng, and McAvoy 2020

CHALLENGES

• Meeting fatigue

• Reliant on individual risk-takers, not yet institutionalized

• Gravitational pull of home organization’s missions, priorities, performance targets/incentives

• Inter-org competition for limited grant funding
4. CO-MANAGING SUPPRESSION
FACILITATING FACTORS
FACILITATING FACTORS

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4. Co-Managing Suppression

Please credit Davis, Cheng, and McAvoy 2020
LIMITING FACTORS
LIMITING FACTORS

4. Co-Managing Suppression

Please credit Davis, Cheng, and McAvoy 2020
LIMITING FACTORS
LESSONS LEARNED
Rangeland Context

- BLM management
- Recent history of large fires
- Greater sage-grouse
- Remote/dispersed communities

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Rangeland Context

- Frustration about fire response
  - Liability and safety
  - Rapid response and rancher engagement
4. Co-Managing Suppression

RFPAs

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4. Co-Managing Suppression

State
- Statutory basis
- Private & state lands response
- Host program
- Training (OR)

Federal
- Cooperating agreements or MOUs
- Training (ID)
- Surplus programs

In-kind/rancher
- Dues, insurance
- Time, equipment, water

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POSITIVE OUTCOMES

- Establishment of RFPAs changed relationships
  - Reduced liability and safety concerns
  - Harnessing mutual benefit
  - Demonstrated and earned respect
HARNEY COUNTY

- Tensions remained
  - Fireline safety and protocols
  - Large incidents
  - Tactics and strategies

→ Need for more substantial dialogue off the fireline
COLLABORATIVE GROUP

- **Formation 2015**
  - Sensing
  - Operating principles

- **Began with suppression**
  - Incident management and transitions
  - Joint training with BLM
  - RFPA liaison

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COLLABORATIVE GROUP

- Moved to mitigation
  - Mapping and chose a priority landscape
  - Analyzed strategic fuel break locations
  - Provided written group agreements during NEPA process
  - Plan for monitoring
  - Chose second priority landscape (mixed ownership)
4. Co-Managing Suppression

S: Oregon statute allowing RFPAs

C: "Megafires"

O: Collaborative group agreements, RFPA-BLM MOUs

P: Wildfire collaborative, nonprofit intermediary (High Desert Partnership), RFPA liaison position, local unit staff on large incidents, Burns Interagency Fire Zone, Cooperative Extension

A: Project and landscape prioritization, spatial analysis of risk, monitoring plan development

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5. IMPLICATIONS AND APPLICATIONS
ACROSS CASES:

- Focusing events with significant impacts...
- ...were capable of stimulating multiple types of boundary spanning...
- ...but also required commitment and resources to sustain and institutionalize collective action.

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FOR COLLECTIVE ACTION...

S  Settings
Need more than one ingredient

C  Concepts

O  Objects
But some may be more necessary than others at different times and places

P  People/organizations

A  Activities

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Which of the following has been the most important ingredient for INITIATING collective action in your work?

- **Settings**—e.g., policies, larger-scale drivers
- **Concepts**—e.g., restoration principles, uncharacteristic wildfire
- **Objects**—e.g., MOUs, agreements
- **People/organizations**—e.g., intermediaries, coordinators
- **Activities**—e.g., mapping, joint assessment
Which of the following has been the most important ingredient for SUSTAINING collective action in your work?

- **Settings** — e.g., policies, larger-scale drivers
- **Concepts** — e.g., restoration principles, uncharacteristic wildfire
- **Objects** — e.g., MOUs, agreements
- **People/organizations** — e.g., intermediaries, coordinators
- **Activities** — e.g., mapping, joint assessment

5. Implications and Applications

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<table>
<thead>
<tr>
<th>BOUNDARY-SPANNING ATTRIBUTE</th>
<th>QUESTIONS TO ASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings</td>
<td>What policies and programs are available and applicable?</td>
</tr>
<tr>
<td>Concepts</td>
<td>Do we have shared language and understanding?</td>
</tr>
<tr>
<td>Objects</td>
<td>Do we need to codify something in writing?</td>
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<td></td>
<td>Do we need to create a way to move resources?</td>
</tr>
<tr>
<td>People/orgs</td>
<td>Who will coordinate?</td>
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<tr>
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<td>Who can work “in between” us all and translate?</td>
</tr>
<tr>
<td>Activities</td>
<td>What shared activities would foster tangible outcomes?</td>
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<tr>
<td></td>
<td>What activities could we coordinate more effectively?</td>
</tr>
</tbody>
</table>

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LET US KNOW:

- Did the SCOPA model help you think about collective action for wildfire risk management in any different and helpful ways?

- What are you going to try differently at home as a result of what you learned?

- What could make the SCOPA model more helpful to you?

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CO-MANAGING WILDFIRE RISK

Managing Rangeland Wildfire Risk in Oregon and Idaho

Boots on the Ground, Boots Around the Table: Managing Rangeland Wildfire Risk in Oregon and Idaho

TAPPING INTO COMMUNITY RESOURCES TO ADDRESS COMMUNITY-LEVEL WILDFIRE RISKS

Wildfire Collaborative group was formed in 2014 to help address these social issues related to natural resource management, the Harney County Wildfire Collaborative includes representatives from multiple entities involved in rangeland wildfire risk management, including the Bureau of Land Management, the U.S. Forest Service, the Oregon Department of Forestry, the Nevada Department of Conservation and Natural Resources, the Oregon Wildlife Foundation, the Harney County Commission, the Harney County Public Health Council, the Eastern Oregon Chapter of the Society for Range Management, and the University of Nevada, Reno. The group was formed in response to a request from the Harney County Commission for a collaborative approach to wildfire risk management, and has since become a model for other counties in the region.

The Wildfire Collaborative has developed a series of case studies to illustrate the benefits of collaborative approaches to wildfire risk management, and has also worked to develop a framework for evaluating the effectiveness of these approaches. The case studies include examples from Harney County, Owyhee County, and a number of other counties in the region. The framework includes metrics for evaluating the effectiveness of collaborative approaches, and is intended to help other counties in the region to develop and evaluate their own approaches to wildfire risk management.

Thank you for your attention.