Developing Adaptive Capacity in Wildfire-prone Regions Project

Seeking to explain where, when, why, and how increasing wildfire risk causes people and organizations to change.





Adapting to Wildfire Workshop

Central Oregon Community College, 2600 NW College Way, Bend, Oregon 97703 March 19th, 2019, 1-3pm.

Please join us for a workshop on the co-management of wildfire risk!

Developing Adaptive Capacity in Wildfire-prone Regions is a National Science Foundation funded project that seeks to explain where, when, why, and how increasing wildfire risk causes people and organizations to change to better cope with and adapt to increasingly large and intense wildfires. This workshop will explore how wildfire is co-managed among the different communities, jurisdictions, and landscapes in the western US, with a focus on Central Oregon.

Workshop Objectives

- Summarize lessons from adaptation research in the western US and share plans to leverage these experiences into general lessons.
- Develop a grammar of collective action on wildfire risk management.
- Identify a set of common wildfire risk management interventions and make transferable arrangements out of participant experiences.
- Identify participants interested in a project advisory group



Date: TBD. Location TBD.

Workshop Agenda

The workshop will include a brief overview of the Developing Adaptive Capacity in Wildfire-prone Regions project and its goals. Discussions will distill generalizable lessons from wildfire governance and Central Oregon and other places of participant experience.

1. Welcome	1:00-1:10	Introductions and agenda
2. Project Overview	1:10-1:25	Project summary and lessons from the field
3. Breakout groups	1:25-2:30	Diagram collaborative actions that increase collective action
4. Summary in Plenary	2:30-2:45	Examples and sharing
5. Closing	11:30-12:00	Next steps and ways to be involved

For more information, please call or email Portland State University team members Cody Evers (cevers@pdx.edu, 503-725-2827).









Adapting to More Wildfire

Seeking to explain where, when, why, and how increasing wildfire risk causes people and organizations to change.



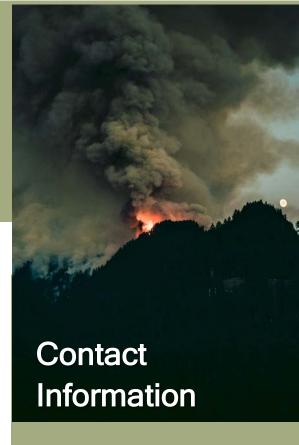
The social and environmental costs of wildfires have grown dramatically in recent decades. Better knowledge of how communities can reorganize themselves in the face of this growing risk is imperative.

Purpose

This project explores how individuals, communities, groups, and organizations in fire-prone regions change and reorganize relationships to become better able to cope with increasingly large and intense wildfires. The project team will:

- Explore wildfire adaptation experiences in four fire-prone western US study areas.
- Convene a stakeholder council with leading national and state wildfire networks to derive key lessons.
- Test the most promising lessons in the Deschutes area near Bend, Oregon using a first-of-its-kind computer model to simulate different adaptation strategies.
- Disseminate insights about how organizations can increase adaptive capacity while being responsive to local conditions and cultures.

Through collaborative engagement with students, educators, stakeholders, policymakers and resource managers, lessons and outcomes will be shared and made accessible to create communities and landscapes that are resilient in the face of increasing wildfires.



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Core Objectives

Research

Our work is organized to fulfill two core objectives:

Objective 1: Investigate how intensifying environmental changes have affected wildfire management networks, and what factors appear to increase or inhibit their capacity to reduce risk.

Objective 2: Use Envision computer simulation modeling to investigate how improved processes and guided reorganization of individuals, communities, groups, and organizational relationships can enhance adaptive capacity to wildfire.

Broader Impacts

Our broader impacts plan expands our research through three core objectives:

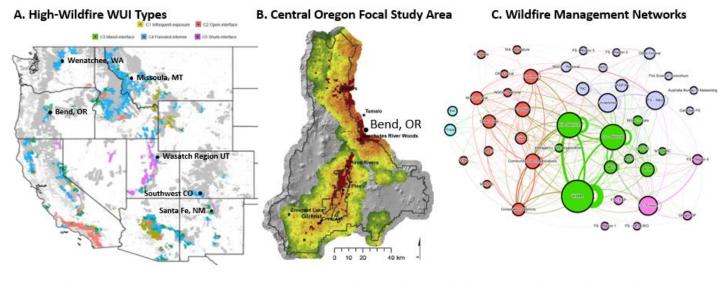
Objective 1: Work collaboratively throughout the project with decision makers, resource managers, communities, and other stakeholders engaged in managing wildfire risk.

Objective 2: Provide experiential, research-based educational, outreach and engagement experiences for minority and underrepresented undergraduate students to help broaden the diversity of future scholars engaged in research.

Objective 3: Provide public access to project-related data and information.

Focus Area

Through four study areas – located in Central Oregon, North Central Washington; and, two others to be determined – our research draws on a diversity of collaborative governance approaches to reducing wildfire risk in the Intermountain West.



Areas of high-wildfire WUI by type. Forested intermix (blue); Shrub interface (pink); Mixed-landscape interface (green). Central Oregon study area within Deschutes National Forest showing risk to local WUI communities. Connections within and between different groups of agencies, organizations, and communities in North Central Washington study area.

This project is funded by:



University partners include:







Mapping Regional Wildfire Risk Management Networks

Local, state, and federal investments are shaping the wildland fire management systems of different fire-prone regions in the western US.

Key Questions

- Who is involved?
- Where do they work?
- How are they connected to each other?
- What interventions have increased collective action?

Approach

Workshops and surveys are used to identify networks of managers and stakeholders working together to reduce or mitigate wildfire risk. We have completed work in North Central Washington, and Northern Utah. Central Oregon will be the next study site.

Expected Outcomes

We aim to identify transferable ideas from common wildfire risk management interventions that lead to collection-action to better cope with and adapt to increasingly large and intense wildfires.

Completed Research

All-lands wildfire risk transmission analysis:

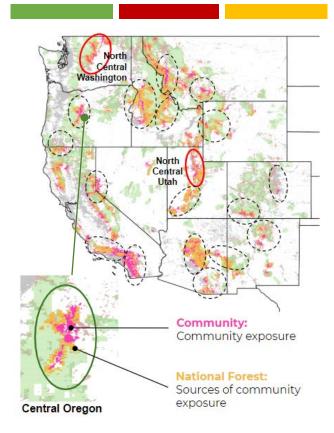
• 24 wildfire risk hotspots identified in the western US

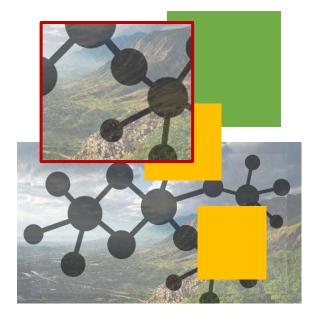
Wildfire risk management workshops and network surveys have been completed in:

• North Central Washington: 769 managers & stakeholders

North Central Utah:

419 managers & stakeholders





Grammar of Collective Action



Bonding – Relationships that combine and reinforce existing knowledge and often facilitate incremental change.



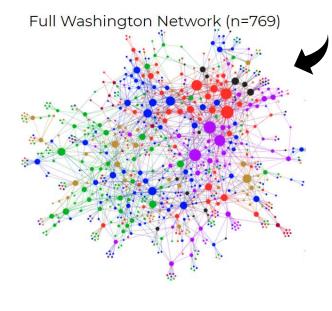
Coupling – Interactions over resources of shared interest creates feedbacks that may offer opportunities or constraints on collective action.



Bridging – Coordinating management actions and resource use among groups of actors in a timely fashion, organize the flow of information and delegate tasks.



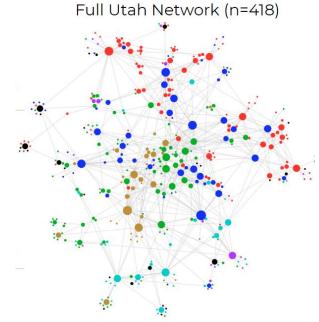
Brokering – Combine perspectives, transfer ideas, make introductions, and negotiate between interests, often across scales or between sectors

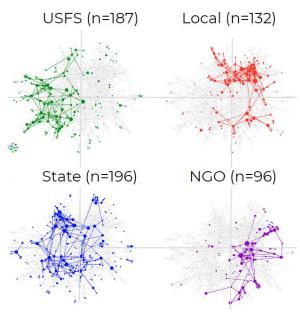


North Central Washington

Lessons from Washington state research:

- Investments in the Washington Fire Adapted Communities (WAFAC)
 Learning Network, the state Wildfire Strategic Plan, and the Cohesive Strategy have convened diverse professionals from governmental and non-governmental organizations at many scales.
- Local and NGO affiliated professionals tended to cluster together separately from USFS staff. **State-affiliated individuals** were more broadly networked.
- The top boundary spanners were with WAFAC and The Nature Conservancy.

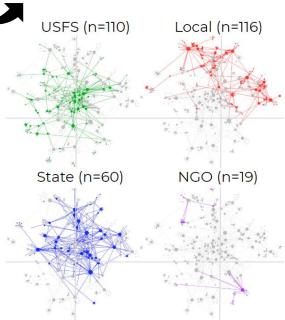




North Central Utah

Lessons from Utah research:

- The Utah Catastrophic Wildfire Risk Reduction Plan, 2016 Utah fire policy updates, Shared Stewardship, and the Cohesive Strategy have primarily convened staff across scales of government.
- USFS, BLM, and state DNR staff were broadly networked together.
- Utah DNR WUI coordinators were the most connected and tended to bridge under-connected parts of the network.



Explaining where, when, why, and how increasing wildfire risk causes human organizations to change.



This brief survey was originally designed to learn from participants in the "Adapt to Wildfire" workshop at the 5th Central Oregon Wildfire Symposium. The workshop and symposium were postponed due to Covid-19. Nonetheless, we would like to hear from you!

As part of the workshop, we are looking to develop a common vocabulary for answering the following question: <u>How do different "management arrangements" facilitate solutions to intricate cross-boundary management problems surrounding wildfire risk?</u> By management arrangements, we refer to relationship among people and organizations with respect to management boundaries and jurisdictions.

This workshop is associated with a grant from the National Science Foundation that looks at how different fire-prone regions in the western US have adapted to increased fire risks. We then hope to apply strategies from these case studies to central Oregon using modeling software to explore the impact of alternative strategies on mitigating future fire risks.

Please take 10 minutes to respond to the following four questions.



Please answer the following questions based on your experience as a professional or key stakeholder engaged with wildfire and wildfire risk management.

- 1) Please describe a specific event that has enhanced the capacity of individuals and organizations in your community or region to collectively address wildfire risk.
 - *We realize that you may have many examples to provide. For the sake of this question, describe the one instance that you feel illustrates a partnership that could be replicated elsewhere.
- 2) With this one event in mind, which specific individuals or organizations were necessary to make this successful? Were these individuals or actors unique to this location? Could this template be copied elsewhere?
- 3) What made the fire related event influential? How was this influence achieved?

4) What preconditions made this fire related event possible?

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Given the uncertainty surrounding Covid-19, we are considering moving our workshop to a digital focus group on Zoom.

Would you be interested in participating in a virtual focus group during the summer?

- Yes
- Yes, but I would strongly prefer meeting in-person
- No

As part of the larger 5-year grant, we are interested in establishing a research advisory group of individuals knowledgeable about wildfire risk in Central Oregon. We are looking for your help in identifying key stakeholders.

Screening question: How knowledgeable are you of the wildfire risk management community in Central Oregon?

- Extremely Knowledgeable
- Somewhat Knowledgeable
- Not sure
- Somewhat Unknowledgeable
- Extremely Unknowledgeable

[[Only show the following question to those that answered 'Very' or 'Extremely'.]]

Are part of this project, we are looking to identify 10-15 individuals to serve on a research advisory committee. These individuals can speak to one or many dimensions of risk management, including public awareness, planning, risk mitigation, response, recovery, and/or research and will provide knowledge and guidance to the research program. The advisory group will meet two-times a year in central Oregon and will provide critical insights and feedback to the research team regarding assumptions, findings, and recommendations. Travel, lodging, and food expenses will be paid by the project.

Please indicate up to 5 people that you think would provide useful insights (including yourself) to the research project:

- Name
- Title
- Affiliation
- Contact
- Why nominated?