Fire Regimes: Rhetoric and the Local Climate Politics of Wildfire

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A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2024

Reading Committee:

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Program Authorized to Offer Degree:

Communication

University of Washington

Abstract

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Fire history, topography, climate, and vegetation make up a fire regime: an ecological tool used to determine a general pattern of wildfire in a particular ecosystem over time. By situating clashes between local politics and federal and state projects to scale policies regulating fire regimes, this project looks at how the ecological is impacted by the rhetorical through public debate. Here, I look at the role of science in mediating, further aggravating, and sometimes creating some understanding in relations between the state and locals around wildfire through *definitions.* First, I demonstrate how definitional rhetoric was instrumental in the United States Forest Service gaining control over the management of our nation's forests. I then move 100 years in the future to the Oregon Labor Day Fires of 2020 where public officials (mis)used definitional rhetoric to rhetorically maneuver political arson rumors while evacuating residents. Lastly, I analyze the controversial Oregon Wildfire Risk Map created in the aftermath of the 2020 fires, showing how the public contested the state's definition of "risk" and how scientists and public officials recovered the map by using the more scientifically specific definition of "hazard." Together, I weave together a story of how tensions between the government and local residents came to shape and be shaped by wildfires in the American West.

Table of Contents

The progress of theory in an interpretative discipline, then, does not take the form of a ladder leading up to and down from high order abstractions. Instead, such theory moves along the broken ground covered by the specific material of the discipline. The interpreter keeps his or her attention focused close to the ground, and while the explanation of what is seen often has potential implications that extend beyond the particular case, this potential is not realized in terms of a disembodied abstraction. An interpretative hypothesis moves across a discipline as a fire burns through a forest, growing, shifting, and receding in irregular patterns, gathering intensity from the matter it consumes, but having no existence apart from that matter.

-Michael Leff, *Interpretation and the Art of the Rhetorical Critic*

Introduction

Depending on weather, topography, and fuel materials, a single flame can turn into a wildfire. In the long-term and across broader landscapes, weather patterns known as climate, lasting natural and man-made topographical features known as ignitions, and recurring fuel sources known as vegetation come to shape the pattern, frequency, and intensity of wildfires in a region that comprises a fire regime (Fig 1).[1] Developed by fire ecologists in order to better understand the interaction of a multitude of characteristics across a region, fire regimes are an account of ecological structures and processes over decades and even centuries. Today, fire regimes are used by fire scientists to compare ecosystems, look at how current fire patterns differ from historic norms, and predict the impacts of changing ignitions, changing climates, and the management strategies humans use to mitigate both.[2]

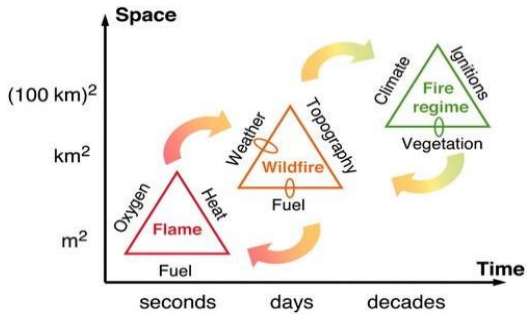

Fig 1. Multiscalar fire triangle. Image from National Academy of Sciences Report.

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[1] Max A. Moritz, Marco E. Morais, Lora A. Summerell, J. M. Carlson, and John Doyle, "Wildfires, Complexity, and Highly Optimized Tolerance." *Proceedings of the National Academy of Sciences* 102, no. 50 (2005): 17912–17.

[2] "Chapter 3: Fire Regimes," Joint Fire Science Program, accessed May 1, 2023, https://www.firescience.gov/projects/09-2-01-9/supdocs/09-2-01-9_Chapter_3_Fire_Regimes.pdf.

While fire regimes describe the interactions of ecosystems over time, a colloquial sense of the term "regime" brings to mind different human-built spaces of control. As defined by the Oxford English Dictionary, regimes are a "manner, method, or system of rule."[3] In political science, regimes more specifically indicate an "institution with clear substantive and geographical limits, bound by explicit rules, and agreed on by governments."[4] While sometimes more neutral, regimes in the US vernacular often refer to the administration of a particular leader, political ideology, or authoritarian approach to governance. In the rural American West, claims against authoritarian "regimes" or government overreach rub against the deeply embedded ethos of rugged individualism and self-sufficiency on the frontier. In southern Oregon and northern California, a region locally known as the "State of Jefferson," the protection of personal liberties and DIY governance are perceived as conflicting with the priorities of their more liberal capitals of Salem and Sacramento. In the shadow of a long history of secession movements in the region that persist today, the sharp rural-urban divide in Oregon found renewed attention in the 2020 wildfire season, where devastating wildfires drew attention to the local politics around climate crisis mitigation and preparation exacerbated by climate change denial.

This dissertation project brings together these two senses of regime, the ecological and the political, to examine how the two become entangled in the local climate politics of the

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[3] "Regime," in *Oxford English Dictionary* (University of Oxford Press, 1989), https://www.oed.com/oed2/00201212;jsessionid=0FADF1F482EC24719D4EDBF0B72F1C52.

[4] Kevin Ward, "Regime: Political Science," in *Britannica*, n.d., https://www.britannica.com/topic/regime.

Anthropocene. As humans continue to irrevocably alter our environments at an unprecedented scale through the massive development of wildland spaces and our fossil fuel-based society, we create conditions for more frequent, harmful, and higher intensity wildfires all over the world. In 2020, Washington, Oregon, and California witnessed some of their worst wildfire seasons on record as measured by loss of human life, acres burned and the destruction and damage of property.[5] In the state of Oregon alone, the fires started on Labor Day weekend of 2020 burned over a million acres and caused 40,000 people to evacuate their homes, leaving half a million more on alert in evacuation warning areas in a state of emergency unprecedented in the state's history.

At the same time that we experienced this unprecedented wildfire season, 2020 also marked a year of increased political divisiveness across the United States, reflected in the rural-urban divide in Oregon. In Oregon, the majority of the population live in the liberal cities of Portland, Salem and Eugene, and vote on policies that impact the majority of the state's land, populated by a more conservative voter base. Oregon's Second Congressional District, which until 2020 covered roughly two thirds of the state from close to the southwestern coast to the uppermost northeastern corner of Oregon, was the second largest Congressional district in the United States, and Oregon's only district that is majority Republican. This land is also at the most extreme risk for wildfires. In the state government, a Democratic supermajority in the

[5] Jeff Masters, "Yale Climate Connections," *Reviewing the Horrid Global 2020 Wildfire Season* (blog), January 4, 2021, https://yaleclimateconnections.org/2021/01/reviewing-the-horrid-global-2020-wildfire-season/.

House and the Senate was continually met with frustration by Republican state legislators.[6] In 2019 and 2020, the 11 Republican State Senators staged walkouts to stop the passage of environmental cap and trade bills, with some legislators even fleeing to Idaho to evade the Governor's police hunt.[7] The walkout in 2020 became especially notable later on as the refusal to vote for the cap and trade bill also killed another dozen bills in the Senate, including a bill that would have added $25 million toward wildfire mitigation efforts prior to the devastating fires later in the 2020 season.[8] In this project, I propose that "fire regimes" can capture more than just the ecological conditions of an environment; they also capture the local politics that so shape the nature of how weather and climate events themselves come to be and be perceived.

My dissertation comes out of my personal experience with one of the 2020 Oregon Labor Day fires, the Almeda Fire in southern Oregon, which started in my hometown of Ashland in the rural southwest corner of the state. After the Almeda Fire started on the morning of September 8 about a mile away from my house, it quickly spread north nine miles, killing three people and

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[6]This supermajority was lost in the 2022 election, see: Fox 12 Oregon Staff, "Democrats Lose Supermajority in Oregon State Senate and House," *Fox 12 Oregon*, November 10, 2022, https://www.kptv.com/2022/11/10/democrats-lose-supermajority-oregon-state-senate/.

[7] Kelly Mena, "Oregon Republicans Walk out Again over Environmental Bill," *CNN Politics*, February 25, 2020, https://www.cnn.com/2020/02/25/politics/oregon-republicans-environmental-bill-walkout/index.html.

[8] Cassandra Profita, "2 Key Forestry Bills Left In The Wreckage Of Oregon Legislative Session," *Oregon Public Broadcasting*, March 6, 2020, https://www.opb.org/news/article/forestry-bills-dead-oregon-legislature-republican-walkout/.

destroying over 2,800 homes and businesses in the cities of Talent, Phoenix, and Medford in a number of hours. In what for many, myself included, felt like a once in a lifetime weather event, the Almeda fire marked a reckoning with familiar understandings of terms like "natural disaster," "forest fire," and even "wildfire season," as these shifting and nebulous signifiers failed to make sense of the climate-driven chaos that converged in our community. In the case of Almeda, like over 85% of wildfires in the US, the fire was determined to be human caused.[9] So while the fire was exacerbated by unusually strong winds and years of severe drought conditions indicative of changing ignitions and climate, a number of residents during and after the fire disagreed about whether the causes of the fire were related to climate change. In the aftermath, residents again disagreed about what to do about mitigation and preparedness measures in the future. These points of tension between the government and locals on the ground are what my project focuses on.

Environmental Communication

My project draws from an emerging subfield of environmental communication studies that is examining the human dimensions of "natural" disasters as they continue to intensify in the face of the climate crisis. While wildfires have long been studied in siloed Western academic disciplines like ecology, biology, and physics, only in recent decades have scholars begun to

[9] Karen C. Short, "Spatial Wildfire Occurrence Data for the United States, 1992-2020," in *Forest Service Research Data Archive*, 6th ed. (Fort Collins, n.d.).

collaborate across disciplines in order to account for the ways that human practices and institutions profoundly shape wildfire events.[10]

Social science communication theory and scholarship more generally surface in this area through organizational communication and subareas of risk or emergency communication that assume what Steven Katz and Carolyn Miller call an "engineering model" of communication, a one-way process meant to disseminate information or influence a distinct audience. In these areas of research, contributions by rhetorical scholars are extremely limited.[11] However, Katz and Miller's work on public deliberation on nuclear waste disposal is one example of the ways that a rhetorical perspective contributes to risk communication. They state:

> The rhetorical approach… assumes that the relationships among rhetor, audience, language, situation, history, and intentions are complex, themselves situated and historical, rather than discrete, objective, and measurable. It assumes that what is unsaid and what is implied are just as important as the overt 'messages' in information transfer and can serve as indications to the values, relationships, attitudes, and historical trajectories of the parties to communication.[12]

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[10] This argument is prominent in this set of case studies from Pyne's earlier collection: Stephen Pyne, *Here and There: A Fire Survey* (Tucson: University of Arizona Press, 2018).

[11] One exception to this is: Rebecca L. Fox, "Voices from the Field: Wildland Fire Managers and High Reliability Organizing Mindfulness," *Society and Natural Resources 28*, no. 8 (2015), 825–838.

[12] Steven B. Katz and Carolyn R. Miller, "The Low-Level Radioactive Waste Siting Controversy in North Carolina: Toward a Rhetorical Model of Risk Communication," in *Green*

These two approaches to communication (engineering vs. rhetorical) as outlined by Katz and Miller are also a prominent framework for the field of Environmental Communication, where scholars constantly draw from both pragmatic (seen as the instrumental, transmission or engineering model) and constitutive (often seen as rhetorical) approaches to communication in order to articulate, frame, represent, and respond to the interconnectedness of affective beings in a variety of biophysical, built, and social environments.[13] Often revolving around an axis of environmental crisis and care, work in Environmental Communication tends to fall under the normative assumption that scholarship should "enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both human civilization and natural biological systems."[14] So, whether communication "greets, informs, demands, promises, requests, educates, alerts, persuades, [or] rejects" as in a pragmatic approach or looks to "shape, orient, and negotiate meaning, values, and relationships" as in a more constitutive approach, both are helpful in articulating the relations between ourselves and "nonhuman systems, elements and

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Culture: Environmental Rhetoric in Contemporary America (Madison: University of Wisconsin Press, 1996), 132-133.

[13] Bridie McGreavy, Justine Wells, George F. McHendry, and Samantha Senda-Cook, *Tracing Rhetoric and Material Life: Ecological Approaches* (Cham: Palgrave Macmillan, 2018), 23.

[14] Robert J. Cox, "Nature's 'Crisis Disciplines': Does Environmental Communication Have an Ethical Duty?," *Environmental Communication* 1, no. 1 (2007): 16.

species."[15] Together, these different orientations to communication scholarship guide research that seeks to better understand and illuminate ways of knowing and thinking about many diverse "modes of expression" on a wide variety of topics including public participation in environmental decision-making, environmental justice, science, climate, and risk communication, and "natural" disasters.

Rhetorical Approaches to "Natural" Disasters

Following the impetus of much environmental communication work, I use rhetorical analysis to look at both the pragmatic and constitutive dimensions of "natural" disasters. Wildfires uniquely challenge us to think through how symbolic action is interwoven with the material world, where humans interpret "natural" disasters through a variety of ideological lenses and engage with their lived experiences of the environment to inform political beliefs. These beliefs can be seen prominently in spaces created for public deliberation on environmental policies such as public information sessions, where more extreme threats like wildfire present the dilemma of making decisions that drastically impact communities on a quick timeline. There, public officials, scientific and technical experts, and members of the public need rhetorical skills, to inform, demand, educate, alert, reject, and persuade. In this context, a rhetorical approach to studying wildfires can take on both a pragmatic and constitutive approach to the study of communication.

In the three chapters that comprise my study, I follow an events-based framework for wildfire research, illustrating the human dimensions of wildfires in the decades leading up to

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[15] Phaedra C. Pezzullo and Robert J. Cox, *Environmental Communication and the Public Sphere*, 5th ed (Thousand Oaks: SAGE, 2018): 4-5.

massive wildfires in the 21st century (Chapter One), during a particular series of wildfires (Chapter Two), and after the wildfires (Chapter Three). For ecologists, an events-based approach to the study of wildfire serves the pragmatic purpose of breaking down the complex components of how decisions are made by officials before, during and after a wildland fire event. This aids researchers in tracking the interaction of different components of decision-making that may be controversial or made under conditions of uncertainty and are often highly variable in different communities and environments.[16] For my study, I widen the time and space component of the ecological events-based approach for a rhetorical study of wildfire. By weaving together a wider narrative of the institutional dynamics that impact wildfire decision-making in the United States Forest Service (USFS) at the turn of the century, I work to explain how political ecologies inform the current controversies arising in Oregon state government around the decisions of officials and their interactions with residents. In my second case study, this history informs my analysis of the challenges facing officials attempting to debunk false information impacting wildfire evacuation, and in the third case study, deepens the context for the constraints the state government must navigate in creating safer conditions for wildfire-impacted communities who are uncertain about scientific expertise that does not align with their on-the-ground experiences of wildfire risk.

This rhetorical events-based approach to research follows suit with other environmental rhetorical studies of the human-dimensions of "natural" disasters, such as Catalina de Onís' work

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[16] Stephen F. McCool, James A. Burchfield, Daniel R. Williams, Matthew S. Carroll, "Forum: An Event-Based Approach for Examining the Effects of Wildland Fire Decisions on Communities," *Environmental Management* 37, no. 4 (2006), 437–450.

on Hurricane Maria in Puerto Rico and Kenneth Walker's study of flash flooding in San Antonio, Texas starting with the 1921 Flood.[17] Both rhetoricians look at how the recurring inequitable impacts of these respective "natural" disasters are profoundly shaped by human decision-making, as the disasters themselves are only "disasters" in how they are framed by human perceptions of ecological phenomena and heightened through human-caused climate change. Both de Onís and Walker provide a wider historical context for each weather event and then look to the rhetorical strategies of the governments and residents involved at different phases of the event to analyze how communication deeply impacts how some communities are protected during and after disasters and others are not. Both argue that public communication and participation plays a large role in adapting to these intensifying and inequitable weather events and provide a helpful model for me in my work on a specific set of wildfire events examined through the tools of rhetorical history and theory.

Through rhetorical criticism, I read texts in their context to provide new understandings of how communication problems are constituted through a longer view of history, audience, and situation. In the case of wildfires, the tools of rhetorical scholars can help make sense of the dynamic ways in which natural disasters change environments, and how environments (radically

[17] Catalina M. De Onis, *Energy Islands: Metaphors of Power, Extractivism, and Justice in Puerto Rico* (Oakland: University of California Press, 2021); Kenneth Walker, *Climate Politics on the Border: Environmental Justice Rhetorics* (Tuscaloosa: University of Alabama Press, 2022).

altered by humans) change natural disasters.[18] In the final section of this introduction, I will focus on one particular rhetorical strategy, definition, that is a particularly useful concept in understanding my three cases of public controversy around wildfires.

Definition as Argument

In Edward Schiappa's 2003 book *Defining Reality*, he argues that definitions always depend on the ever-changing relationships between humans and their environments, both as historically situated and technologically mediated. Pushing back on the idea that some definitions are *fact* that reflect an essence and other definitions are *institutionally bound*, Schiappa proposes that all definitions are "linguistic propositions" that "demarcate our available reality."[19] Furthermore, definitions tell us more about what we "ought" to understand, value or do about something than what something actually "is."[20] Indeed all definitional work is persuasive, and constructs functional relationships between words and people that have deep social and ethical implications and should not be differentiated between the "real" and "socially constructed," a point that environmental rhetoricians have long understood in their work on naming and framing the

[18] This has been a central argument for historian Stephen Pyne across his many works, but as centrally featured in his recent book: Stephen Pyne, *To the Last Smoke* (Tucson: University of Arizona Press, 2020).

[19] Edward Schiappa, *Defining Reality: Definitions and the Politics of Meaning* (Southern Illinois University Press, 2003), 48.

[20] Schiappa, *Defining Reality*, 43-46.

environment.[21] Just as Kenneth Burke argued that stimuli have no inherent or absolute meaning, definitions cannot be divided into the better "observational" ones and the corrupt "theoretical" ones. Rather than believing that some definitions are "scientific," merely describing what can be seen in an objective way, Schiappa argues that all observation is guided by theory, "a larger cluster of beliefs," that continues to change what we understand to be "observed" and vice versa.[22] However, oftentimes arguments about definition fall into the trap of assuming that it is the "real" nature of "X" that is being defined. In fact it is what is valuable about "X" that is being negotiated, reflecting, selecting and deflecting parts of "X" for particular reasons by various stakeholders.

In *Defining Reality*, Schiappa's turns to several case studies where scientific and technical expertise relies on the language of "real" definitions, based on empirical or supposedly "pure" observation. Schiappa cautions against this rhetorical strategy of experts to brand their side as "science" and others as "political," positing that if the two are designated as separate from each other, it leads to the dangerous belief that "reality is to be defined by experts." Schiappa cautions that it is then "an easy step to granting definitional hegemony to a technocratic elite," which he does not favor, worrying that definitional hegemony results in attitudes and

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[21] Tema Milstein, "Nature Identification: The Power of Pointing and Naming," *Environmental Communication* 5, no. 1 (March 1, 2011): 3–24; Christine L. Oravec and Tracylee Clarke, "Naming, Interpretation, Policy, and Poetry: Communicating Cedar Breaks National Monument," *The Environmental Communication Yearbook* 1, no. 1 (2004): 1–14.

[22] Schiappa, *Defining Reality*, 49, 65.

consequences that often promote unethical ends.[23] Advocating for the use of the "real" definition for a particular term or class of objects/events can draw attention away from the interests and values at stake for the public, and furthermore take power away from the public to decide on matters that most impact them. Instead, experts should embrace their role as citizens and engage in how the "scientific" is also political as experts, too, are invested in particular values, interests, and outcomes, the revealing of which help move debate in more productive directions than arguing over the "real" definition of something.

In the following chapters, I will look closely at three case studies relating to the definition, naming, and framing of wildfires as a public problem, a subject that I argue has a rich rhetorical history that we must attend to if we want to better understand and prepare for future wildfire events. In my first chapter, I look at the ownership of wildfires as a public problem through the formation of the United States Forest Service (USFS). I explore the debate around "light burning" that helped the USFS successfully, though incompletely, dominate the way wildfires were thought of and acted upon through the practice of total fire suppression in the 20th century. In that chapter, I look at how a whole group of practices (light burning) is *named* and *framed* in opposition to the modern system of wildfire protection in order to better establish the USFS's authority on wildfire. The consequences of their definitional authority on wildfire protection resulted in the fuel-build up we see today in the American West, where decades of "poor forest management" resulted from the suppression of light burning practices.

This historical background sets up the context for two more recent case studies which occur during and after the 2020 Oregon Labor Day Fires. In the first, public officials attempting

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[23] Schiappa, *Defining Reality,* 82.

to evacuate citizens had to rhetorically maneuver the spread of false rumors about wildfires being started by Antifascists groups. I argue that by attempting to define the false rumors as misinformation and political extremism, public officials working on the Almeda Fire in southern Oregon somewhat successfully deescalated the rumors. However, in the case of northern Oregon's Riverside Fire, public officials made the rumors worse by not properly defining the situation, and so perpetuated the idea that it was caused by political arson.

Lastly, I use the previous chapters on "poor forest management" and "arson," to set the stage for the last case study on the creation of the Oregon Wildfire Risk map, a product of state policy passed through the Oregon legislature after the 2020 Labor Day Fires to help residents better mitigate and prepare for the threat of wildfires. In this case, the risk map created massive controversy and ultimately had to be redacted due to pushback by the public around the definition of "risk" put forth by the map. Here, I look at how the definition of "risk" was contested by the public and then how public officials and scientists redefined the map using the more scientifically specific designation of "hazard" to recover the legislation.

Together, three chapters weave together a story of how tensions between the government and local residents came to shape and be shaped by wildfires in the American West. While the first case study on the United States Forests Service contributes to scholarship on rhetorical definitions that demonstrates how the narrowing of definition to technical expertise leads to dire impacts for the public, the second two case studies indicate a shift in the importance of definitional rhetoric in the 21st century. In the wake of misinformation and extreme political partisanship, I look at how public officials use helpful rhetorical strategies drawing on definitions to create clear information for the public and promote healthy public deliberation. Instead of cautioning away from the narrowing definitions of expertise, I show how public deliberation and

decision-making can be improved by definitional rhetoric that balances between the necessary importance of experts and the importance of public agency in deciding how to act and prepare for “natural” disasters that will continue to intensify in their communities. With this work, I hope to contribute to both transdisciplinary studies of wildfire and rhetorical studies to highlight how public officials and scientists can create better opportunities for productive rhetorical engagement at the nexus of politics and the environment.

Chapter One

Rhetoricians of science have for decades explored the dynamics of scientific debates, pointing to the ways that features like common topoi, ethos, and clever argumentative tactics significantly shape understandings of science among and between scientists and the public. Foundational to this work is highlighting the tensions between science as an ideal (superior, and separate from other ways of knowing), and science as a social practice, defined through the rhetorical acts of individuals and institutions. Rhetorical scholar Charles Alan Taylor argues "The cultural configuration that privileges science over and against politics (and other cultural discourses) is fundamentally discursive," pointing to the ways that science is constituted through symbolic action.[24] He looks at science as an ecosystem with various niches-- from the researchers and funding agencies to private industries and social advocates-- that compete and work together to define what is considered to be "science" and "nonscience."[25] It is in these definitional arguments that important values arise, most often positioning scientific values in opposition to ideology or myth. These values might draw from the consensus of experts, the power of universal theory, the realness of empirical data, or varying forms of reliability in systematic and consistent findings to authorize against the whims of the nonscientific.

Today, as we see the climate crisis playing out in various "natural" disasters across the globe, shades of climate change denialism combine with longstanding debates over the demarcations between "science" and "politics" that impact how we think about and prepare for these increasingly destructive events. Wildland fire in the United States is one such controversial

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[24] Charles Alan Taylor, *Defining Science: A Rhetoric of Demarcation* (Madison: The University of Wisconsin Press, 1996), 227.

[25] Taylor, 15-16.

topic that intertwines longstanding debates about the use and misuse of science to sow seeds of doubt about the role that human-caused climate change plays in their increasing intensity. For example, in the prolonged 2020 wildfire season in United States, one of the most destructive in recorded history, Donald Trump claimed that it was poor forest management, the fault of the United States Forest Service, not climate change, that fueled the wildfires.[26] As debate around wildfires continues to play out, promoted by our former President and many others, this kind of false dichotomous thinking is effectively deployed to pit forest management against climate change as reasons for increased wildfires, instead of accepting the more complex reality that the two create a compounding effect.[27] What is often left unsaid within the wildfire debate is how the residue of public distrust, especially among rural communities, from decades of bad science instituted by the federal government contributes to skepticism about the complex causes of today's increased wildfires, often making resistance to environmental policies difficult to disentangle.

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[26] Peter Baker, Lisa Friedman, and Thomas Kaplan, "As Trump Again Rejects Science, Biden Calls Him a 'Climate Arsonist,'" *The New York Times*, September 15, 2020, sec. U.S., https://www.nytimes.com/2020/09/14/us/politics/trump-biden-climate-change-fires.html.

[27] "Is Climate Change Worsening California Fires, or Is It Poor Forest Management? Both, Experts Say," accessed December 3, 2023, https://www.sfchronicle.com/california-wildfires/article/Are-climate-change-or-poor-forest-management-15564031.php.; Steven C. Beda, "Climate Change and Forest Management Have Both Fueled Today's Epic Western Wildfires," The Conversation, September 16, 2020, http://theconversation.com/climate-change-and-forest-management-have-both-fueled-todays-epic-western-wildfires-146247.

In this chapter I claim that this distrust can in part be traced back to debates over progressive reform in the early 20th century that defined the United States Forest Service (USFS) as 1) the agency of wildfire management and 2) committed it to wildfire protection through total fire suppression. Today's pundits claiming that wildfires are due solely to "poor forest management" evoke the USFS's policy of fire suppression as the reason for massive fuel buildups and tree density that led to more intense and destructive wildfires in the long run.[28] However, the simple story of "poor forest management" leaves open the question of why the USFS would have implemented decades of unscientifically supported policies across the nation's forests, and why this agency came to be the target of such animosity despite their mission to protect communities from wildfires. I argue that a rhetorical history of these historical events is needed to illuminate this question, looking to the ways that a series of scientific and public debates in the early 20th century, deemed "the light burning controversy," defined the early formation of the USFS and framed how we understand wildfire protection. By looking through a rhetorical lens at these debates, I aim to answer some of these questions that may enrich the "poor forest management" vs. "climate change" debate today.

A Rhetorical Approach to Environmental History

In his 1998 essay "Four Senses of Rhetorical History," David Zarefsky describes four core ways that rhetorical scholars engage the study of history: the history of rhetoric, the rhetoric of history,

[28] "Thinking Like a Mountain, About Fire," US Forest Service, March 28, 2013, https://www.fs.usda.gov/speeches/thinking-mountain-about-fire.

historical studies of rhetorical practice, and rhetorical studies of historical events.[29] In this chapter, I turn towards the rhetorical study of historical events to understand scientific and popular debate around wildfires that formed the USFS as an agency of forest management and total suppression in the period of early US firefighting known as the frontier period between 1910 and 1930.

In a rhetorical study of historical events, it is not necessarily the subject itself that is any different from what might be taken up by the historian, as any scholar may collect a variety of documents, images, and materials to conduct their research. However, it is the perspective of the rhetorical scholar that differentiates their research from that produced by those trained in history departments. According to Zarefsky, "The focus of the study would be on how, and how well, people invented and deployed messages in response to a situation" to get at "how messages are created and used by people to influence and relate to one another." In so doing, the scholar of rhetorical history points out specific rhetorical choices that other disciplinary approaches might miss in their interpretations.[30]

In this study, I used archival and digital ethnography research methods to write the rhetorical history that appears in the following pages. I started my work in the archives of the Southern Oregon Historical Society in Medford, Oregon sifting through documents and frontier newspapers from Jacksonville, Medford, and Ashland looking especially for reporting on

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[29] David Zarefsky, "Four Senses of Rhetorical History," in *Doing Rhetorical History: Concepts and Cases*, ed. Kathleen J. Turner (Tuscaloosa: University of Alabama Press, 1998), 19–32.

[30] Zarefsky, "Four Senses of Rhetorical History," 30.

wildfires and forest management. The documents I collected dated back to the 1880s with the earliest frontier newspaper in the area, *The Democratic Times,* and expanded to other local newspapers that began to report on wider regional environmental concerns.[31] From these documents, I found residue of larger national debates around the themes of forest and wildfire management and the "light burning debate" that I will discuss in Chapter One. As I followed the light burning debate, I collected a variety of documents from existing online archives in addition to in-person collection of documents at the University of Washington's Pacific Northwest Special Collections and the Southern Oregon University's LaLande Special Collections. In addition to the archival work of Chapter 1, I used digital ethnography to collect changing documentation around the Oregon Wildfire Risk Map in Chapter Three. In this work, I captured screenshots of the changing map, changing online platform, letters sent out by the Oregon Department of Forestry, and documented many hours of recordings of public meetings on Zoom.

Throughout my work, Jenell Johnson's scholarship in the history of American medicine provided me an example of what a rhetorical history approach adds to the scholarly record. She writes, "A rhetorical perspective adjusts our focus away from the divine glare of universal truth and toward symbols in all their messy earthly contingency: images framed by history, language bound by culture and convention; signs with unstable referents; narratives written, spoken, repeated, translated, and understood by someone, somewhere, sometime."[32] Rather than suggesting that rhetorical history provides something better than other forms of doing history,

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[31] *The Democratic Times*, August 2, 1888, Forest Fires Vertical File, Southern Oregon Historical Society.

[32] Johnson, *American Lobotomy,* 12.

Johnson following the lead of rhetorical critic Leah Ceccarelli who suggests that a rhetorical approach, among others, lends itself to a spirit of interdisciplinarity, adding to a rich cacophony of voices to create a dialectic about history.[33]

It is important to note that in this kind of study, rhetoricians do look for certain things that may differ from what captures the attention of other disciplines. Johnson points out that rhetoricians are interested in tracing out stories, even wrong ones, as holding rhetorical force. Looking at a puzzling rhetorical situation or artifact, "the rhetorical historian's role is that of an untangler rather than an unmasker. She might theorize why a marvel emerged at a particular place and time; hunt for the origins of its polysemic tendrils in cultural narratives, social structures, and political events; and track how… [the artifact] is transformed when transmitted, repeated, and bounces 'across bodies of discourse and across bodies.'"[34] In short, the rhetorician is focusing on different aspects of history through their perspective: rather than study events or eras, cultures or societies, economic or political arrangements, rhetoricians study "material effects and virtual traces of images, symbols, tropes, and narratives, which are best understood within the social, cultural, ideological, and political environments in which they develop meaning and in which those meanings are received, interpreted, and contested."[35] In the case of Johnson's work, she is producing a rhetorical history of medicine by tracing various accounts of a particular medical procedure and telling a story about how the interaction of those accounts creates meaning in American culture.

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[33] Johnson, *American Lobotomy,* 13.

[34] Johnson, *American Lobotomy,* 13.

[35] Johnson, *American Lobotomy,* 13.

In my case, I will look at a series of debates dubbed the "light burning controversy" that while spanning several decades from the 1880s through the present, was heavily concentrated in the frontier period (1910-1930) during which the USFS was forming its fundamental place in the US government and culture. While much attention had been paid to light burning policies and the results of these debates in environmental history and subsequent fields, very little work draws attention to the content and strategy of the debates themselves as central to defining expert and popular understandings of environmental management and disaster in their time. I argue that a rhetorical history that looks closely at these texts today is fundamental to our understandings of present wildfire politics. In the remainder of the chapter, I analyze two specific debates around the issue of fire management or "light burning," one published in a trade magazine intended for professionals and experts and another in the popular *Sunset* magazine that ultimately resulted in quelling the debate for the following decades. I will demonstrate that in both cases, representatives of these two approaches to forest management claimed the mantle of true science for themselves, and branded the other side as unscientific, driven by politics, and lacking common sense. As the debate progressed, the two positions hardened, until the side with more politic clout won out, only to realize much later that it was in the wrong.

The Light Burning Controversy

The United States Forest Service (USFS) was formally created in 1905 by Theodore Roosevelt who appointed fellow conservationist Gifford Pinchot as its first Chief Forester. When a wildfire in 1910 burned down three million acres of forest across Idaho, Montana, and Washington, taking with it the lives of 87 people, mostly firefighters, the newly minted USFS gained significant support from a skeptical Congress for their necessity as a public agency. In the

shadow of the tragedy, among a traumatized public psyche, the USFS gained support for their move towards total fire suppression as the best way to prevent wildfires.[36]

Before 1910, debates about how to best manage wildfires via land management had long been waged in the West, where settlers, farmers, ranchers, and railroad and timber industries used "light burning" to manage their private lands throughout the late 19th and early 20th century.[37] Learned by settlers from Indigenous peoples who shaped the natural landscape through cultural burning practices in a wide diversity of forms for thousands of years, "light burning" was co-opted on the frontier by the colonizers to various self-serving ends. For settlers and farmers, light burning cleared land and helped tend to fallow crops. Ranchers used it for pasturage, namely, to reduce brush. Finally, for timber owners, like the Southern Pacific Railroad who owned huge swaths of forests in the West, light burning helped clear underbrush to decrease fire intensity on these large tracts of land, to protect mature timber from being crowded out or destroyed by larger crown fires fueled by second-growth trees, and to control pests eating away their precious timber investments.[38]

However, these practices of light burning, proven through experience on the Western frontier, differed from the academic knowledge of forestry that guided USFS Chief Gifford

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[36] "Thinking Like a Mountain, About Fire."

[37] "Paiute Forestry: A History of the Light-Burning Controversy," in *Fire in America*, by Stephen J. Pyne (Princeton, NJ: Princeton University Press, 1982), 100–125.

[38] Kirsten Vinyeta, "Under the Guise of Science: How the US Forest Service Deployed Settler Colonial and Racist Logics to Advance an Unsubstantiated Fire Suppression Agenda," *Environmental Sociology* 8, no. 2 (2022): 134–48.

Pinchot and his immediate predecessors. Pinchot learned forestry through training at premiere forestry schools in Germany and France in the 1880s, where the landscape, both ecological and political, was drastically different from the American West. Where the Western states were largely unregulated, French forests, for example, were heavily managed and worked over by peasants clearing underbrush for firewood for hundreds of years. Pinchot recounted that they were "divided at regular intervals by perfectly straight paths and roads at right angle to each other… [and were] protected to a degree we in America know nothing about."[39] On German forests, he wrote in his autobiography, the thinking was very different from how Americans approached forests. "It is also worth recalling that while a very partial survey showed twelve million acres of forest burned over in the United States in 1891, with scant attention paid to that vast loss, in Germany one fire of less than six thousand acres was still a timely topic of discussion when I went over the ground, ninety years after it happened."[40] Light burning was nowhere incorporated into these efficient systems of European forest management that Pinchot looked to in modeling the new USFS.[41]

Although light burning was practiced across the states, from Florida to South Dakota to Arizona, the most prominent advocates for light burning came out of parts of northern California and southern Oregon, where low intensity ground-fires in mature pine forests were a common feature of the fire regime by way of natural lightning strikes, Indigenous stewardship, and the

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[39] Eric Rutkow, "American Canopy: Trees, Forests, and the Making of a Nation" (New York: Scribner, 2012): 53-157.

[40] Gifford Pinchot, "Breaking New Ground" (New York [N.Y: Harcourt, Brace, 1947): 24-25.

[41] "Paiute Forestry: A History of the Light-Burning Controversy," 101.

subsequent frontier co-opting of Indigenous practices. While different burning techniques were and are highly variant to local geographies, adjusting to different climates, vegetation, and topography, the Pacific Northwest became the grounds for a national debate about the efficacy of "light burning" for fire management. These regional-turned-national advocates ranged widely from poet Joaquin Miller to the second director of the US Geological survey John Wesley Powell who argued that the use of light burning was the "Indian way," best suited to the unique firescapes of the American West.[42] In fact, Powell, who was an ethnographer of the Southern Piute people, lectured Secretary of the Interior John Noble about light fire practices in 1889, bragging that he had even started a forest fire himself in his expeditions.[43] Pinchot recounted this encounter in his autobiography, describing Powell's remorseless confession as being "interesting, and that was all."[44] This incident may well have led the USFS to some of its deeply misaligned association of the light burning by reckless frontiersmen with Indigenous cultural burning, later characterized by the denigrating racialized term "Piute Forestry."[45]

At the turn of the century, two sides began to emerge in the light burning debate: one that aligned itself with the "practical forestry" of what had been previously done in the West by Indigenous peoples and frontiersmen, or the setting of fires to manage fires, and the other which

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[42] "How Forest Burning Could Have Become Federal Policy," PBS SoCal, October 10, 2016, https://www.pbssocal.org/shows/tending-the-wild/how-forest-burning-could-have-become-federal-policy.

[43] "Paiute Forestry: A History of the Light-Burning Controversy," 102.

[44] Pinchot, "Breaking New Ground."

[45] Vinyeta, "Under the Guise of Science."

saw light burning as unsuitable for a systematic approach to protecting future forests under a conservation-forward regime. Writing of his travels in the West in 1890, Pinchot stated, “Forest fires raged unchecked. According to the estimates of the day, they were destroying as much timber as was cut. Fires in the woods were regarded as acts of God, beyond human control.” Pinchot, in alignment with other conservationists like future President Roosevelt, believed that this wanton destruction of forests was not only a waste of resources, but sinful. Just as other evils of society had come to pass, such as slavery, the liquor trade, and the massive political corruption of the time, unchecked wildfires destroying the forests, too, would be seen as immoral in due time.[46] The goal for conservationists was not only to preserve nature, but to make a more efficient industrial state for timber that would power the economy for future generations. Thus, light burning which may not have impacted old-growth trees, was seen as destroying second-growth trees that would be needed for future forests, and therefore extremely counter to their goals.

Over the first decade of the 20th century, several minor technical and local debates between light burners on the frontier and a systematic approach of the USFS arose across professional forestry and policy forums, but none so prominent as an article published in the nationally popular *Sunset Magazine* in 1910 by civil engineer George Hoxie. Hoxie made the radical argument that mandatory light burning policies should be implemented by the federal government.[47] In the article, Hoxie sets up a dichotomy between “practical forestry” that he

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[46] Pinchot, "Breaking New Ground," 24-25.

[47] George L. Hoxie, “How Fire Helps Forestry: The Practical vs. The Federal Government’s Theoretical Ideas,” *Sunset: A Pacific Monthly*, December 1910.

aligns with light burners and "the Federal Government's theoretical forestry whims," establishing that "the practical invites the aid of fire as a *servant*, not as a *master*."[48] Thus began a more public accusation by light burning advocates that theirs was not only a difference of technique with the USFS, but political statement that the federal government's methods and control were ungrounded and unfounded. As the newly minted forest service was the first form of federal control many landowners felt on what had been open lands of the frontier, light burning was seen as a political protest to the federal government.[49] Unfortunately for Hoxie, these strongly worded accusations did not go far, as the worst fires of the twentieth century blazed through the West later that August of 1910. The public seemed to side with the USFS argument that a new system for fire protection was needed to keep forests and people safe from future disasters. However, the light burning controversy continued to boil under the surface in the West.

Under new USFS leadership by Chief Henry Graves following the fires of 1910, the next decade saw a much stricter implementation of fire suppression, along with the expansion of the National Forest Reservation Commission, a huge piece of conservation legislation that made it so the federal government could purchase private land for the purpose of protection and called for federal, state, and private cooperation around fire protection.[50] With this greater establishment of

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[48] Hoxie, "How Fire Helps Forestry," 149.

[49] Stephen J. Pyne, *Fire in America* (Princeton, NJ: Princeton University Press, 1982), 260-264.

[50] "Celebrating a Century of Conservation: The Weeks Act Turns 100" (United States Forest Service, 2011), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5286259.pdf.

forest protection through the USFS across more land, the debate over "light burning" arose again. According to fire historian Stephen Pyne:

> It was light burning… more than any other practice that contributed to the establishment of systematic fire protection. The relationship exhibited a peculiar symbiosis. Not until government foresters began to control traditional fire practices did light burning as a program define its premises and refine its techniques, and only when they were confronted with light burning as a defined alternative did American foresters invent the program of what became known as systematic fire protection."[51]

It was this antagonistic relationship that defined both practices of light burning and wildfire protection. The USFS began to gain definitional control over what "wildfire protection" meant as they simultaneously justified their bureaucratic hold on managing the land, replacing unruly frontier practices they named "light burning" with total fire suppression. While "light burning" was not a unified concept with a set group of supporters, advocates began to define their agendas through their united opposition to the USFS approach to controlling wildfires and forest management. What had previously been a question of technique of forest management came to be defined on the national stages as a clash between the old days of the open frontier and a new regime of state control.

While Chief Graves was open to some research on the use of light burning over the next decade, he largely rejected light burning as an overarching policy option. In his annual USFS report in 1912 he hardened his stance farther in defining light burning as "nothing less than the

[51] "Paiute Forestry: A History of the Light-Burning Controversy," 101.

advocacy of forest destruction."[52] While the technique of light burning may not have been a major issue on its own, what light burning began to stand for as a form of political protests to the USFS threatened their control over wildfires as a federal agency and conservation mission to create a system of forest protection across the West.

At the time that USFS strengthened their hold as a bureaucratic agency, California Forester F. E. Olmstead published an official report on light burning for the USDA that, according to Pyne, "fixed both the terms of the debate and the names of the antagonists."[53] As light burning had earlier represented a wide array of different practices without the particular "light burning" name attached to them, Olmstead's report solidified light burning from a set of dispersed practices into a unified theory, or in his case, enemy of the USFS.[54] A few years later, California Forest District Head Coert duBois' expansive volume titled *Systematic Fire Protection in the California Forests* set out to give instruction in comprehensive fire suppression in the state, thus further defining "fire protection" as a program that was in opposition to light burning.

Over time, however, advocates from outside the world of government forestry management were not deterred by the agenda set by the USFS, representing ruptures in the USFS control over wildfire protection. Civil engineers, such as former Captain of the Army Corps of Engineers Joseph Kitts, resisted the characterization of light burning as evil or an enemy to those

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[52] Diane M. Smith, "Sustainability and Wildland Fire The Origins of Forest Service Wildland Fire Research," *United States Forest Service*, 2017, 16.

[53] Pyne, *Fire in America*, 104.

[54] Pyne, *Fire in America*, 104.

trying to protect forests. Kitts delivered a speech to the American Society of Engineers in 1919 which was turned into a popular pamphlet by the light burning advocates working for the Southern Pacific Railroad. Making the more engineer-minded argument that more fuel simply meant more fires, Kitts spoke about how light burns worked on his own properties in northern California. Like his light burning predecessors of the previous decades, Kitts aligned himself as being practical and having personal experience. Furthermore, he evoked a very commonplace racial nostalgia that light burners used to align themselves with Indigenous peoples in cultural burning practices.[55] He stated that Indigenous peoples were "the most practical of foresters" in the area and that if their system had left "clean and open" forests for thousands of years, it is clear that their burning must work.[56] Supporting Kitts, the Land Commissioner for the Southern Pacific Railroad B. A. McAllister wrote about light burning to the *Journal of Forestry* that same year, going further to suggest that the USFS "protection" program was designed more to highlight the prowess of the firefighters by allowing for the buildup for bigger fires, than protecting forests themselves. McAllister celebrated Kitt's program of light burning, warning

[55] This racial nostalgia praised Indigenous peoples for having the "real" knowledge of the forests, often evoking days on the early frontier as superior due to pristine environmental conditions before colonization. Light burners often raised this comparison while simultaneously deploying racialized tropes to violently erase, denigrate and appropriate diverse stewardship practices on the lands stolen by the very people who "mourned" them in their rhetoric.

[56] Harold K. Steen, *The U. S. Forest Service: A Centennial History* (Seattle: University of Washington Press, 2013), http://ebookcentral.proquest.com/lib/washington/detail.action?docID=4305920.

that the forests would ultimately be too big to manage without the removal of fuels that Kitt so eloquently demonstrated was necessary in his studies on his own land.[57]

This sharpened rise in light burners taking to larger professional forums in 1919 to protest the USFS policies meant a stricter crackdown by the USFS who had previously allowed some leniency on the technique. In January 1920, outgoing Forest Chief Graves took to the lumber industry magazine *The Timberman*, to denounce light burning as "Piute Forestry." By way of the title "Piute Forestry" Graves also reinstated the racist tropes taken up by colonizers over the decades who discredited, downplayed, and erased Indigenous peoples and knowledges in their cultural burning practices.[58] For example, the use of "Piute" refers to three non-contiguous Indigenous groups, the Northern Paiute, Southern Paiute, and Mono people living across the American West speaking different languages or dialects, and coming from distinctive cultural backgrounds. In his naming of light burning as "Piute Forestry," Graves does the rhetorical work of not only mischaracterizing "Piute" as one group, a common practice of simplifying and erasing distinctive Indigenous peoples and cultural practices, but furthermore, racializing burning practices to make them seem more simplistic, unscientific, and counter to the paternalistic management of the US federal government.

In Graves article, he also calls upon the support of further government research by forester S. B. Show to prove scientifically how the USFS technique of fire suppression reigned superior to the program of light burning as either a corrupt frontier or ineffective Indigenous practice. The *Timberman* published Graves and Show's articles as a series with Kitt's pamphlet

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[57] Smith, "Sustainability and Wildland Fire."

[58] Vinyeta, "Under the Guise of Science."

in the middle, pitching it as a controversy over "exactly opposite view[s]." The editors wrote that further investigation was needed to determine the "efficiency of both plans," but hoped to spur discussion among professionals about this increasingly politicized issue.[59]

In the three articles published in the January edition, Graves' article appears first. Careful not to demonize the lumber industry's destructive practices (they were his audience), he appeals to their admirable partnerships in serving the progressive mission of the Forest Service, reminds them of the enormous cost of destructive fires to the timber industry, and presents evidence that over the past 15 years "hundreds of thousands of acres of national forest land in the Western pine belt… now furnish a practical demonstration of what these forests can be made to produce under a genuine system of fire protection."[60] Recognizing that the other side was claiming practical knowledge over the government's academic credentials, Graves seems to be trying here to show foresters that the government too now has practical experiential knowledge to back its claims. Anticipating the propositions of Kitt's studies, Graves writes that the USFS has already studied "every area which it was able to learn about where intentional light burned has been practiced" and that light burning had no effect different from the natural lightning strikes that happen (an argument also used to dismiss Indigenous practices). He argues it was disastrous to new and old growth and so costly that even light burning advocates had given up on their own protective measures.[61] Graves further frames light burning in the article as a "makeshift" proposition that

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[59] "Light-Burning Controversy," *The Timberman* 21 (January 1920): 30.

[60] H. S. Graves, "Graves Terms Light Burning 'Piute Forestry,'" *The Timberman* 21 (January 1920): 35.

[61] Graves, "Graves Terms Light Burning."

"at its best is simply a part of the process of timber mining," which is in direct opposition to the "progressive development in forestry" that the USFS developed.[62] While he acknowledges that it is untrue that light burning practices were *all* associated with corrupt timber mining (burning up second growth trees in order to prioritize more profitable old growth trees), he frames light burning practices for the public as exploitative, careless, and against their best interests. In other words, like the opposition was wont to do, he claimed that common sense was on his side.

Directly following Graves' article are excerpts from the speech Joseph Kitts gave to the American Society of Engineers that was turned into a pamphlet published by the Southern Pacific Railroad. In the excerpts selected for *The Timberman*, Kitts focuses on the technique of light burning as practiced in northern California on his own land as the best evidence that it works for forest management. Kitts describes a risk-free use of light burning where "The litter is not allowed to accumulate in any area in proportions sufficient to cause crown fires," that is, fires that pass from tree to tree through their crowns, and this protective fire is controlled through several prevention measures including control lines and backfiring.[63] Kitts states that these methods are needed because, unlike the forests of France where peasants can gather litter for

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[62] Graves, "Graves Terms Light Burning."

[63] Joseph Kitts, "California Divided on Light Burning," *The Timberman* 21 (January 1920): 39, 81–82. A backfire, according to Kitts use, is "a surface fire started ahead of the crown (or surface) fire to burn only against the wind, so that when the two fires meet both must go out for lack of fuel." The control line referenced by Kitts is a variable three-to-twelve-foot path where all fuels are cleared out, and in some cases a larger trench is dug in order to catch rolling pinecones.

firewood, thus clearing the forests of the fuel that, when built up, can feed crown fires, the US has "larger proportions of our forests… [which are] far removed from population and means of transportation," thus demanding different methods for clearing that litter. This was a common argument that light burners made, pointing to the ways that the theory and system imported from Europe by the USFS was not suited to American forests because of the distinct features of the American frontier. In other words, he suggested that the government was not doing good empirical science, but was instead basing its conclusions on scholastic assumptions, too blinded by the status of European masters to attend to the observed realities of the American experience.

For Kitts, this American frontier was an empty one that white men had settled and that no longer had Indigenous people living on it. Light burning was taught to settlers by Indigenous tribes of California who were the "most practical of foresters," always in the past tense. His praise for these practical foresters was no less racist than the treatment offered by Graves. Kitts appeared to be offering a nostalgic appeal to the customs of a vanished race of noble savages who were more connected to the land and whose practices are thus worthy of appropriation by modern science. For their Indigenous predecessors, "the surface fire was the natural and only means available to them by which to remove the forest litter to prevent fire destruction," as proven by its widespread use. Kitts, in this article, and all his other materials, would also call upon historical testimony from his own colonizer grandparents who settled in the region and learned from Indigenous people.[64]

As further evidence of light burning's efficacy, Kitts employs the four-thousand-year-old sequoia trees as testimony to the importance of surface fires. The sequoia trees' survival, he

[64] Kitts, "California Divided on Light Burning."

claims, has been dependent on surface fires to destroy the litter that the "Big Trees" accumulate, and the fact of their old age is living evidence that these surface fires work. The difference between American trees and European trees is thus emphasized, and appeals to local evidence give Kitts the stronger claim to empirical scientific knowledge. Versions of this combination of arguments: that the light burning technique was more practical, based on Indigenous burning of the past, and worked well because of the conditions of American forests, were repeated in many publications by Kitts.

For *The Timberman*, the Kitts article was followed by an article written by the government scientist and forester S. B. Show, author of a few studies conducted on light burning, who came out with an escalated attack on the argument from Kitts. The argument printed in *The Timberman* reproduces his presentation at the most recent meeting of the California Section of the Society of American Foresters.[65] Show writes that in the region, two "radically different theories of forest protection" had developed over the past decade. One views fire as "inimical" to protection and the other views "fire protection in the long run as an impossibility." This framing characterizes all of light burning with the ignorant frontiersman or greedy timber baron attitude of destroying forests with no foresight for reproduction or future protection, a far cry from the carefully systemized plan laid out by Kitts in the previous section.

Show then goes on to examine the development of light burning theories, characterizing the theories as having different and escalating methods, all of which he depicts as ineffective, creating a strawman argument for the light burning theory. The first theory of light burning

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[65] S. B. Show, "Forest Fire Protection in California," *The Timberman* 21 (January 1920): 37, 88.

introduced in 1910 by T. B. Walker, according to Show, states that all merchantable timber must be individually protected when engaging in light burning. The second light burning theory, by timber owner S. E. White, focuses on how light burning can help control attacks by insects, with the assumption that light burning does not hurt merchantable timber. The third and most extreme theory of light burning, that of Joseph Kitts proposed in 1918, is a more complex seasonal system of burning of different types of the understory in a five-year rotation that, according to Show, "goes rather farther than either of the two previous plans." Show then argues that "the chief executives of controlled burning [Walker, White, and Kitts] are not in agreement among themselves as to the proper method," as one assumes that light burning does damage to merchantable trees (because of the individual protections proposed by Walker) while the latter two do not. In addition, Show writes, "One [White's plan] actually provides for summer burning of the main portions of the treated areas after snags and windfalls have been disposed of; the other two [Walker and Kitts] are aimed to prevent or to reduce the intensity of summer fires." If the audience is to take Show's word for the description of the three light burning methods, the methods are undermined by inconsistency in that they disagree over the major question of whether burning damages mature timber or not and when the burning itself should be done. This also makes them unscientific, in that one unified theory should agree upon the major issues at stake in light burning. Show's argument is that the proposals are too disparate to offer anything of value that would change the USFS program. They must be rejected as the contradictory hypotheses of undisciplined individuals who lack the big-picture vision that can be expected from credentialed experts working for the government who represent the broader scientific community.

In addition to the science on the proposed method being inconsistent, Show additionally frames light burning's association with Indigenous methods as unreliable historical fact. He writes:

> In the literature on the subject of light burning one finds constant reference to the alleged practice of the Indians to burn over the forests of the state periodically. The reason for this alleged practice is variously stated as, to protect the forest, to improve feed, to make hunting easier, and to make travel easier. This practice … [makes up] the bulwarks of the controlled burning theory since it is stated that these fires were … fires which caused no damage and that ... [through] the use of these fires serious and damaging conflagrations were prevented.

He again frames differences that might be attributed to local distinctions as evidence that light burning advocates are contradictory, and thus not to be trusted. He dismisses claims that Indigenous fire history holds any relevance to current conditions and argues that the office of Forest Pathology and the Forest Service would need to undergo a study of the "actual proven facts" to "work out in detail the fire history of the state." He proceeds to claim that "Our own studies made over wide areas and for a considerable period of years show what is now generally recognized, that fires may kill our timber but do not kill out brush." In fact, he states, "We find in many cases remarkable vitality and vigor in certain of the brush species in coming back after fire," therefore concluding that light burning makes fires, if anything, worse, through making brush more robust.[66] Common sense suggests that anything that makes brush more robust would be damaging to the forests in the long run. In these arguments for *The Timberman,* it was clear

[66] Show, "Forest Fire Protection."

that both sides of the debate were beginning to harden more and more, and both made arguments that aligned their side with science and common sense, and the other with myth and irrationality. A few months later the issue bubbled up again in a more popular arena meant for the general public.

Not having gotten the final word among lumber industry professionals and foresters in *The Timberman* did not deter light burning advocates. The Southern Pacific Railroad's own *Sunset Magazine* was a popular, nationally distributed publication created at the turn of the century to promote Western living. Fighting against the "Wild West" reputation, *Sunset* aimed to present the West as an attractive place for people to buy land and live, an interest of the railroad, as it was a major landowner in states like California and Nevada and it profited from people traveling to the West on its trains. By 1920, the publication had expanded from tourism into substantive articles on domestic and foreign affairs. Already a strong proponent of light burning, the publication took on the topic in the spring of 1920. A frequent *Sunset* contributor, Western fiction writer S. E. White, wrote on light burning for their March 1920 issue. According to historian Harold Steen, "Sunset promoted White's article by placing posters in city buses proclaiming, 'Your forests are in danger. The Forest Service won't save them, but fire will, says Stewart Edward White in a smashing article.'"[67] Chief Graves protested the posters, threatening to sue the Mayor of Seattle for allowing the posters (which were eventually taken down), and *Sunset* agreed to run Graves' counterargument in the following April 1920 issue, believing that the Forest Service would sue the company otherwise. In four articles, S. E. White's in March, a response by Chief Graves in April, a response to Graves by White in May and then a final article

[67] Steen, *The U. S. Forest Service, 136*.

summarizing the debate by pro-USFS Fire Chief P.G. Redington in June, light burning was once and for all brought to a national stage. Pyne writes of the debate:

> More than a choice between various techniques of fire protection, the controversy—as perceived by the Forest Service, evolved into a choice between two diametrically opposed philosophies of forest management… As the lines of the debate hardened, the possibility of compromise became less likely. Individual landowners could practice light burning, but systematic protection required organization, interlocking agreements, and research. The forest service had insisted that it should manage the forest reserves because it offered something different from frontier practices. If it adopted the same methods, then the public would naturally ask why the service was especially qualified to administer its lands.[68]

It thus followed that while the public debate was about the technique of light burning, the real issue of defining light burning and wildfire protection was about political control. In this struggle moving from the previously unregulated frontier economy to a federal agency of an industrial state that controlled the forests, the USFS had to continually respond to threats to their agency. Thus, while the scientific efficacy of total fire suppression was far from thoroughly tested, the USFS had to promote their program as the most scientific and denounce any science associated with light burning. In this next section I will look closely at how the lines of this debate hardened over science as the political stakes for each side grew.

The *Sunset* Debate

[68] Pyne, *Fire in America, 105-106.*

The series in *Sunset* magazine started out with an article by S. E. White, a light burning advocate who was previously mentioned in *The Timberman* for his own studies and methods developed in California. Overall, White attacked the USFS, questioning not only their ability to protect forests, but their technical expertise and entire program of conservation. However, surprisingly, instead of focusing plainly on light burning or fire suppression as the problem, his article starts off by focusing on a different forestry issue: beetle infestations destroying mature timber. Fire, he argues, is the only solution for killing the pests. White testified through his own eyewitness accounts and practical experience using fire that this "epidemic" was more destructive and costly than wildfires for the forests, using financial statistics to show the cost of damage that the USFS caused by allowing the pests to spread unchecked. For understanding the scope of this issue on the ground, White elucidates, the USFS Rangers, not trained on the issue, were completely useless. He wrote, "They do not know an infested tree unless it is so far gone in dissolution that any child could spot it."[69] These ill-trained rangers, the government foresters who manage them, and the chief government foresters who supervise the whole system of forestry had no accurate knowledge on what was happening on the ground, according to White.[70]

By targeting the new issue of beetles, instead of getting directly to the ongoing policy issue of light burning, he draws attention to the forest service's lack of competency in helping truly protect the forests. Furthermore, he continues that government entomologists, those presumably responsible for solving the beetle problem in the forests, "have been betrayed by

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[69] Steward Edward White, "Woodsmen, Spare Those Trees!: Our Forests Are Threatened; A Plea for Protection," *Sunset: A Pacific Monthly*, March 1920.

[70] White, "Woodsmen, Spare Those Trees!."

human nature into false doctrines" about how to fix the beetles problem without fire, due to the USFS suppression policy. This is to say that he thinks the scientists working on the problem are not being objective, but subject to the government's interest in denouncing light burning as the best method for forests, and pest, management. While there is some "excellent laboratory work" that has been done on the beetle issue, he says, the field work (which discredited light burning) was rushed and incomplete: it was done over the course of two short years, whereas White's observations cover decades that prove light burning works best.[71] White attacks the government scientists who are following political direction to suppress light burning instead of common sense that would support it:

> When certain theories that should have been advanced as tentative hypotheses were put forward as final conclusions…There is where the human nature comes in. Once having committed themselves these scientists were reluctant to back water. They abandoned the scientific for the polemic; they were more interested in procuring facts to bolster their expressed theories than in refitting their theories as fresh facts came to attention. This is a serious statement and is meant to be.[72]

Like Graves and Show, White aligns true science and rationality with his side and denies it to the opposition, claiming that they are being misled by false ideology.

Regarding the flawed nature of their science, White claims one of these "false doctrines" is a new theory that if 75% of trees are safe from the beetles then the infestation does not spread. However, according to White, it must be 100% of trees free of beetles to keep the pest from

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[71] White, "Woodsmen, Spare Those Trees!," 24.

[72] White, "Woodsmen, Spare Those Trees!," 24.

spreading, and the only way to accomplish that number is through treatment by fire. He offers his own account of observing the beetles "only the other day" in a neighboring county where the epidemic returned because the government relied on the 75% rule. White thus pointed to his own superior empirical knowledge, gained from local experience, as a reason to believe him and reject the claims of remote government scientists who rely on academic theory untethered to practical evidence.

While the Forest Service thinks this epidemic is of little importance, White says he knows, based on "hundreds of observations made during a sojourn into the forest—not on hasty trips at perhaps the wrong time of year," that "all the work done and the money spent" might as well be "thrown away" if not properly done. "The soothing theory is likewise advanced that there have been in the past epidemics that have run their course. This is pure supposition based on no physical evidence… Epidemics may have occurred in the remote past. If so, they were both checked and obliterated by fire."[73] In fact, it is an agreed upon fact by the more knowledgeable people on the ground, as well as some whose voices are suppressed, that fire is necessary to stop the beetles:

> To the complete satisfaction of every practical woodsman outside of the Forest Service, and secretly to a great many inside it, the hypothesis has been proved—Fire kills bugs. There remains to examine this remedy, to determine whether or not it is worse than the disease. The Forest Service tells us it is, and the general public educated for twenty years by the Forest Service, reacts blindly and instinctively against any suggestion of fire.

[73] White, "Woodsmen, Spare Those Trees!," 24.

> Nevertheless fire—a bad master—is an excellent servant. There are good fires and bad fires. Let us not too blindly condemn one for the misdeeds of the other.[74]

White then goes on to further describe government investigations as corrupt, and his experience combined with common sense (observations by anyone actually on the ground) as superior: "Nevertheless, the facts are there for a man who goes to the woods with an open mind."[75] He uses quotes from studies published in *American Forestry* to make a case that incomplete evidence was used, calling the government's position "unscientific surmise without a fact to support it, but it reads well and it has its effect on the public."[76] Again and again, we see White pulling science and common sense onto his side through the value of empiricism, and denying the label of science to the other side, often by characterizing the government as a manipulator of emotions, whether to soothe the public or work them into a blind and instinctive fear.

White also directly attacks the USFS fire suppression policy, stating that "Nature used to keep her woodlands clean. Now we must do it. If we can not do it European fashion by picking up our debris then we must to it Nature fashion by burning up our debris. We can not eat our cake and keep it."[77] He advocates for civil engineer Joseph Kitts' study as well and taunts that "The few half-hearted official experiments in surface burning have not been systematically enough conducted to prove anything except lack of desire to get at the real truth."[78] While Show

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[74] White, "Woodsmen, Spare Those Trees!," 25.

[75] White, "Woodsmen, Spare Those Trees!," 110.

[76] White, "Woodsmen, Spare Those Trees!," 112.

[77] White, "Woodsmen, Spare Those Trees!," 114.

[78] White, "Woodsmen, Spare Those Trees!," 115.

had branded the light burning arguments as contradictory and thus lacking in the consistency we expect from systematic scientific thought, White is here claiming that the government's fire suppression advocates are lacking in the skill and persistence to perform systematic on-the-ground observations.

In conclusion, White states: "I wish to appeal for a fair scientific attitude toward these things."[79] Describing the Forest Service as close-minded and flawed by human nature, he ends by stating that the public must follow the true experts on the ground, not government officials:

> Most of these woodsmen who are genuinely interested in these subjects have read and digested the standard text-books in use at the forestry schools and colleges. It would astonish you to discover how conversant with academic theories these 'rough old lumberman' are. The graduates of the forestry schools do not represent so exclusive a body of expert opinion on these subjects as they imagine. But the practical woodsmen have in addition two advantages—an open mind and wide experience… Most scientists or experts have a sort of scientific contempt for laymen. But in this case it is not justified. The laymen, if one could call them such, are not speaking from ignorance of the 'expert's' reasons or reasoning. They speak from the teaching of the schools as tested rigidly, for results, in the forests themselves.[80]

Thus does White define woodsmen as the true scientists in this case, trained in academic theories as the government scientists are, but with the additional advantage of building their own empirical knowledge from open-minded and rigorous encounter with the natural world.

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[79] White, "Woodsmen, Spare Those Trees!," 115-116.

[80] White, "Woodsmen, Spare Those Trees!," 116.

At the end of this crucifying article there was a concluding comment from the editors that a response by Chief Forester Graves would be published the following months. The Forest Service responded in *Sunset* and several other publications, trade, and academic journals, to stomp out the doubt in the government's position that White's article kindled.[81]

Whereas Chief Graves' article in the *Timberman* series with Kitts and Show was positioned to give him the advantage of preemptive responses to Kitt's pamphlet, Graves' *Sunset* article had a burden of rebuttal to set straight White's accusations on several fronts that threatened the agency's validity and their methods for protection. The article begins not by characterizing light burners as the enemy, as one might expect, but by focusing on fire as the arch enemy of the forest and the public, while mostly ignoring the arguments about the beetles which dominate White's argument and text.

Graves begins with a definition of the problem space. He writes, "White says that this [USFS] system of protecting the public forests is wrong; that it is creating a condition that will inevitably lead to uncontrollable conflagrations and hence is defeating its own end. He would substitute for fire prevention a system of forest burning."[82] Note that instead of calling the system "light burning" in the article, he nearly always calls the system "forest burning," not a science, but a "doctrine preached and practiced."[83] It is not until well into the article that he addresses the "light burning theory" and contends that his reader must "dispose of… fallacies"

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[81] Steen, *The U. S. Forest Service, 136*.

[82] Henry S. Graves, "The Torch in the Timber: It May Save the Lumberman's Property, But It Destroys the Forests of the Future," *Sunset: A Pacific Monthly*, April 1920.

[83] Graves, "The Torch in the Timber," 38.

before seeing anything constructive in White's proposal to "let… fire run through the whole forest."[84] Throughout each argument, he ties his logic to fire as the enemy. He writes, "in our West, the forest is a resultant of soil, climate and the struggle against fire," and that "it was always in a struggle with fire and in the face of fire, not because of fire" that forests survive.[85] The fact that he identifies this as a characteristic of "our West" counters the charge that the USFS is building its policy on theories formed in the European academy and ignorant of local conditions.

He writes further of the history of light burning, that it is not new but a theory tested by the scientific community and rejected by the consensus of scientific experts. Ten years ago when the debate arose at the beginning of his term as Chief Forester, he concluded that it was irresponsible:

> Lumbermen as a whole… did not argue for an intensive system of controlled burning. They argued for a crude method of forest burning. They wanted carte blanche to set fires in the woods without control, without regard to reproduction, without regard to other injurious effects. They argued for a destructive system such as they themselves had been accustomed to practice, a system that has been wasting the California forests like malignant disease.

This, he said, is like "killing the patient to rid of the disease."[86] Graves unsurprisingly uses this premise, that non-experts are practicing outdated medicine like bleeding and folk remedies that

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[84] Graves, "The Torch in the Timber," 81.

[85] Graves, "The Torch in the Timber," 38.

[86] Graves "The Torch in the Timber."

do more harm than good, to re-establish the Forest Service as the all-knowing authority on forestry management and modern science, and stamp the opposition with the taint of antiquated tradition. Even though there was limited research on light burning conducted by the government, Graves rhetorically constructs the USFS as a comprehensive, scientific agency that represents the heights of progress. Over several pages, Graves disputes White's evidence and frames White as lacking foresight, another common argument that light burning was not accounting for second-growth forests in the long term. In this respect, the debate in *Sunset* becomes more scientific and less accessible to a popular audience who may not be acquainted with the details of the scientific literature and case studies either of the authors presents. This tactic worked to walk the debate back from a public issue to a scientific one to be managed by the experts, which in this case was a status claimed by the USFS and largely denied to woodsmen with on-the-ground experience in the forests.

While White bases his theories off of Kitts's perspective as an engineer, Graves bases his in the extant literature on forests as an ecological system. This was based on accepted scientific theory of the time, conducted by American ecologist F. E. Clements, who adapted much of the knowledge of European forests to the Americas and proposed that forests be seen through linear successional stages. Through this model, ecological systems move through higher and higher stages of development until they reach their peak stage of development, called the "climax" stage. In this model, fire is seen as a disturbance to reaching the "climax," a disturbance that should be eliminated to promote the most successful growth. Graves uses this wider theory of ecological succession to counter much of White's belief that fire could be good for forests by saying that White had no knowledge of the biology of tree growth and was not familiar with the current research on biology. In claiming biology on his side, Graves is perhaps offering a

roundabout counter to the argument of White that knowledge of the beetles turns the debate to the light burning side.

Graves points to areas destroyed by fires such as northern California where poor fire suppression has resulted in damaged forests prevented from reaching their climax stage: “The forest as a whole is broken, patchy, and defective. There is every stage, from the areas which by location were sheltered by fire, and consequently can now show excellent stands, to the openings with blackened snags or traces of trees to show what once grew there.”[87] These stages represent where, if properly protected from fire and light burning, the forest could be significantly more productive and reach a climax stage. As for these patchy areas, Graves writes: “Experience proves that when the fires are stopped the forest, as a rule, begin to work their way back on… [growing brush] lands, slowly reconquering the lost ground. There is nothing mysterious or unusual about the sequence, to students of the natural laws which govern plant succession.”[88] By implication, White does not possess this broader biological view, and thus fails to understand the damage that fire can do.

While Graves writes only a paragraph to address the biological problem of beetle infestation that White had raised, he also takes on an ecological argument there, agreeing that more research is needed, but that fire is a short-sighted answer: “Conclusions must be drawn not merely on the basis of observed conditions in a single place but with a background of biological facts and laws, and an intimate knowledge of the life history of the insects in question.”[89] White

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[87] Graves, “The Torch in the Timber," 40.

[88] Graves, “The Torch in the Timber," 39.

[89] Graves, “The Torch in the Timber," 88.

may have observed some phenomena in one place, but the government scientists had broader knowledge from a comprehensive view of the entire nation. Thus the more comprehensive science of the USFS is offered again as a counter to the more local knowledge of light burning advocates.

Lastly, to address the larger question of fuel build-up that was the crux of the debate, again Graves focuses on an ecological understanding to usurp the engineer:

> Without a doubt there is a hazard that for a limited period will be a severe one; every cluster of pines with their crowns close to the ground is a hazard. The filling up of the stands with these young trees will continue to be a hazard for a number of years. In countless places young trees are pushing up through the brush and will in time shade it out, so that ultimately the hazard will progressively decrease.[90]

It is on this belief of successional stages that Graves concludes that the fuels will eventually be reduced. Of course, the Clementsian science was wrong on this: fuels were built up for decades due to increased firefighting funding and more regulation that greatly reduced wildfire damage, and wildfire conditions ultimately went as White, Kitts, and the light burners predicted: hotter and more frequent due to fuel suppression.[91]

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[90] Graves, “The Torch in the Timber," 82.

[91] Mark R Kreider et al., “Fire Suppression Makes Wildfires More Severe and Accentuates Impacts of Climate Change and Fuel Accumulation,” *Nature Communications* 15, no. 1 (2024): 2412–2412; Mark Oberle, “Forest Fires: Suppression Policy Has Its Ecological Drawbacks,” *Science* 165, no. 3893 (1969): 568–71; Tom Tidwell (Chief Forester), “Big Burn Centennial Commemoration” (United States Forest Service, May 22, 2010).

White's reply to Graves in the May 1920 issue of *Sunset*, however, does not have the advantage of time to make this argument coherent to the public. Instead, White's response strategy is to point out conflicting evidence, to identify disputed cases and to propose further test cases to settle the matter once and for all. Note again how White embraces empirical science as the arbiter of the dispute. While Graves envisions forest protection through fire exclusion being able to get all forests to a final stage of productivity, White writes that "Some places naturally grow good trees and in others the conditions are not favorable."[92] So again, Graves is shown to be lacking in the ability to recognize differences in local conditions because he is so focused on general theories. White says that Graves blames fire for bad forests and ignores other reasons, and then White continues to argue that the Forest Service constructs their science on this same premise, whereas light burners "do not construct their final theories in advance."[93] White remains unconvinced of Graves' science as he sees it not as science but "interpretations and… not arguments but assumptions."[94] His conclusion is that "This fire thing is a basic policy and must be proved scientifically, by experiment, no matter how certain anybody—or any opinion—may be that he is right."[95] He proposes that the government see through Kitts experiment proposals in the "spirit of truth seeking, not of propaganda."[96]

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[92] Steward Edward White, "Getting at the Truth: Is the Forest Service Really Trying to Lay Bare the Facts of the Light-Burning Controversy?," *Sunset: A Pacific Monthly*, May 1920.

[93] White, "Getting at the Truth," 81.

[94] White, "Getting at the Truth," 62.

[95] White, "Getting at the Truth," 81-82.

[96] White, "Getting at the Truth," 82.

Ultimately, a final article by California forester Paul G. Redington titled "What is the Truth?" refutes a few of White's claims but informs the public that a committee on light burning was appointed and that further experiments would be conducted. This was largely the end of the public debate for the period. Further inconclusive experiments were conducted in the following years, and the total suppression policy was not changed. Ultimately, the federal government had the power in this situation, and they exercised that power to reaffirm their position. Reporting on the committee's findings over the following few years, forestry scholar Donald Bruce wrote in 1923:

> The issue was a practical one which involved not so much the truth or fallacy of a theory as a practical and economic application of whatever truth there might be therein... The concrete problem therefore, was not the correctness of certain theories but rather a determination of whether any modification in the existing system of fire protection could probably be developed therefrom.[97]

This forthright acknowledgment that practical and economic rationales trumped scientific ones was not what was reflected in the debate to the public where the USFS presented themselves as the definitive source on fire protection and science, denouncing the science of light burners for several decades to follow.

Chapter Conclusion

[97] Donald Bruce, "Light Burning--Report of the California Forestry Committee," *Journal of Forestry* 21, no. 2 (February 1, 1923): 129–33.

The USFS won the light burning debate, although they served as the ultimate judge of the policy, so it was not exactly a fair contest. Fire exclusion was the national policy for most of the 20th century and justified the use of massive firefighting resources. All fires were seen as an enemy, and the government equated firefighting to a defense of the nation in the 1930s and 40s.[98] For some time, this protection program did work to reduce fires. However, the suppression program, in the words of USFS Chief Forester Tim Tidwell, "hit a wall." Tidwell elaborated on this development in his speech at the Centennial of the 1910 Big Burn:

> Fuels are naturally self-regulating. They accumulate as vegetation grows, sequestering carbon; and they burn when weather and moisture conditions are right, releasing carbon back into the atmosphere. Then the cycle begins anew. But firefighting success, coupled with homes springing up in the woods, broke the cycle. At lower elevations, the ecosystems that were historically most dependent on fire missed multiple fire cycles. As fire retreated across the landscape, fuels that normally would have burned continued to accumulate, and sooner or later something had to give—and when it did large fires occurred.

He explains in his speech that at the turn of the century, the combination of climate change and fuel accumulation resulted in the worst fires since the 1950s: "In a sense, [since the Big Burn in

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[98] Daniel Zobel, "Before the Reign of Smokey Bear: Patterns of Persuasion in Early Twentieth-Century Forest Fire Prevention Posters," *Environmental History* 29, no. 1 (January 2024): 180–96; Jesse Minor and Geoffrey A. Boyce, "Smokey Bear and the Pyropolitics of United States Forest Governance," *Political Geography* 62 (January 1, 2018): 79–93.

1910] we have come full circle."[99] Now many fires are too big to suppress, as fuels and climate change defeat any modern technologies available. "Gifford Pinchot was wrong," Tidwell concluded, "All you can do is get people out of the way." Like the Big Burn of 1910, firefighting is ill-equipped to fight the fires coming our way.

By looking to the light burning controversy and the specific forums where the USFS and their adversaries debated the issue, this chapter illustrates a rhetorical history of wildfire. In the debates I analyzed, light burning advocates attempted to align themselves with being the more practical foresters, citing their use of Indigenous practices of burning. The USFS responded by dismissing those practices, calling them nothing more than natural lightning and unsystematic covers for the corrupt and reckless practice of forest burning by frontiersmen. Light burners attempted to align themselves with the "real" science on the ground, discrediting USFS use of European theories for forest management and failure to appreciate the results of lengthy empirical research on beetle infestations in the area. In response, the USFS doubled down on their scientific methods, describing instead how their pioneering science in ecology promised that suppression would lead to better forests, allowing for a "climax" phase of succession that would improve upon the forests, justifying their agency's control.[100] Today, a similar tension

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[99] Tidwell, "Big Burn Centennial Commemoration."

[100] This theory of reaching a "climax" phase of the forest direct echoes eugenics entwined in ecological research at the time that was manufactured to justify the superiority of a White race colonizing the Americas, Asia, and Africa. Forest science was instrumental in many of such displays of eugenicist science, including at early World Fairs that displayed the potential of the forests of the Americas. See: Jedidiah Purdy, "Environmentalism's Racist History," *The New*

arises with locals wary of the control of government science and authority on the causes of wildfires. Skeptical of the promise of sweeping new policies to make their communities safer, residents draw upon a scientific commonsense, the observations on the ground at their forested properties, to argue against climate-informed policy. On the more extreme end, some residents even disbelieve that worsening wildfires are natural at all, blaming organized political groups for committing arson to forward their political agendas, as has been seen in cases in Australia, Canada, and the United States.[101] Both of these topics I will explore in relation to this longer history in the following chapters.

Throughout this chapter, I point to how defining the program of wildfire protection was developed in relationship with the agenda of light burning. While neither light burning or total suppression were a tight set of concepts at the beginning of the century, each side began to set its parameters as a scientific and forest management technique as they arose through clashing

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Yorker, August 13, 2015, https://www.newyorker.com/news/news-desk/environmentalisms-racist-history; Charles Wohlforth, "Conservation and Eugenics," *Orion Magazine*, June 24, 2010, https://orionmagazine.org/article/conservation-and-eugenics/.

[101] Denise Chow, David Ingram, and Brandy Zadronzy, "Australia's Wildfire Crisis Faces a New Foe: Misinformation," *NBC News*, January 9, 2020, https://www.nbcnews.com/science/environment/australia-s-wildfire-crisis-faces-new-foe-misinformation-n1112736; Laura Paddison and Paula Newton, "A Climate Conspiracy Theorist Said the Government Deliberately Lit Wildfires. He Just Pleaded Guilty to Starting 14 Himself," *CNN World*, January 17, 2024, https://www.cnn.com/2024/01/17/climate/canada-conspiracy-theorist-arson-wildfires-intl/index.html.

political views between the frontier landowners and the federal government. In the end, the USFS was able to effectively quell the debate by reframing the issue as a scientific one to be settled in the field studies of experts, a title they claimed with credentialed scientists trained in European institutions. This framing of the issue allowed them to quash an alternative framing of the debate as a political and public issue questioning their agency's right to control the previously open lands of the West. This federal government control had to be established through *definitional control* of the terms of the debate and by *naming* and *framing* light burning as in direct opposition to protection, even before they had a comprehensive system of protection to oppose light burning. Schiappa writes, "The establishment of authoritative definitions by law or custom requires a political process involving persuasion or force that generates political results by advancing some views and interests and not others."[102] In the case of the light burning controversy, the USFS obfuscated their political motives by using scientific definition and brought the debate away from the realm of the public to the realm of technical expertise.

Of course, the work of the USFS was not total, as light burners continued doing research and pushing back on total suppression policies for decades. By the 1960s and 70s, the rebranded version of light burning, "prescribed (Rx) burning," started in National Parks, and slowly but surely public and private lands started to reincorporate fire back into controlled land management practices until it became national policy in the 1990s.[103] Chief Tidwell pointed to

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[102] Schiappa, *Defining Reality*, 70.

[103] "U.S. Forest Service Fire Suppression," Forest History Society, accessed November 3, 2023, https://foresthistory.org/research-explore/us-forest-service-history/policy-and-law/fire-u-s-forest-service/u-s-forest-service-fire-suppression/.

the irony of this turn of events in his speech to foresters at the Centennial: "Today, we are the light burners whom Forest Service Chiefs once questioned and disagreed with."[104] While one might feel relief that the truth won out, the dire level to which the USFS was wrong about total suppression lingers heavily in rural areas where, as a result of fuel build up based on government science, "poor forest management" massively threatens communities with wildfire.

While the light burners of the early twentieth century were not successful in drawing attention to the ways that government scientists countered good scientific practice when they supported the political agenda of total suppression in their time, the next chapters focus on how their argument is now resurfacing around the issue of wildfire management in the face of climate change. In the chapters two and three, I will look at challenges state officials and scientists face in trying to keep residents safe who distrust government management of wildfires, accusing them of a climate agenda that is opposed to "real" science. Here, I look at the shift to the politicization of scientists wherein scientists and government officials must sharpen their rhetorical skills in order to stand up for science in the face of misinformation and climate denial. I will focus next on one specific case, the Oregon Labor Day Fires of 2020, 100 years after the light burn debate, to show how this rhetorical history continues to shine a light on present issues.

[104] Tidwell, "Big Burn Centennial Commemoration."

Chapter Two

The first week of the September 2020 saw a deadly combination of record-breaking heat waves and unseasonably strong winds that grew and started fires all up and down the West coast of the United States. On September 5, the Creek Fire in California grew a pyrocumulonimbus cloud that created its own weather; in Washington a "historic fire event" on September 7 started 80 new fires in one day; and in Oregon, five concurrent megafires grew over the three days of Labor Day weekend.[105] Across the West coast, images of dark red skies and thick smoke looked like posters from the climate apocalypse.[106] However, for some residents, the wildfire events were a

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[105] Madison Olson, "California's Creek Fire Creates Its Own Pyrocumulonimbus Cloud," *NASA*, September 8, 2020, https://www.nasa.gov/missions/suomi-npp/californias-creek-fire-creates-its-own-pyrocumulonimbus-cloud/; Anna King, "Labor Day Fire Storm Destroys Homes, Burns Thousands Of Acres Across The Northwest," September 8, 2020, https://www.kuow.org/stories/labor-day-fire-storm-destroys-homes-burns-thousands-of-acres-across-the-northwest; "Forest Facts: 2020 Labor Day Fires: Post-Fire Challenges with Invasive Plants" (Oregon Department of Forestry, May 2022), https://www.oregon.gov/odf/Documents/forestbenefits/fact-sheet-labor-day-fire-weeds.pdf.

[106] Monica Samayoa, "Oregon's Air Is so Hazardous It's Breaking Records," *Oregon Public Broadcast,* September 15, 2020, https://www.opb.org/article/2020/09/15/oregons-air-is-so-hazardous-its-breaking-records/; Marisa Peñaloza, "'It's A Bit Surreal': Oregon's Air Quality Suffers As Fires Complicate COVID-19 Fight," *NPR*, September 14, 2020, https://www.npr.org/2020/09/14/912701172/its-a-bit-surreal-oregon-fights-smoke-from-record-wildfires-during-a-pandemic; Kevin Stark, "No, You Didn't Wake Up to the Apocalypse.

sign of a different kind of danger brewing under the surface of an increasingly divisive political climate. All over Oregon, conspiracy theories spread that Antifascist groups were starting wildfires and planning to loot evacuated properties. The rumors quickly amassed attention by far-right groups as then-President Trump retweeted claims about the "antifa" arsonists.[107] While Trump had for some time been blaming "poor forest management" for devastating wildfires, this departure into antifa arson marked an even further move from the typical climate change vs. poor forest management debate seen in recent years.[108] As fires grew, residents in areas around

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Wildfire Smoke Turns Bay Area Sky Orange and Dark," *KQED*, September 9, 2020, https://www.kqed.org/science/1969409/no-you-didnt-wake-up-to-the-apocalypse-wildfire-smoke-turns-bay-area-sky-orange-and-dark; Allie Bice, "Washington Gov. Inslee Says State Looks 'Apocalyptic' from Fires," *POLITICO*, September 13, 2020, https://www.politico.com/news/2020/09/13/inslee-wildfires-climate-change-413593; Shannon Osaka, "How Apocalyptic This Fire Season Is -- in 1 Flaming Chart," Grist, September 10, 2020, https://grist.org/climate/how-apocalyptic-this-california-western-fire-season-is-in-1-flaming-chart/.

[107] Gina Spocchia, "Trump Pushes Dangerous 'antifa' Wildfire Conspiracy despite Pleas from Local Officials," *The Independent*, September 16, 2020, https://www.the-independent.com/news/world/americas/us-politics/antifa-wildfires-conspiracy-west-coast-trump-b454246.html.

[108] Justine Coleman, "Oregon Senator Says Trump's Blame on 'Forest Management' for Wildfires Is 'Just a Big and Devastating Lie,'" *The Hill*, September 13, 2020, https://thehill.com/policy/energy-environment/516188-oregon-senator-says-trumps-blame-on-

Oregon refused to evacuate their homes and listen to first responders. First responders were forced to expend their overtaxed resources in not only fighting more and more fires, but also fighting misinformation that was making it hard for them to do their jobs.

In this chapter, I look at two different cases in rural communities in Oregon where the #antifafire rumors spread and where public officials had to navigate wildfires rhetorically to keep citizens safe. In the case of the Almeda Fire in southern Oregon, public officials somewhat successfully stopped the spread of the misinformation through clearly defining specific local claims as false rumors. In the case of the Riverside Fire in northern Oregon, public officials' lack of effective definition sparked even worse rumors, resulting in drastic measures taken by residents. Overall, I draw attention to how arguments *from* definition, or the lack thereof, created different outcomes for Oregon communities during the fire event.

Argument from Definition

Unlike arguments *by* definition that hide the persuasive steps being taken by redefining without explicitly saying so (X is Y), or arguments *about* definition that are explicitly drawing attention to the term (X should be defined as Y), arguments *from* definition use an intermediary syllogistic step in order to construct a claim (All X are Z; Y is an X; therefore Y is Z).[109] In these arguments, the question of what X is has been defined by its "predictable attributes" and now

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forest-management-for-wildfires/?fbclid=IwAR178rfE_b_k-OinyLr2SE8FF-Q6uBosX-2t-Pzc7u6aCTZ9rhHurTSGKTQ.

[109] Schiappa, *Defining Reality,* 130.

whatever phenomenon shares those "predictable attributes" is syllogistically determined to fit the definition.[110]

For example, Ed Schiappa details argument *from* definition with the Mapplethorpe trial, a legal case that questioned whether a series of photographs counted as "obscenity" or "art." In the trial, the defense successfully persuaded the jury that the shocking photographs were indeed art by providing the jury with expert witnesses from the art world who testified with an *institutional definition* of art that helped the jury see the photographs as holding artistic value:

> All that is accepted by art institutions as art is art.
>
> The Mapplethorpe photographs are accepted by art institutions as art.
>
> Therefore, the Mapplethorpe photographs are art.[111]

In addition, the defense employed a *functional definition*, arguing that a key purpose of art is to challenge viewers, as expert witnesses illustrated the following logic:

> Good art includes controversial, nonaesthetically pleasing works.
>
> The Mapplethorpe photographs are controversial and nonasethetically pleasing.
>
> Therefore, good art includes the Mapplethorpe photographs.[112]

These two arguments, institutional and functional, were impactful in helping jury members see the photographs as more similar to art than different from it (i.e. obscenity) through persuasive descriptions. This also carves out the concepts being defined as mutually exclusive categories. Schiappa writes, "To frame the debate as 'art' versus 'obscenity' is doubly persuasive in that,

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[110] Schiappa, *Defining Reality*, 109-110.

[111] Schiappa, *Defining Reality*, 125.

[112] Schiappa, *Defining Reality*, 126.

first, other aspects of the situation are set aside, and then, second, we are encouraged to understand the objects as either art or obscenity but not both."[113] Schiappa argues that it is impossible to describe something through pure observation, as "people 'entitle' tiny slices of reality from various points of view."[114] Thus, audiences must be willing to see the similarities and differences in the description of phenomena in order to be persuaded. In this following case study, I will show how public officials used this kind of syllogistic thinking in order to persuade the public that #antifafires was fake news.

The Almeda Fire

The Almeda Fire started on Almeda Drive in a neighborhood field in north Ashland, a small town in southern Oregon on the morning of September 8. Nearby neighbors saw the flames and called 911; however, due to the strong winds, low humidity, and extreme drought conditions, the fire grew and spread quickly. Within a few hours, the fire jumped back and forth across the four-lane Interstate highway and billowed north to the towns of Talent and Phoenix and into south Medford, killing three residents. In total, over 2,800 homes and businesses were destroyed or damaged, leaving many residents still in temporary housing in 2024.[115]

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[113] Schiappa, *Defining Reality*, 117-118.

[114] Schiappa, *Defining Reality*, 128.

[115] Hillary Borrud, "Oregon Promised Permanent Housing for Wildfire Survivors. Victims Are Still Waiting 3 Years Later," The Oregonian/OregonLive, September 29, 2023, https://www.oregonlive.com/watchdog/2023/09/oregon-promised-permanent-housing-for-wildfire-survivors-victims-are-still-waiting-3-years-later.html."Almeda Fire Monitoring," *Rogue*

Among the many causes of damage in the Almeda Fire, lack of public communication was one of the most disturbing. In Oregon in 2020, there was no law requiring there be a blueprint for disaster management on a county-level, meaning that it was up to local governments to decide how to respond to emergencies like wildfires and set up alerts to warn and evacuate residents.[116] Without state support, this left two systems in place for emergency alerts in Jackson County. The first was the Integrated Public Alert and Warning System or IPAWS that came from FEMA's national emergency system. This was a broad alert that could be activated by counties who registered for the system, tested the alerts, and then sent alerts to all phone numbers in the wider area. While Jackson County was registered for the system, the county never tested the system to activate the alerts, so on September 8, none were sent out.[117]

The second system available to the county was a more targeted opt-in system called Everbridge, that could send out specific alerts in a smaller region but that required residents to sign up and keep their information updated with an online account. In 2020, most residents in

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Valley Council of Governments (blog), accessed January 29, 2024, https://rvcog.org/almeda-fire-monitoring/.

[116] Jim Tankersley, "Some in Wildfires' Path Never Got Evacuation Alerts in Oregon," *New York Times*, September 25, 2020, https://www.nytimes.com/2020/09/25/us/fires-oregon-evacuation-alerts.html.

[117] Erik Neumann, "County Alert System Left Many Without Notifications During The Almeda Fire," *Jefferson Public Radio*, September 19, 2020, https://www.ijpr.org/disasters-and-accidents/2020-09-19/county-alert-system-left-many-without-notifications-during-the-almeda-fire.

Jackson County were not signed up for alerts and many hundreds who were properly signed up still did not receive alerts. This was because city officials during the emergency did not know how to communicate with the county emergency staff who oversaw the Everbridge alert system. In addition, according to the *After-Action Report* created by the Jackson County Commissioners, only one staff person at the time was filling the role of two people for the county, leaving one person in charge of several emergency response duties beyond the task of issuing alerts and communicating with city officials. The breakdown in communication meant that most people in Talent, Phoenix and Medford did not receive alerts. While the fire was reported in Ashland at 11:04am, a general alert did not go out to people in Talent and Phoenix until 4:01pm, well after the fire had spread several miles north up the Interstate and was burning through Talent and Phoenix.[118]

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[118] Bert Etling, "Did We Learn Anything from the Almeda Fire? Plenty.," *Ashland News - Community-Supported, NonProfit News* (blog), September 12, 2023, https://ashland.news/did-we-learn-anything-from-the-almeda-fire-plenty/; Newsroom Staff, "Jackson Co. Releases 'After Action' Report on Almeda/South Obenchain Fires," *KOBI-TV NBC5 / KOTI-TV NBC2*, June 3, 2021, https://kobi5.com/news/local-news/jackson-co-releases-after-action-report-on-almeda-south-obenchain-fires-151600/; Christina Giardinelli, "Talent Responds to Lack of Emergency Command Center during Almeda Fire," *KTVL*, June 7, 2021, https://ktvl.com/news/local/talent-responds-to-lack-of-emergency-command-center-during-almeda-fire; Newsroom Staff, "Almeda Fire Incident Report Released," *KOBI-TV NBC5 / KOTI-TV NBC2*, June 2, 2021, https://kobi5.com/news/almeda-fire-incident-report-released-151578/; Vicki Aldous, "Report

Instead, the "emergency alert" for many residents was going outside to see or smell the smoke, flames, or toxic red fire retardant being dropped near their homes. For others, they found out they needed to evacuate through calls and texts from upwind family or friends, receiving a knock on the door or call via loudspeaker by a first responder to evacuate immediately, or, in many cases, through updates on social media.[119] Unsurprisingly, in the void of a centralized flow of public communication, thousands of people flocked to posts and livestreams for the newest location of the fire, tuning in to feeds of police scanners and cameras located at vantage points in the valley that would reveal what to do or what had been lost. In this environment, one primed for misinformation, all kinds of rumors spread.

To this day, it is not known how the Almeda Fire started, only that there is a high likelihood it was sparked through human activity, as remains were found at the fire's point of origin. Despite a multi-year criminal investigation, certainty as to whether the fire was started recklessly or intentionally remains to be seen.[120] In this analysis, I look at how some residents

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Details What Went Right, Wrong during Almeda and Obenchain Fires," Yahoo News, June 6, 2021, https://news.yahoo.com/report-details-went-wrong-during-121800064.html.

[119] Jamie Parfitt, "Jackson County Plans to 'Debrief' on Emergency Alerts after Almeda Fire, but Not Right Away," *NewsWatch 12 KDRV,* September 16, 2020, https://www.kdrv.com/news/firewatch/jackson-county-plans-to-debrief-on-emergency-alerts-after-almeda-fire-but-not-right-away/article_417162f6-74c8-11ec-96b9-8f39e0e445ad.html.

[120] Bert Etling, "'It's Not a Cold Case': Investigators Still Search for Almeda Fire Cause," *Ashland News - Community-Supported, NonProfit News* (blog), September 8, 2023, https://ashland.news/its-not-a-cold-case-investigators-still-search-for-almeda-fire-cause/.

interpreted the fire and how different public officials responded to their interpretations using varying definitional arguments. Through this close reading, I draw out ways that the emergency generated different rhetorical energies. First, I will look at the most extreme of the interpretations, that the fires were started through arson by an organized group of Antifascist protestors.

Antifa Rumors

According to *Media Manipulation Casebook* author Erin Gallagher, the first traces of this massive misinformation event were generated after leftist protestors burned a mattress outside a Portland police precinct on the night of September 6. Fifteen of the protestors were arrested and on the following day, when the Holiday Farm Fire broke out outside of Eugene, Oregon, rumors began to spread on right-wing social media and smaller websites like 4chan that antifascist protestors ("antifa") started the wildfire.[121] On September 8, the day the Almeda Fire started, a commenter on the right-wing website 4chan wrote, "My guess is Antifa has switched to starting forest fires." Two hours later, another commenter wrote that "this fire was one hundred percent started by proud boys," which perpetuates the political arson theme, but conflicts with the #antifafires rumor in that it locates the agent of destruction on the other end of the political spectrum. More rumors continued on 4chan that it was antifa "burning down everything" and during the active crisis 70 different threads started their own category "Oregon wildfires general"

[121] Erin Gallagher, "Misidentification: How The #Antifafires Rumor Caught On Like Wildfire," Media Manipulation Casebook, April 14, 2021, https://mediamanipulation.org/case-studies/misidentification-how-antifafires-rumor-caught-wildfire.

or "/owg/." Within /owg/, users shared link roundups of possible "antifa" arson arrests (which were all unrelated recent arson incidents) with names, locations, and mugshots gathered from various areas of the West coast and copied in bulk on social media accounts building evidence for the #antifafires rumors.[122]

On the day of the fires in southern Oregon, first responders reported fielding an overwhelming number of calls from residents suspicious of the fires and unsure if they should evacuate due to their undetermined cause. Presumably for conservative southern Oregon residents who believed that this might be some form of organized Antifa revolution, they wanted to stay to protect their homes rather than expose themselves to violence by fleeing. However, this presented major issues for first responders asking residents to evacuate. Instead of erring on the side of precaution and leaving their homes when it was still safe to do so, people waiting it out might be in worse danger later and use valuable resources of first responders to rescue them. Armed homeowners primed to protect their property could also greatly endanger first responders. In addition to the issue of making conditions worse for first responders, the volume of people calling in to 911 to share or receive dubious information about how the fires started (whether being actively evacuated or not) clogged up the line for others in active emergency, such as elderly people, disabled people, minors, and others who would not be able to evacuate from dangerous areas by themselves. These factors made it more difficult for responders to do their job effectively and efficiently during active crisis.

[122] Gallagher, "Misidentification."

Response by Officials

The next day, enough fake news had spread to warrant a response by public officials. The first response was by the Medford Police Department debunking an imposter police profile that was posting misleading information about the fire. Instead of referring to the flood of 911 calls generally or the numerous rumors about Antifa circulating online, they instead posted a screenshot of the fake "Medford Police" Facebook profile with a post of a more local rumor that had not picked up in wider circulation like the Antifa rumors had. The fake police Facebook post used an old mug shot of an unrelated arrest captioned "5 PROUD BOYS ARRESTED FOR ARSON" and had a description of an arrest taking place on the evening of September 8. The fake post described a group of people leaving the scene of a fire at 6pm on September 8 and stated that police found "firestarting implements" in their truck. The fake police post was made at 2pm on September 9 and the real Medford Police Department posted the debunked post later that day at 6pm.

The real Medford Police account post splashed the words "FAKE" across the fake image, with the caption stating: "This is a made up graphic and story. We did not arrest this person for arson, nor anyone affiliated with Antifa or 'Proud Boys' as we've heard throughout the day. Also, no confirmed gatherings of Antifa which has also been reported. Please flag or ignore this post if you see it."[123] Important here is that like the one comment reported by *The Media*

[123] "Medford Police - This Is a Made up Graphic and Story. We Did Not Arrest This Person for Arson, nor Anyone Affiliated with Antifa or 'Proud Boys' as We've Heard throughout the Day. Also, No Confirmed Gatherings of Antifa Which Has Also Been Reported. Please Flag or

Manipulation Casebook, this was an outlier, one of the very few pieces of Proud Boys fake news, compared to the hundreds of comments and graphics made about #antifires that were circulating at the time. #Antifires was trending, no #proudboysfires equivalent existed. Even though these two contrasting rumors were not equivalent, one was widely circulated and the other got very little traction, the syllogistic comparison served to cut through the conspiracy ideation by elevating the latter:

The police said reports about Proud Boys and Antifa arsonists are fake.

I heard an Antifa arsonist report.

That Antifa arsonist report is fake.

One might assume that residents more in alignment with conservative ideologies would be more prone to believe in the Antifa rumor; therefore, it is a more effective rhetorical tactic for the police to present these rumors side-by-side as equally widespread and equally dubious. Presumably, those more prone to the Antifa rumor would dismiss the accusation against the Proud Boys and see the equivalent Antifa rumor in a new light.

Even though there was no equivalent of massive link roundups or widespread blog or social media posts generated in left-leaning online networks about Proud Boys, the screenshot alone made it seem that the Medford Police Department was seeing just that. This redefinition move therefore relies on the public seeing both rumors as more alike in being "fake" than different based on their political affiliation.

Ignore This Post If You See It. Thank You | Facebook," accessed January 5, 2024, https://www.facebook.com/MedfordPoliceOR/photos/a.178440072363247/1496914300515811/.

This logic also largely relied on recognition of the genre of fake news that members of both parties were being inoculated against by their respective leaders. By pointing out that the mug shot was not a current or related arrest, the police department implied that the numerous link roundups of accused "antifa arsonists" arrests circulating, all of which were old mugshots of unrelated crimes, were similarly fake. In this way, the police department was working from the hopes that a shared language of misinformation and extremism would help dispel the rumors. They offered a definition of this kind of story as fake, speaking as an institutional authority in the position to make such an assessment.

The following day on September 10, the Jackson County Sheriff's office posted this longer message to residents:

> One increasingly problematic issue related to the disastrous fires in Jackson County is the spreading of false information. There are numerous FALSE reports of arrests and other situations over the past days that are the content of postings, fake stories and gossip. When you see or hear a story please check official sources only to verify the information. Please don't re-post and spread misinformation based on some unverified random post or meme. Rumors make the job of protecting the community more difficult. We are inundated with questions about things that are FAKE stories. One example is a story circulating that varies about what group is involved as to setting fires and arrests being made. THIS IS NOT TRUE! When official information about the investigation is available it will be on reputable government, fire and law enforcement internet sites and social media pages. Do your part, verify information you hear through official sources and DON'T spread rumors.

In this post, the Jackson County Sheriff's office did something very similar to the Medford Police's 'we are hearing it from both sides' move. Instead of explicitly naming Antifa and Proud Boys, they instead said "a story circulating that varies about what group is involved as to setting fires and arrests being made." This tactic allows "what group" to be interpreted by the reader but implies that there are, again, *many* varying rumors from across political divides. This draws attention to the fact that the news is fake more so than blaming any one group. Instead of calling out one specific extremist narrative, which may make those believing the rumors double down or turn against public officials and further erode trust, it calls them in as one of many forwarding opposite interpretations of events which can be corrected by officials who are hearing it from all sides.

Similar to the Medford Police post, the conclusion would presumably go, if there are many different versions of the story, especially from completely ideologically opposed groups, then perhaps it is not true, or at least there may be cause for reconsideration before reacting. By working from either two conflicting stories, or several conflicting stories without singling out the bigger conspiracy, the police and sheriff encouraged the public to understand the stories as misinformation. In that persuasive move, other aspects of the situation, for example people refusing to evacuate or rumors spreading in other parts of the state, were minimized. The same cannot be said in the case of the Riverside Fire.

The Riverside Fire

The Riverside Fire started on the morning of September 8, near the Riverside Campground in southern Clackamas County. Located about an hour southeast of Portland, the fire grew quickly, running 17 miles west down the Clackamas River and within 30 hours burned 112,000 acres near

the small logging towns of Molalla, Sandy and Estacada. As the fire spread, the three towns were put under evacuation alert on September 8 and 9, pushing the towns to a Level 3 "Go Immediately" evacuation.[124]

As first responders attempted to control the flames from reaching communities, a near impossible task with the high winds, rumors about how the fire began escalated in the area, too. Different from the case in southern Oregon, where the evacuation alerts were for a fire active in town on September 8, most people living in smaller towns in Clackamas County had more time to evacuate safely. However, suspicious of their nearby fire's origins, some residents chose to stay and defend their homes and neighborhoods out of fear they would be looted by fire-starting Antifacists.

Unlike the Medford Police Department, the police department in Molalla chose to ignore the fire-starting rumors and instead, on September 9, posted the following message on their Facebook page, skipping over the fires and addressing the subsequent misinformation about reported looters:

> To those of you still in and around town, please report any suspicious activity (strange people walking around/looking into cars and houses/ vehicles driving through

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[124] "Riverside Fire," ArcGIS StoryMaps, July 29, 2021, https://storymaps.arcgis.com/stories/7ba1715929bb4cc591b3bbade3e30895; Jamie Goldberg, Samantha Swindler, and Mike Rogoway, "Clackamas County Fire Grows to 130k Acres, Moves within Half Mile of Estacada," *The Oregonian/Oregonlive*, September 11, 2020, sec. Clackamas County, https://www.oregonlive.com/clackamascounty/2020/09/clackamas-county-wildfire-grows-to-130000-acres-moves-within-half-mile-of-estacada-weather-improves.html.

> neighborhoods that don't belong there) to 911 immediately. Don't waste time posting it on FB, calling a friend or calling the non-emergency line. Call 911 immediately. The sooner we get to the area, the better chance of identifying the issue we have. A lot of rumors and posts are going around about looters. Please use caution and get us there ASAP. CALL 911.[125]

The attempt in the message was to stop fake stories getting out of hand about looters. Identifying such posts as "rumors" and advising residents to not "waste time" on them, they are doing the same thing that the Medford Police Department did. But rather than give readers a reason to believe those posts really are fake news, this police department included lines that further alarmed readers. The advice was read by some to mean that the "suspicious activity" from "strange people…looking into cars and houses… through neighborhoods that don't belong there" was proof that Antifa started the fires and now officials were worried about looting. The intention of the post likely was to dispel fear about anyone looting homes and to encourage residents to obey the evacuation order, but instead it made some less likely to evacuate because they read the message as confirmation of their fear that the #antifafires were real.

As evidence that this is how the post was interpreted, consider the fact that the message, which was posted on Facebook and Twitter, was taken up by conservatives such as *Turning Point USA* reporter Katie Daviscourt to confirm the #antifafires rumors. She wrote: "WARNING: Multiple sources in Emergency Response have confirmed that the fires along the

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[125] *Molalla Police Department*, accessed January 5, 2024, https://www.facebook.com/MolallaPolice/posts/editclarification-this-is-about-possible-looters-not-antifa-or-setting-of-fires-/3369665646435025/.

West Coast are caused by dozens of arsonists. These fires are allegedly linked to Antifa and the Riots. Read this warning." Daviscourt's post was linked to the Molalla Police Department post, confirming that she thought the police post was evidence of such an allegation, linking Antifa arson to looters.[126] By not defining the root of the rumors, and instead choosing to describe "suspicious activity" as "strange people walking around/looking into cars and houses/ vehicles driving through neighborhoods that don't belong there," the Molalla Police made the rumors of Antifa arsonists more easily open to anyone's interpretation and suspicion, as it was reframed to confirm suspicions.

That evening Gabriel Trumbly, a Portland-based photojournalist who had been documenting the 2020 Black Lives Matters protests, traveled with his partner Jennifer Paulsen to her hometown of Molalla to take footage of the Riverside Fire. As reported by *Buzzfeed News*, Trumbly and Paulsen parked their car in town and put on gas masks to protect from the smoke while taking video of the encroaching flames. The couple talked to a few locals and then decided to leave due to the proximity of the fire. On their way home, they checked local Facebook groups

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[126] While exactly how Daviscourt and others (mis)interpreted these exact messages with malintent is beyond the scope of this dissertation, this form of doublespeak to support extrajudicial efforts appears throughout this series of wildfires. Katie Daviscourt [@KatieDaviscourt], "WARNING: Multiple Sources in Emergency Response Have Confirmed That the Fires along the West Coast Are Caused by Dozens of Arsonists. These Fires Are Allegedly Linked to Antifa and the Riots. Read This Warning Https://T.Co/x1HVVsAIJy," Tweet, *Twitter*, September 10, 2020, https://twitter.com/KatieDaviscourt/status/1303882029184868353.

and Twitter for more updates about the fire and found that pictures of their car and license plates were posted on various pages claiming that they were antifa. One Twitter post even said that they were "two guys wearing gas masks and 'press' vests" and had started a fire.[127] It was clear that town residents were on the lookout for people starting fires. Violent and threatening online comments ensued. Trumbly ended up calling the Molalla Police Department at 1 a.m. to clear up the misinformation, and the department made an addendum to the top of their earlier Facebook post, realizing their mistake:

> EDIT/CLARIFICATION: This is about possible looters, not antifa or setting of fires. There has been NO antifa in town as of this posting at 02:00 am. Please, folks, stay calm and use common sense. Stay inside or leave the area.[128]

The definitional move here is an attempt to dissociate possible looters from hypothetical antifa arsonists. However, the damage had already been done in enflaming the rumors, and the qualifier that antifa is not here *yet* left an opening for continued paranoia. The advice to "stay calm … or leave the area" was in fact the opposite of what some residents seemed to be doing. If residents believed that there was an organized political attack, their instinct was not to evacuate but to fight and protect their territory.

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[127] Christopher Miller and Jane Lytvynenko, "This Couple Are Not Antifa Arsonists, But Armed Locals Thought They Were," *Buzzfeed News*, September 10, 2020, https://www.buzzfeednews.com/article/christopherm51/oregon-fires-antifa-rumors.

[128] *Molalla Police Department*.

The Aftermath

The next day, September 10, three *Oregon Public Broadcast* journalists reporting on the fire were stopped in Molalla by a group of armed men and told to leave.[129] Another photojournalist in the nearby town of Estacada, where other residents were refusing evacuation orders, was held up by armed men and told to leave town as well.[130] That evening, Clackamas County Commissioners called an Emergency Board Meeting to figure out what further safety precautions would be needed for residents during the wildfire. There was no mention of the militia groups popping up. In the meeting, Sheriff Captain Jeff Smith, claiming to be speaking on behalf of the Sheriff's office, stated in the public meeting that there were "reliable sightings and reports" of Antifa in Estacada and that they were carrying chainsaws to cut power lines and hiding gas cans to set fires later. A hotline operator from the area told *Buzzfeed News* that they fielded hundreds of calls with false reports, for example expressing concerns about people hiding gas cans that turned out to be residents bringing gas to other people to keep their generator power on.

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[129] Jason Wilson, "'I've Never Been So Afraid': Oregon Fire Evacuees Face Unrecognizable Landscape," *The Guardian*, September 12, 2020, sec. US news, https://www.theguardian.com/us-news/2020/sep/11/oregon-fires-evacuations-clackamas-county.

[130] Jason Wilson, "Social Media Disinformation on US West Coast Blazes 'spreading Faster than Fire'," *The Guardian*, September 14, 2020, sec. US news, https://www.theguardian.com/us-news/2020/sep/14/disinformation-oregon-wildfires-spreading-social-media.

The next day on September 11, the Molalla Police Department Chief Frank Schoenfeld then posted a longer statement on Facebook to address the confusion: “We have been getting overwhelming inquires on several rumors and unconfirmed information. To help ease the fears of everyone we are going to list some of those questions here and answer them.” In the post he listed several questions to directly define the evacuation situation for residents:

1. Are there looters in Molalla?

   No incidents of looting have been confirmed. We are investigating all reported and on-sight suspicious activity in the Molalla City limits.

2. Is Antifa or other individuals intentionally setting fires/cutting power/etc within the City limits of Molalla?

   There have been NO Incidents confirmed or suspected in Molalla City limits. If you know of or see any incidents, please call 911. If you have inquiries regarding incidents outside of the Molalla City limits, please contact the Clackamas County Sheriff’s Office.

3. Are armed militia/citizens working/collaborating with or for the Molalla Police?

   No, we are not working with/or endorsing armed patrols/militia/posses. We do observe a person’s open carry and legal concealed carry rights.

4. Did the Molalla Police Department abandoned the city?

   No, at no time did the Molalla Police Department abandon the city. In fact, we have used resources from multiple outside law enforcement agencies here to assist us with the emergency evacuations. As of this posting, Molalla PD has extra resources on patrol 24/7. Please know that your police department is dedicated to the protection of your property during this evacuation period. The cooperation of our amazing

> community has made this entire evacuation process manageable and one we will get through as long as the weather cooperates with these fires burning around our City. Please continue to observe the Level 3 Evacuation of the City of Molalla.

Clear as this FAQ seemed to its writers at the time, again, mixed messages prevailed from the post. “There have been NO Incidents confirmed or suspected in Molalla City limits” was walked back by “If you know of or see any incidents, please call 911.” Similarly, the confirmation that “No, we are not working with/or endorsing armed patrols/militia/posses” was walked back with the affirmation of the right to open carry. The slashes that hesitate to characterize who the groups are make the message even more unclear. Are the people stopping residents an armed militia, citizens, patrols, or posses? The various descriptors would indicate different attitudes. Armed citizens or neighborhood patrols may be people doing their duty to protect other citizens, while an armed militia or posse indicates a more organized militant group at work. Similarly, the second part of the question that uses slashes to discuss the Sheriff’s office’s relationships to the armed groups leaves room for interpretation. Working with, collaborating with, or endorsing could again mean different things. And while they deny direct organizational ties, or even endorsement of such groups, this does not mean that the police department will stop such extrajudicial bodies from using their weapons to threaten or even harm others. Their endorsement of open carry and legal concealed carry rights could be a wink and nod to groups harassing reporters or other outsiders.

The last rumor in the post that the police addressed was that the police had abandoned the city. Presumably, the narrative among some of the armed militia/citizens/patrols/posses was that they had to protect the city with the lack of police enforcement amid the fire evacuation. The police wanted to make it clear that no, in fact they had been there the entire time. However, at the

same time in Clackamas County, the Sheriff's office continued to make contradictory moves that complicated this attempt at a clear message from the Molalla Police Department.

Mixed Messages

The same day that the Molalla Police Department posted its frequently asked questions statement, September 11, a viral video was posted by a civilian showing a Deputy Sheriff, and former spokesperson for the Sheriff's Office, Mark Nikolai, spreading misinformation about antifa starting fires, stating that they might "need the public's help" in making sure there is law and order with the "antifa motherfuckers." The video titled "Sheriff deputy said f ANTIFA" was posted by a cop-monitoring YouTuber, Robert West, and raked up thousands of views; it stands today at over 190,000 views.[131] Another video titled "Clackamas County Sheriff and Militia," also posted on September 11, shows Nikolai allegedly coaching militia members on how to catch "antifa" and not get caught by law enforcement. This video also went viral, with 111,000 views to date.[132] The next day, Nikolai was put on administrative leave, but the videos remained online.[133]

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[131] See: *Sheriff Deputy Said f ANTIFA,* 2020, https://www.youtube.com/watch?v=1ZHY4RE_GLA. West's channel regularly patrols and "holds accountable" police by taking videos of them, mainly in the Portland area.

[132] *Clackamas County Sheriff and Militia,* 2020, https://www.youtube.com/watch?v=_Vdxl_7xhAI.c

[133] K. Rambo, "Clackamas County Deputy Placed on Leave after Video Captures Him Blaming Antifa for Wildfires," *Statesman Journal,* September 12, 2020,

Unfortunately, this is not where the mixed messages ended. While the Molalla Police Department dismissed any association with militia and warned that it was illegal to block roads, evacuees coming from Estacada, Sandy, and Molalla encountered armed patrols further north in the town of Corbett in the neighboring Multnomah County. Latoya Robinson, a Sandy resident, drove with her children to stay at a friend's house in Corbett after being evacuated from her home. According to her testimony published in *The Guardian*, Robinson was stopped by armed men at a civilian roadblock. The men questioned her, stating "You're not from around here, are you?," implying to Robinson, who is Black, "racist overtones." On Robinson's return to Sandy, she was again stopped, this time with two Multnomah County Sheriff's Office cars nearby the civilian roadblock, implying to her that they saw her being stopped; however, the officers did not interfere, and the Sheriff's office did not issue a statement. Other people in Corbett reported the same experience of being illegally stopped and questioned by armed men with sheriff's vehicles nearby offering no interference to the unlawful detentions.[134]

The next day, September 12, the Multnomah County Sheriff's Office posted a video with Sheriff Mike Reese stating the facts of the fire's progression in the county and restating that it is

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https://www.statesmanjournal.com/story/news/2020/09/12/oregon-wildfires-antifa-video-clackamas-county-deputy-administrative-leave/5782424002/.

[134] Jason Wilson, "Armed Civilian Roadblocks in Oregon Town Fuel Fears over Vigilantism," *The Guardian*, September 16, 2020, sec. US news, https://www.theguardian.com/us-news/2020/sep/16/oregon-fires-armed-civilian-roadblocks-police.

illegal to stop residents on the road.[135] However, later that day, residents of Corbett gathered at a rally at the fire station to "recruit" more people for the armed "checkpoints" on the city, led by a prominent member of the local school board. An audio recording obtained by *The Guardian* showed contradictory messages on display again. *The Guardian* reported that Sheriff's Sergeant Bryan White "did not explicitly discourage further citizen patrols and went on to indicate that the MCSO [Multnomah County Sheriff's Office] would be comfortable with a range of actions that stopped short of that… such as taking 'photos of cars and even license plates' and 'standing on the side of the road, parking on the side of the road, 20 deep, with signs and flashers on.'" When asked by residents what "suspicious" looked like, he stated, "'suspicious is anything that feels out of place to you,'" adding "'you know your neighborhood and know what your neighbor drives'" and "'anything that feels out of place to you, just listen to your gut because nine times out of 10 your gut is right.'" The Multnomah County Sheriff's Office did not make any further comment to *The Guardian* about whether "explicitly discourag[ing] citizen patrols" may have been more effective in the moment, saying they thought their social media posts were effective.[136]

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[135] Multnomah Co. Sheriff's Office [@MultCoSO], "Sheriff Mike Reese Issues a Statement Regarding Illegal Roadblocks and Fire Concerns in East Multnomah County. Https://T.Co/WvmIavU39V," Tweet, *Twitter*, September 12, 2020, https://twitter.com/MultCoSO/status/1304917391986495488.

[136] Multnomah Co. Sheriff's Office [@MultCoSO], "Deputies Have Contacted Several Groups of Residents in Corbett Who Have Set up Checkpoints and Are Stopping Cars. While We Understand Their Intent Is to Keep the Community Safe, It Is Never Legal to Block a Public

Chapter Conclusion

This chapter shows two different locales where rumors about #antifires took root and how public officials responded to them, in some cases effectively, and in others to further detriment and harm. In the case of the Almeda Fire, the police and sheriff's offices used conflicting extremist views to imply that they were hearing rumors equally often from both sides, which helped portray them as false rumors and thus shut them down. By multiplying the claims across the political conspiracy spectrum (far right and far left), officials attempted to show that the reports were all fake news. Instead of drawing attention to one extremist group, Antifa, which could have set off residents who were primed to believe claims against them, officials used their institutional position to draw attention to the misinformation in general as a public safety precaution. This argument *from* definition creates a syllogistic logic that draws from a commonsense tendency in the public to dismiss misinformation about extremism perpetrated by people who align with their own viewpoints, helping residents think more critically before accepting fake news about extremism perpetrated by people who do not align with their views.

In the second case, the Riverside Fire, conservative conspiracy theorists used vague language to confirm the #antifafires theories and fill in the blanks of "suspicious activity" with their own interpretations. What followed were illegal roadblocks, buttressed by public officials who expressed sympathy and in other cases outright support for these nefarious activities. By not setting out clearly what they were addressing (a rumor that fires were being started by political

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Roadway or Force Other Citizens to Stop.," Tweet, *Twitter*, September 12, 2020, https://twitter.com/MultCoSO/status/1304631505314930688.

extremists) and offering a wide swath of behaviors and possible suspects ("strange people walking around/looking into cars and houses/ vehicles driving through neighborhoods that don't belong there" or "anything that feels out of place to you, just listen to your gut because nine times out of 10 your gut is right"), officials made journalists reporting on the wildfires and innocent families evacuating their homes more similar to Antifa arsonists and looters than different from them in some residents minds. This resulted in false reports and further escalation of the rumors.

In both cases, public officials did not get their initial communication right in the moments of the wildfire. In the case of the Almeda Fire, the lack of clear public communication made it so officials had to go back to correct misinformation later on, taxing their already overrun resources. In the case of the Riverside Fire, officials made mistakes in their initial public communication about the misinformation and had difficulty repairing it. In some cases, the mistakes got worse and worse. Both cases illustrate the increasingly dire and political nature of communication during wildfires. As partisan politics makes way for new forms of conspiracy ideation, public officials need to have clear rhetorical strategies for moments of crisis. In the next chapter, I will look at how beliefs about arson combined with forest management and the climate denialism debate in Oregon legislation passed after the 2020 Labor Day Fires.

Chapter Three

In this chapter I build upon Ed Schiappa's argument that all definitions are political to demonstrate how wildfires are rhetorically constructed through negotiations between various local and state interests. Schiappa argues that definitions always serve "particular interests," becoming consequential when "empowered through persuasion or coercion."[137] Here I turn to the aftermath of the Oregon Labor Day Fires, where in the wake of disaster, state legislators sought to create climate change-informed policy based on their scientific definition of "risk" to protect vulnerable communities. The state's scientific definition ultimately did not align with the shared reality of "risk" among rural residents facing its most adverse effects, causing massive pushback that significantly delayed pressing fire protections in the 2021, 2022, and 2023 fire seasons. I look at the ways policy definitions were negotiated between the state legislators and locals in diverging ways to show how perceptions of wildfires and what we should do about them have important rhetorical dimensions that must be attended to in order for communities to better mitigate and prepare for future disasters. In this chapter I look at how arguments about the definition of "risk" surrounding the implementation of protections from wildfire risk set out by the state were rejected by the public and then *redefined* to reflect shared understanding by residents, scientists, and public officials. I then offer some suggestions for how definitional arguments based in science can better incorporate their public and political dimensions through attending to shared values.

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[137] Schiappa, *Defining Reality,* 42.

Definitional Arguments

In Schiappa's 2003 book *Defining Reality,* he argues that definitions build functional relationships between words and people always with social and ethical implications. In this vein, arguments *about* definition tell us more about what we "ought" to understand, value or do about something than what something actually "is."[138] Oftentimes arguments *about* definition fall into a debate about the nature of "X" that is being defined, when in fact it is what is valuable about "X" to various stakeholders that is being negotiated. Scientific definitions fall into these debates about what is a more "real" definition of reality versus a definition that has some ulterior political motive that strays from the "real." Of course, as scientific theories change, what counts as "real" itself also changes; however, in public debate the impetus to push for who has the more "real" definition based on the value of scientific objectivity is a commonplace for arguments, especially *about* definition.[139]

The legislation formed in response to the Oregon Labor Day Fires started as an example of an argument *about* definition. By not defining "risk" adequately in the original legislation and subsequent rulesmaking, the Oregon Wildfire Risk Map did not depict what "ought" to be done by residents, creating massive confusion and pushback. Instead, the map visualized an incomplete view of risk, which they later called a "hazard," through *redefinition*. The difference between the two mattered tremendously in gaining public support.

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[138] Schiappa, *Defining Reality,* 43-46.

[139] Schiappa, *Defining Reality,* 65.

In the following sections, I will show how "risk" and "hazard" played out in the public testimony, communication, information, and appeals process, ultimately resulting in the Risk Map being redacted shortly after its rollout in June 2022. A new map is yet to be released for use in wildfire regulations, delaying any subsequent protection from the legislation. I end by noting how public officials and scientists might better attend to their rhetorical moves in future cases where divisive matters of partisan politics, community safety, and climate are concerned.

Legislation in Response to the Oregon Labor Day Fires

After the devastating 2020 Labor Day fires, elected officials moved quickly to draft legislation to prevent future disasters in the state. However, Republican Senate walkouts over a controversial cap-and-trade bill prevented voting on several other bills, including wildfire bill SB 1536, in the 2020 legislative session. Two new wildfire bills drawing from the previous legislation, SB 248 and SB 287, were ready to go prior to the 2021 legislative session to get the discussion of new policy started.[140] By February 2021, these two bills were combined into a more robust, first-of-its-kind fire omnibus bill, Senate Bill 762, introduced by Senator Jeff Golden from Ashland.

The bill tackled several important issues including mandating utilities companies' wildfire mitigation plans, expanding state firefighting funding, establishing new health systems for smoke, refining building codes, forming a Wildfire Advisory Council to oversee several of these processes, making rules for property owners around wildfire buffers, and continuing to

[140] Cassandra Profita, "Oregon Lawmakers Consider New Rules for Wildfire Prevention," *Oregon Public Broadcasting*, March 16, 2021, https://www.opb.org/article/2021/03/16/oregon-lawmakers-consider-new-rules-for-wildfire-prevention/.

grow the state's forest restoration work to prevent future burns. All new or expanded programs depended on the collaboration of multiple state agencies in deciding further rulesmaking to implement the bill, a point that was critiqued by opponents as favoring top-down bureaucracy over open debate in the legislature.[141] However, faced with the pressing timeline of yet another dangerous wildfire season, SB 762 ultimately gained bipartisan support and passed in June 2021, with 22 votes in favor and seven Republican senators against.[142] In its final form, the bill provided a groundbreaking $220 million, largely focused on helping communities become more fire-adapted, creating safer and more effective response measures, and increasing the resilience of Wilderness-Urban Interface (WUI) zones.[143]

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[141] The bill delegated agencies to create further rules-making advisory committees to determine the details of each piece of the legislation, instead of the details being worked out explicitly in the bill itself. The critique here is that it hinders public transparency and involvement. On the other side, the lack of this provision hinders the bill from being passed at all as the process would take considerably more time due to the scope of the bill and the timeline of when the Legislature is in session. Ted Sickinger, "Oregon's Comprehensive and Contentious Wildfire Response Bill Left for the Last Week in Session," *Oregonian/OregonLive*, June 17, 2021, sec. Politics, https://www.oregonlive.com/politics/2021/06/oregons-comprehensive-and-contentious-wildfire-response-bill-left-for-the-last-week-in-session.html.

[142] "SB762 2021 Regular Session - Oregon Legislative Information System," accessed March 27, 2024, https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/SB762.

[143] "Senate Bill 762," Oregon Department of Forestry, n.d., https://www.oregon.gov/odf/pages/sb762.aspx.

As part of the SB 762 mandate, the Oregon Department of Forestry (ODF) in collaboration with ecologists at Oregon State University (OSU) were tasked with creating three new state maps to help assess wildfire preparation and address new state regulations: a new Wildland-Urban Interface (WUI) map to establish the most dangerous areas, a Wildfire Risk map to assess what the severity of danger was in those areas, and a Social Vulnerability map to delegate state resources to those most at risk. I will discuss the WUI map and Risk map in this chapter, and the Social Vulnerability map in the Conclusion Chapter. The first, a WUI map, came under early scrutiny during the legislative session by Republican representatives, the Oregon Property Owners Association (OPOA), and the Oregon Farm Bureau (OFB). The bill proposed the adoption of the International Wildland-Urban Interface Code (IWUIC), an update overdue since it was recommended back in 2019 through a report published by the Oregon Governor's Council on Wildfire.[144] According to David Hunnicutt, President of the Oregon Property Owners Association, the IWUIC was an overly broad assessment and would result in a vast majority of rural properties being inappropriately zoned as WUI, potentially costing rural property owners who would be subject to new building regulations by the State Fire Marshal. Their dissent to the IWUIC was joined by the Oregon Farm Bureau whose members were concerned about how the IWUIC "uses definitions that do not consider the varied types of vegetation that exists in rural Oregon, including commercial agricultural commodities." In their public testimony on the precursor bills SB 248 and SB 287 in March 2021, they stated that the OFB's issue was the definition of "fuel" in the IWUIC that incorporates vegetation but

[144] "Governor's Council on Wildfire Response" (Oregon State Fire Marshall, November 2019), https://www.oregon.gov/osfm/Documents/GovWildfireCouncilRpt-FinalRecs.pdf.

"subsequently provides no definition of 'vegetation,' thus possibly including irrigated or commercial agricultural and timber products that pose far less of a threat than unmanaged brush." Their worry was that areas generally less susceptible to fire would be unfairly subject to defensible space requirements because the IWUIC does not account for the local environment in the ways that the past local laws were adapted to do. The bill read that "The State Fire Marshal may establish different minimum defensible space requirements for homes and infrastructure on different types of land. […] minimum defensible space requirement […] for a type of land shall apply statewide for all lands of that type that are in areas identified as susceptible to wildfire." On this front, the OFB argued that:

> It is unclear how OSFM [Oregon State Fire Marshal] will define 'types of land' and whether that will intersect with our land use planning system. Oregon has thousands of acres of land zoned for Exclusive Farm Use. However, EFU land in the Willamette Valley looks substantially different than EFU zoned land in Eastern Oregon, and how one fights fire on these lands will vary substantially by the geographic region. OFB is concerned that having defensible space standards that apply statewide based upon 'land type' will actually hinder Oregon's approach to successful wildfire mitigation and response, as [it] will not adequately consider geographic and environmental differences.

In other words, the OFB was concerned that in the transferring of WUI and defensible space regulations from local and county control to the state, the maps would be more harmful to rural

communities, both in not keeping rural communities safe from fire because of their lack of specific knowledge of the land in question, and in costing rural Oregonians more money.[145]

In the legislative session, Republican senators described a series of worst-case scenarios for rural Oregonians where nearly the entire state would be classified as WUI under the IWUIC, forcing rural farmers and homeowners to make drastic, costly changes to their land. This misconception that every rural property would be subject to new laws was rampant in the opposition's arguments on the Senate floor. Similar arguments were pushed in the House, where Minority Leader Republican Christine Drazan claimed that there was not enough public input for the process of drafting the bill. She stated in an interview with *Oregon Public Broadcast*: "I recognize people are telling me (this bill) has been years in the making — that [it] was not a public process… I don't know who was in the room for that, but they weren't elected people that are sitting here today that have the opportunity to vote on this measure." Going further, she stated, "One public hearing in this session in part of this body, and then a fully crafted piece of legislation in front of us today that lacks substantial input, is the wrong place to start." However, Senator Golden and House Speaker (and future Governor) Tina Kotek adamantly disagreed with

[145] Samantha Bayer, "Senate Committee on Natural Resources and Wildfire Recovery: Oregon Farm Bureau Testimony on SB 248 -1 & SB 287" (Oregon State Legislature, March 15, 2021), https://olis.oregonlegislature.gov/liz/2021R1/Downloads/PublicTestimonyDocument/16290.

this assertion, arguing that the framework for the bill had been nearly three years in the making with substantial opportunity for public input and bipartisan feedback.[146]

With such dissent to the bill, the OPOA and OFB worked with legislators, including Democratic Senator Betsy Johnson to propose an amendment with a narrower definition of WUI that would create more local control. Although their amendment didn't pass, Democrats ultimately made several concessions to gain Republican votes including prohibiting defensible space rules from regulating land use, a provision sought by the OFB, and delegating the WUI definition decision to the Oregon Board of Forestry for further public input after the bill passed.[147]

Nevertheless, the OFB and OPOA were not totally satisfied with these concessions. In OPOA's newsletter to members after the legislative session, the editors wrote:

> Unfortunately, the environmental industry and some ardent supporters of SB 762 are using the most recent wildfire to create policies that have nothing to do with wildfire prevention. For these groups/legislators, an overly broad definition of WUI is helpful, as it subjects more property to regulation by OSFM [Oregon State Fire Marshal], DCBS [Department of Consumer and Business Services] and DLCD [Department of Land Conservation and Development] … while at the same time, providing more opportunity

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[146] Sam Stites, "Oregon's Big Wildfire Bill Seeing More Pushback than Democrats Initially Expected," *Oregon Public Broadcasting*, June 21, 2021, https://www.opb.org/article/2021/06/21/oregon-wildfire-bill-pushback-republicans/.

[147] Sickinger, "Oregon's Comprehensive and Contentious."

> and money from the state for grants and 'studies.' Follow the money and power and you'll figure out what these folks want.

Forwarding the narrative that Democrats were using the fires as an excuse to create a climate agenda that they otherwise would have not been able to attain, for nefarious financial and political reasons, the OPOA set an oppositional tone for the subsequent creation of the Wildfire Risk Map. The newsletter, posted on their website as an "Action Alert" for members, stated further that, "The jury is still out on whether ODF will map the WUI based on science and logic… We're doing our best to keep the agency [ODF] focused on science and common sense."[148] Here, the OPOA implied to their members that the ODF would make a map based on politics rather than science, either overlooking common sense fire risk or deliberately misclassifying the fire risk of rural residents for their own financial or political gain. This draws on common arguments in contemporary Republican rhetoric that push the idea of a "deep state" wherein external private or non-elected parties influence and implement government policies, like climate policies, not to help people, but in a self-perpetuating cycle to make Democrats richer and further their control over citizens. It also draws on the sort of skepticism we saw local figures set out in the early twentieth century about one-size-fits-all government science that ignores practical differences and local empirical knowledge. By sowing seeds of doubt as to whether the ODF will follow the science or lose "focus" by letting their scientific role be manipulated by Democrats or other parties who want to overly regulate and tax rural residents, the OPOA positions themselves with the real science and safety of citizens. It is through this

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[148] "Action Alert - New Wildfire Rules Will Apply to Nearly Every Oregon Property," *Looking Forward*, 2021.

dispute that the OPOA got appointed to the Rules Advisory Committee (RAC) for the WUI map, a concession made by Democrats in getting the bill to pass. So, while the OPOA ultimately was able to come to an agreement on WUI rules, which were decided in committee after the bill passed and ended up significantly narrowing the WUI zones on the map, the animosity the OPOA cultivated around top-down control transferred directly over to the creation of the second map mandated by SB 762, the Wildfire Risk Map.

Defining "Risk"

Outlined by the new bill, a "comprehensive state-wide map of wildfire risk" was set out to identify the risk levels of the 1.8 million tax lots in the state "based on weather, climate, topography, and vegetation."[149] The Oregon Department of Forestry would oversee the Oregon State University's development and maintenance of the map in consultation with the bill's Rules Advisory Committee. The RAC would not only oversee the overall process of creating the rules for the map, but also figure out how ODF would best notify landowners of their risk levels based on the WUI map first and then the Wildfire Risk map.

In the Risk Map creation, ODF was instructed to work in collaboration with Oregon State University to establish five risk designations.[150] Over the next nine months, the joint WUI and

[149] "SB762 2021 Regular Session."

[150] Moving from the bill's original three risk designations (high, moderate, low) to five (extreme, high, moderate, low and no risk) was another concession made to appease Republican legislative interests concerned about overly broad designations. The Rules Advisory Committee (RAC) was also tasked with creating an appeals process so that landowners could push back

Risk Mapping RAC, comprised of 26 voting members representing diverse interests across the state, including the OPOA and OFB, assembled in open public meetings on Zoom in 70 hours of planning.[151] Their meetings directly oversaw the guidelines for the creation of the map based on the criteria outlined by the bill.[152] According to SB 762, these mapping criteria were to provide the most basic assessment of risk in order for downstream agencies, the State Fire Marshal, the Department of Land Conservation and Development, and the Department of Consumer and Business Services to then respectively create defensible space and home hardening requirements for homes and businesses in high and extreme risk zones of the Wildland-Urban Interface.

It should be noted that "risk" is generally defined by wildfire scientists through three factors: burn probability, fire intensity, and susceptibility, but this is not how "risk" was defined in the legislation, instead favoring the more general "weather, climate, topography and vegetation" rule that did not include the category of "susceptibility" that is necessary to create a full risk profile. In a full risk profile, burn probability is the "average annual likelihood that a

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against their given risk designation if thought to be incorrect, another concession to an opposition concerned with top-down state rules that do not have enough public input. SB 762 gave a short timeline of one year to complete the entire map so that the State Fire Marshal and other related enforcement agencies would be able to implement the new safety rules in a timely manner after that.

[151] "Wildland Urban Interface and Statewide Wildfire Risk Mapping Rulemaking Advisory Committees Master Member List" (Oregon Department of Forestry, n.d.), https://www.oregon.gov/odf/board/Documents/laws-rules/members-rac-wui-swrm.pdf.

[152] "SB762 2021 Regular Session."

specific location will experience a wildfire." This considers multiple factors including the history of fire occurrence and size in an area as well as local weather and landscape conditions. To calculate the wide variance of burn probability across the state, the OSU team went through over 100,000 simulations to reach an annual average in each area. The second factor of risk, fire intensity, is the "amount of energy produced by a fire" or "flame length" which looks more at features of the landscape, such as topography and fuel type (forest, grassland, etc.), that help estimate fire behavior. In the case of the OSU team, they looked at fire intensity at the level of 2.5-mile grids in each area of the state. In blending these two components, fire intensity and burn probability, they were able to calculate the exposure to environmental *hazard* of any given area. These parameters were what was outlined in the legislation through creating a risk map based on "weather, climate, topography and vegetation."

However, to create a full profile of "risk," there is a third component, "susceptibility" which is the "effects of fires on structures."[153] To know susceptibility there would need to be existing data on the condition of every structure in the state, a task that, according to Chris Dunn, one of the scientists directing the mapping process, would have either taken his team decades or would have required hundreds more staff members to do the work of gathering that data in the

[153] Andy McEvoy, "Summary of Required and Proposed Changes to Oregon's Statewide Wildfire Hazard Map: Opportunities to Amend Hazard Mapping Process During the 2024 Rule-Making Process" (Oregon Department of Forestry, February 13, 2024), https://www.oregon.gov/odf/board/Documents/laws-rules/whm-osu-potential-updates-to-hazard-map.pdf.

short timeline laid out in SB 762.[154] In lieu of having the time, staff, and data needed to create a full map of the risk profile, the OSU team instead used common guidelines for "generalized susceptibility," to complete the mandate for the map. This supplements the legislation's definition of risk (weather, climate, topography, and vegetation) by using what's called the susceptibility response function, a value generated by multiplying the burn probability by flame length in each area to assess "general" potential risk to structures. This measure models risk as if the same structure existed on every tax lot in the state. This measure is commonly used in risk assessment for projecting risk, such as in developing building codes for areas that do not currently have structures. As explained in a report by OSU:

> The estimated damage to a structure is directly related to the expected intensity of a wildfire. In other words, the expected damage is a function of the expected flame length… However, the expected damage to structures is also a function to some degree of the kind of vegetation in which the fire is burning. For instance, if a fire is burning in forested vegetation and the flame length at the location of a structure is five feet, the structure is anticipated to suffer a 50% loss in value… The expected loss for each flame length category is called a 'response function.' In this context when we talk about the change in value it does not mean a change in the monetary value. Instead, the word 'value' refers to a generalized, unitless concept of value that allows us to compare relative risk between structures in different locations.

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[154] *The Oregon State Wildfire Hazard Map*, 2023, https://www.youtube.com/watch?v=W_n678B6si8.

So, instead of taking into account specific conditions of already-existing homes and other human-build structures, as would ultimately be needed in order to create rules and regulations, this generalized relative risk "quantifies risk to buildings at every location in Oregon as if a building were present at all locations," which, of course, is not the case. Such a measure could be useful for future building purposes but is confusing when applied to land that already has structures on it. In addition, in large swaths of federal land as seen in central and eastern Oregon, there are no structures at all and none that will be built in the future. By using a generalized susceptibility measure that imagines hypothetical structures on the land, the risk value "tells us the magnitude of the expected annual damage to any structures at that location," but does not account for locations that will never have such structures, nor does it account for home hardening or defensible space already carved out on existing homes and structures on private land.

In short, the mapping criteria give a generalized assessment of risk based on the available data on weather, climate, topography, and vegetation of each region but does not work out the particulars of how, for example, people may need to adapt their already existing homes to meet the requirements made by state agencies down the line. The risk map thus "illustrates risk to all locations in Oregon, regardless of whether or not there is currently a structure or other human development present" as a "planning tool for decisions about future land use and development."[155] The map did not reflect the detailed dimensions needed to establish all elements of risk for building codes on existing homes and structures, which would be determined in downstream rulesmaking where other state agencies would do on the ground visits and assessments to make sure that landowners would know their requirements to stay safe.

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[155] McEvoy, "Summary of Required and Proposed Changes."

Therefore, in function, this map was of the *hazards* across the state, not the existing state of "risk" for residents.

Presenting the Map to the Public

As delegated by SB 762, the RAC had to ensure that both the process of mapping and the product of the map were fully accessible to the public, which required ODF to provide any technical assistance needed by residents to meet that requirement. According to Christopher Dunn, the scientists who led the mapping team at OSU, the rulemaking process took several months and the finals rules were not complete until June 8, 2021, giving the scientists only a few weeks to complete the final map by the bill's deadline.[156] The state opened the online portal on the Oregon Wildfire Risk Explorer mapping tool for public viewing on June 30, 2022, the day it was due. While the RAC had several opportunities for public input, the rollout of the map was not proposed to the public as a draft, but rather a final product which would be used to create the regulations.

On the Oregon Wildfire Risk Explorer platform, residents could search for their homes on a neighborhood and even parcel (specific address, land, or property line) level to see their designated risk as indicated by color: red (extreme), orange (high), yellow (moderate), green (low), and blue (no) risk. The "layer" features on the platform allowed for users to filter through

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[156] Adam Aton and Avery Ellfeldt, "'People Exploded': Can Oregon's Wildfire Plans Survive the Public?," *E&E News by POLITICO*, July 5, 2023, https://www.eenews.net/articles/people-exploded-can-oregons-wildfire-plans-survive-the-public/.

to see components of the map such as burn probability and average flame length, as seen in a previous 2018 Quantitative Wildfire Risk Assessment map on the Oregon Explorer portal, but provided now in more updated and fine-tuned detail.[157] Although the map was labeled "Oregon Risk to Potential Structures," to highlight the "generalized susceptibility" feature versus the on-the-ground susceptibility, the overwhelming swaths of orange and red "high" and "extreme risk" areas that took up major areas of southern and eastern Oregon sent a different message. Although only 8.8% of tax lots in the state fall into potential regulation zones through the new WUI and Risk maps overall, and even less of those, around 80,000 tax lots (out of Oregon's 1.8 million tax lots) had structures on them that may be subject to some kind of regulation, it appeared that the entire eastern and southern sections of the state would be subject to regulation.[158]

As decided through the RAC, on July 21, 2022, all owners of private property categorized on the new map as "high" or "extreme" risk received a letter in the mail to inform them of their status, even if they did not live in a newly designated WUI zone. Those who were additionally located in a WUI zone were told in their letters that "You may be required to take actions to create defensible space around your home and adhere to changes to building code requirements," however, "Both of these regulatory processes are still in development," as the

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[157] "Oregon Wildfire Risk Explorer," Oregon Explorer, accessed March 30, 2024, https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=wildfire.

[158] Cassandra Profita, "What Is Your Oregon Home's Risk of Wildfire? New Statewide Map Can Tell You," *Oregon Public Broadcast*, June 30, 2022, https://www.opb.org/article/2022/06/30/oregon-wildfire-prevention-map-risk-forest-fire-home/.

legislation and the map did not actually create the requirements themselves.[159] Therefore, the map reflected general hazard levels, but not actions needing to be taken by property owners; those actions would be determined by other agencies, a point of confusion for many readers. So, despite the best efforts of the RAC process to be transparent to the public, and for the map to provide adequate information about the risk designation process, the Wildfire Risk map and the ODF letters were not well-understood or well-received by many property owners, many of whom were learning about the map and regulations for the first time via letter and worried about what it would mean for them in the future.

The map was heavily reported on by local news media who characterized it as poorly and hastily put together, in part because the scientists and officials behind the map did not do on-the-ground site visits to determine the risk designations, making it hard for residents to believe that they did a "proper" scientific assessment.[160] This echoes early USFS days of light burning debates where locals argued, and were ultimately proven right, that the federal scientists did not know the local conditions and that the residents and forests would suffer from their miscalculations. Of course, the rules outlined in the risk map did not require site visits, as they were not assessing the conditions of structures, merely the hazards that existed in the area gathered through satellite and other data. However, the disconnect between seeing the map as a

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[159] Sam Stites, "Oregon's Big Wildfire Bill Seeing More Pushback than Democrats Initially Expected," *Oregon Public Broadcasting*, June 21, 2021, https://www.opb.org/article/2021/06/21/oregon-wildfire-bill-pushback-republicans/.

[160] Kylie Mohr, "Fire Risk Map Ignites Controversy," *High Country News*, January 1, 2023, https://www.hcn.org/issues/55.1/north-wildfire-fire-risk-map-ignites-controversy.

risk map being used to regulate citizens and a map showing hazard that would be used down the line to create specific regulations based on further examination of specific sites was lost in the reporting.

Over the following weeks, specific Facebook groups against SB 762 and the map, one with 2,400 members, formed along with organized letter-writing campaigns against the bill.[161] The Oregon Department of Forestry received thousands of public comments from Oregon residents in July and August. According to Oregon Public Broadcasting, these comments reflected residents pushing back on the state for miscategorizing their property and expressing concern about the map raising future insurance rates and lowering property values.[162] Republican House Representative Mike Owens, who voted for the bill and then changed his stance on it, calling to retract the maps, told reporters that the state "possibly just devalued… property asset[s] by inaccurately reporting the fire danger." According to Owens, more than any one aspect of the map itself, it was the process that opponents pushed back against: the map did not allow for enough public input. Owens justified his call to retract the maps that he had voted to create as a proper response to ODF mismanagement of the map-making process. "If they haven't

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[161] Jake Bittle, "Oregon Tried to Inform Residents about Wildfire Risk. The Backlash Was Explosive.," *Grist*, November 2, 2022, https://grist.org/housing/oregon-wildfire-risk-map-home-values/.

[162] Cassandra Profita, "Oregon Postpones Wildfire Risk Mapping and Rulemaking Plans after Public Backlash," *Oregon Public Broadcasting*, September 26, 2022, https://www.opb.org/article/2022/09/26/oregon-postpones-final-wildfire-risk-map-and-rules-for-one-year/.

done great outreach with the community and sat down with them, they're gonna cause us to go political again… The only way we can get them to slow down is through the public process of being loud, and that doesn't make good policy."[163] It seemed that the dilemma of creating timely policy to respond to the urgency and scope of wildfire was pitted against the need to involve the public in the policy-making process.

Public Pushback

As outlined by the SB 762, and stated in the letter sent out to property owners, the Oregon Department of Forestry had an appeals process built into the map-making process. "If you disagree with your risk designation, you have 60 days to appeal from the date of this notice."[164] After the notice letters went out in July, over 5,000 residents appealed their designation through the official process.[165] As part of the Wildfire Risk Map rules, and especially due to the many comments and appeals from early July, ODF along with local legislators planned to conduct a series of public information sessions to answer questions about the map. These sessions included several personnel from ODF, the chief scientist from the mapping project at OSU, Chris Dunn, and Senator Golden who headed the bill.

The first information sessions were to take place in two southern Oregon cities, Grants Pass and Medford on July 26 and 27. Days before the events were scheduled, someone called in

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[163] Bittle, "Oregon Tried to Inform Residents about Wildfire Risk. The Backlash Was Explosive."

[164] Shaw, "Tax Lot," July 21, 2022.

[165] Profita, "Oregon Postpones Wildfire Risk Mapping."

death threats to the personnel in Grants Pass who would be conducting the meeting.[166] It seemed the map had caused enough stir that there were credible threats being made against not only the politicians, but the forest service staff, and scientists who made it. The police advised that the event be moved to an online format, so the session moved to a Zoom call on July 27 to cover both Grants Pass and Medford residents. Over 1,200 people showed up to the online public information session.

Many who spoke in the public comments period had concerns with the possibility of increasing insurance rates or being dropped by their insurance carriers altogether, a question that the officials on the call had no definite answers to. Some residents had concerns about how to follow the rules about home hardening. As the rules were not created yet, again the officials could not answer their questions. Other residents were vocal about contesting the designation criteria, again raising difficult questions as a response would involve reviewing the criteria that went into assessing each individual property. Many residents referred to their experiences with the Almeda Fire, as well as other rural WUI wildfires that recently impacted their homes and expressed frustration about the causes of the wildfires that were not being addressed by SB 762 and the map.[167] Within these comments, some pointed to how the map appeared to be high or extreme only in rural areas, forwarding the long-held sentiment, grounded in early twentieth-century fire suppression policies, that rural people are paying for fires that are the federal

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[166] Bittle, "Oregon Tried to Inform Residents."

[167] *Wildfire Risk Map Community Information Session (Medford) - July 27, 2022* (YouTube, 2022), https://www.youtube.com/watch?v=ExX0Wx7_xdY&list=PLhtLP-50RDaTVVL_3DdpP8M3WBK08-_d4&index=5.

government's fault. This also fed into the contemporary Republican narrative, especially in the state of Oregon, that Democratic elites are taking over the government to exploit rural people living in more conservative areas of the state who have less of a voice in government. Many of the public comments expressed a disconnect, on several fronts, between what they saw as the policy or map and what the real issues were. One resident from southern Oregon stated:

> You're discussing the fact that our area is drier. That I understand. But the problem is that when you cite the fact that the area is drier, I would just like to point out that the Garner Creek Complex [in southern Oregon] in 2018, yes, it was in fact caused by lightning, but a lot of the fact of the issue has to do with *poor forest management* which has been going on for years. And I'm not trying to point fingers at one particular agency, but it just seems like that constant *poor forest management* is now falling back to us, the homeowners. And you know, the recent fires in Medford that we had, those are all arson.

In this case, the resident may be pointing out that in many rural areas in Oregon, decades of poor forest management in the form of fuel suppression by the federal government has endangered communities. As the map very strongly highlights the federal lands through "high" and "extreme" risk that covers huge swaths of eastern and southern Oregon, it makes sense that viewers would be drawn to making that connection, asking why they must pay taxes for being at risk, when poor forest management is to blame. However, at a state level, when assessing risk, this issue was not within their means to solve.

In this case, the resident goes further to say that the policy responds to what is an arson problem by adding costs to homeowners, which makes the map even more ineffective and nonsensical. Others similarly expressed concern about arson as not addressed in the map, even though it was what really to blame for the fires. Another resident said:

> The Almeda fire was arson. The risk mitigation for arson is to catch the arsonists. But there's nothing in this map that is addressing that. Also… poor forest management is… a cause of these fires… and that hasn't been incorporated into the science in this map… especially in southern Oregon…. The two main features who [sic] are risks aren't in your models, so your models are already flawed.

Here, the resident correctly identifies that the wildfire was most likely started by arson, but then goes on to conflate blame and cause. Under this logic, the arsonist is to blame for the Almeda fire, and so arsonists as a risk factor must be mitigated. This makes sense in the popular sense of "risk" defined as a situation involving exposure to danger, where arson may well be incorporated in these dimensions that look at blame in relation to cause.[168] For example, an area with more arsonists at large has a higher risk of arson. By defining risk this way, the resident makes an argument less about what risk *is*, and more about what *ought to be done* about risk based on their definition. In this case, law and order is implied: catch the arsonists and other criminals to prevent the wildfires. In their definition of risk, forcing regulations on homeowners makes no sense.

Additionally, the resident points out that poor forest management is the cause of wildfires which is also not explicitly factored into the map. Here the resident is talking more about what the map does do, which is quantify risk with the causes (not blames) of the fires. However, what this resident does not realize is that the map *does* consider forest management and human-causes, as burn probability incorporates human-caused fires as part of fire history, and fire intensity

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[168] "S.v. "risk (n.)"," in *Oxford English Dictionary*, March 2024, https://doi.org/10.1093/OED/2698784569.

incorporates fuel and forested vegetation patterns which are impacted by management. Of course, the comment made was about "poor" forest management, which while in some ways impacts the hazard, was not what the map was there to assess and therefore difficult to address. Regardless, it clear in this comment that by not clearly defining the parameters of risk assessment in the map, the map clashed with residents' understandings of important factors of risk in preventing wildfires.

A similar narrative that claimed the state was forcing rural people to pay for either poor management or arson was brought up by a final commenter who added in the dimension of climate change absent from the other comments. The resident stated, "This is more about climate change evangelism than it is about actually protecting people from the risks that are out there and have been here." In this comment, the resident first defines the policy as related to climate change, rather than focused on the fires. Because the map was thought to be inaccurate and counterproductive in both not keeping people safe and threatening their security financially, the commenter connected the map to the broader progressive political agenda, like those failed cap-and-trade bills, that many conservatives believe is not needed and doing more harm than good. Next, they compared the policy to "evangelism," stating further that the creators of the policy were following along with a progressive agenda like they are preaching the Gospel, supposedly letting any contrary evidence like on-the-ground reality or science slide to prove that climate change is real. The commenter continued, "We live in a state that is mostly timberland and will burn at some point, we're not dealing with something that's out of the ordinary, we've always had dry years, it's not anything new." While some of these comments were on the more extreme end of the climate denial spectrum, they summed up numerous issues people had with the

assessment of risk on the map, viewing wildfires as an ongoing issue of state and federal mismanagement with rural residents being the victims of it.[169]

After the public information sessions, which attracted thousands more residents across the state over the next month in person in La Grande, The Dalles, and Redmond, ODF decided to withdraw the map "for further refinement" and suspend the already flooded appeals process along with it. ODF spokesman Derek Gasperini stated in the reasoning for the map's temporary withdrawal that, "We want to take that [the appeals] seriously, hit pause on the map and investigate what may be anomalies, or what may be a gap in understanding."[170] Part of the reason for this withdrawal was that residents pushed back on the science of the map and how this approach to addressing wildfires was hurting residents. While there was no disagreement about something needing to be done to protect against devastating fires, residents did not trust government officials or scientists to know best about the true risk of wildfires. Indeed, the government did a poor job of clearly educating the public about what the steps in the risk assessment process would be, where the Risk Map factored into that process, and communicating about why the definition of "risk" they were using would be the best to keep communities safe. Some of these factors did not observe best-practice for public policy, such as creating adequate

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[169] *Wildfire Risk Map Community Information Session (Medford) - July 27, 2022*.

[170] Cassandra Profita, "Swamped by Public Outcry, Oregon Withdraws Controversial Wildfire Risk Map," *Oregon Public Broadcasting*, August 5, 2022, https://www.opb.org/article/2022/08/05/oregon-wildfire-prevention-map-risk-forest-fire-insurance/.

time in the legislation for public input; however, part of the issue was in the rhetorical issue of how the map itself was defined as a “risk” map.

Senate Bill 80

Over the next year, legislators in conjunction with the Wildfire Programs Advisory Council, went back to the drawing board and drafted a new and improved Senate Bill 80, which passed in August 2023. Taking in the feedback from the public information sessions and appeals process in 2022, the bill outlines several changes to the original legislation dictating the rules for the Wildfire Risk Map process and product.

The most pronounced of these changes is the more precise definition of the goal of the map, reflected in their alteration of its name from a “risk” map to an environmental “hazard” map. Wildfire hazard is comprised of two criteria: burn probability and fire intensity. Hazard level, then, is the *potential* for a wildfire with various possible outcomes. Hazard, different from risk, *cannot* be reduced by an individual property owner’s actions. This conception of environmental hazard is distinct from risk, which is the probability of a specific damaging event occurring and *can* be reduced through an individual property owner’s actions like creating firesafe landscaping. In the case of designating wildfire risk, there are therefore three components: the burn probability and fire intensity (hazard assessment), and the additional susceptibility of the resources (homes, other properties, etc.) that would be damaged, a

susceptibility that the new map does not include.[171] Articulating this difference between risk and hazard, then, is intended to clearly communicate to residents about their level of exposure to wildfire, so that people living in the most vulnerable areas can figure out how to stay safe, or at least safer and take part in reducing their risk.

This shift from risk to hazard was intended to answer many of the questions that arose in the public appeals process from 2022 and eliminated the "risk to potential structures" as calculated through the "generalized susceptibility" factor that assumed the same property existed on every tax lot in the state. With SB 762, residents expressed confusion as to whether their risk designation could be changed based on changes they made to their property. SB 80 made it clear that individual effort does not change the hazard designation, so does not factor that component into the drawing of the map. Therefore, a need to visit a property on the ground is not necessary, as the map only assesses hazard which is based on broader data. In this way, the map clearly tells residents what they should do based on their hazard designation to decrease risk of damage.

Another issue with the risk designations was the lack of clarity around the five designations: no risk, low risk, medium risk, high risk, and extreme risk. It was not clear why there were differences between, for example, high and extreme risk, as they would both be regulated the same. Again, this was an issue of definition, as the "high" and "extreme" risk designations were functionally the same hazard level, created to tell some residents living in those areas and in WUI zones what regulations they might have to comply with. However, by

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[171] Elizabeth Castillo, "How Oregon Is Approaching Wildfire Planning," Oregon Public Broadcast, July 11, 2023, https://www.opb.org/article/2023/07/11/how-oregon-is-approaching-wildfire-planning/.

having them separate it made them seem functionally different from each other. By creating an unnecessary division between extreme and high risk, it was again needlessly confusing for residents trying to interpret what they ought to do based on the map.

In SB 80, the map instead outlines three hazard designations: low, medium, and high. Only high hazard designation properties must follow building codes if they live in a designated WUI area. In the case of the Wildfire Risk Map, all residents designated high or extreme risk received a notice letter from the state, even though it would only be property owners in WUI areas who would need to follow new code. By alerting residents who did not need to follow new codes about their risk level, ODF caused confusion, and misleadingly made it seem as though anyone with a higher level of risk would be subject to new codes. This was presumably in a move to follow the legislation's guidance to inform residents about their risk level, based on the chosen five, and be transparent about the process. This, however, had the opposite effect for many, sending residents who would not be subject to any regulations into a panic.

Pam Marsh, an elected representative working on the House committee who drafted SB 80, explained that their communication on the new bill would also make it clearer what the relationship between the state hazard map and private properties is. Marsh stated in an interview with a local news station that, "People who live in an area that is designated a hazard impacted area will be informed of that but rather than saying 'your property' it will say 'you live' or 'you own property in this area that we believe is of high hazard."[172] This shift in language does not

[172] Christina Giardinelli and KATU Staff, "Oregon Wildfire Hazard Map Pulled over Public Backlash to Make a Comeback," *KPIC*, July 12, 2023,

tell people that their property is a risk, which creates a tone of blame and mistrust over how risk is designated, but instead gives a broader picture that the state is mapping the area's overall hazard zones and that they are helpfully informing residents of their relationship to the area's natural features, a scientific fact of the landscape. In this way, it also more clearly identifies what is being assessed, it is not the property, which implies the homeowner's buildings that exist, but the area, a piece of land with topographical and natural features that are part of a broader landscape experiencing wildfires. These facts are not changeable and instead invite property owners to protect the structures on their property without blaming them for the existence of the hazard in the area.

From this empowered position to reduce damage to their homes, the message has the intended effect of seeing the state as a partner in reducing risk, which although it was the original goal of SB 762, was not well rhetorically constructed in messaging by ODF about the original map and the notice letters that followed. Here, public officials attempted to resolve the debate *about* the definition of "risk" with a new strategy *from* definition that reset the terms of the conflict by offering the new designation of "hazard." Because the Risk Map was always just functionally a Hazard Map, the renaming and reframing does not change the goal of the map but makes it clearer to the public what the map actually does.

Along with these rhetorical strategies to make the map clearer, the new map also made other changes based on the public information and appeals process. It turned out some issues were anomalies, and others a matter of better public education around the map around how risk,

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https://kpic.com/news/local/senate-bill-80-brings-changes-to-oregons-wildfire-hazards-map-after-backlash.

now hazard, works. One issue was the discrepancy in property risk designations; for example, some people had adjacent pieces of property that had different risk levels or were comparing their risk designation to a neighboring land with similar features that were in a different risk level. By simplifying the risk levels to three hazard levels, this smoothed out many of the issues about the differences. In addition, the public officials identified the need to educate residents that indeed they could have a different hazard level from their neighbors, even if land appeared to be similar, as there are many factors that go into the designation that are not all visible or based on vegetation.

In addition, there was a lot of pushback around the designation of some irrigated crops as high or extreme risk, which presumably didn't make sense as they are not the same as dry brush or other fuel heavy vegetated areas. In this case, ODF also identified the need to educate the public better about the fact that irrigated crops do still burn, as seen in the 2022 Miller Road Fire in Wasco County.[173] On a related matter, one substantial change that was made to the new hazard map was the designation of hay and pasture lands, which were mapped at peak harvest times in Risk Map, but upon further investigation and on-the-ground visits were changed by the scientists to be mapped at after-harvest time to better reflect a balance in fuel load for the Hazard Map.

Many anomalies and misunderstandings were caught due to the appeals process. As SB 762 created a short timeline that pressed collaborators to roll out the map before getting feedback to the public, the hope was also that there would be fewer appeals the second time around as they would be able to solicit public feedback before the map was finalized. To ensure that feedback was processed before the new hazard map was finalized, SB 80 outlined eight initial meetings

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[173] *The Oregon State Wildfire Hazard Map*.

with county officials in different regions of the state to start with. According to the team working on the map, these meetings will then be followed by more public listening sessions to give feedback on the hazard designation map draft before the final map and codes would be put into effect in 2024.

As for the issues with major concerns that residents had about insurance rates skyrocketing, the Oregon Senate passed SB 82, which went into effect in January 2024 and forbids insurance companies from using the hazard map for insurance rates. SB 82 outlines that insurance must consider individual property owners building code compliance (that changes their risk level) when assessing rates and companies must inform customers on the specific reasons why they may cancel wildfire coverage. While this does not fix all the insurance issues presented by the complexities of wildfire protection in the age of climate change, SB 82 is meant to address the main concerns that residents had when it came to the state's fire map.[174]

Chapter Conclusion

This case study demonstrates multiple clashes between scientific and public arguments about definition around the wildfire Risk Map, now named the Hazard Map for the state of Oregon. In the legislative process following the 2020 fires, SB 762 created three new maps: a WUI map, and Wildfire Risk Map, and a Social Vulnerability Map to be used together to assess 1) what communities needed to be protected from wildfires and 2) where resources should be delegated by the bill's funding to prioritize highest risk communities. With a tension between meeting the

[174] "Tracking Senate Bill 82 in the Oregon Legislature," Your Government: The Oregonian, accessed February 20, 2024, http://gov.oregonlive.com/bill/2023/SB82/.

timeliness of the need to protect highest risk communities, and the extensive legislative and public deliberation process needed to create buy-in for all the detailed policies urgently overdue and needed in the state, direction for the maps was delegated out to a Rules Advisory Committee to deal with after the bill passed. These processes ended up being trickier than expected, as the "risk" map defined by the bill through the criteria of "weather, climate, vegetation, and topography," was not the full scientific risk profile that would ultimately be needed to carry out the regulations needed to meet the goals of the legislation. Therefore, the map was functionally a "hazard" map that could use the criteria in the bill to calculate two of the three scientific criteria for risk, "burn probability" and "fire intensity," but would not fulfill the last scientific criteria, which is "susceptibility," an estimate of the effects of fire on a human-built structures which was the issue both the bill and the public were ultimately concerned about.

By not directly addressing the discrepancy between the scientific definition of risk and the profile of risk that the legislation created, the map caused confusion and ultimately massive pushback from the public who did not see clearly what the map was doing, and how it was working to better protect them. With a lack of understanding about the goals of the map, which were to show a risk profile that would then later be overlayed with the WUI map to be used to inform downstream agencies about regulations, it appeared that the government had created a Risk Map of people's homes without ever visiting their properties to see how susceptible they were to wildfire. Taken further, residents most opposed to the map disagreed with the government's definition of risk, stating that the criteria putting them most at risk, issues discussed in the previous two chapters of this dissertation—decades of poor forest management by the federal government, and arson—should be the focus of legislation, not more regulations on residents.

The new bill created after the redaction of these maps, SB 80, highlights several ways that definitional arguments can be improved to avoid creating unnecessary partisan divide and clearly inform residents about their exposure to hazards and responsibility in protecting themselves from risk. While the bill makes several moves that better align with important public processes, such as doing site visits to correct anomalies on the map, creating public meetings for drafts of the map prior to its finalization, and prioritizing a clearer product to educate the public, it also attends to an important rhetorical move around definitional language. While some changes are made to the map between SB 762 and SB 80, the map functionally is the same and does the same thing, except for its name change from Risk Map to Hazard Map. Not only is this more scientifically accurate, but it also attempts to create more separation between the science and the policy. Whereas the Risk Map was, with some good reason, interpreted as the regulation itself, a fact not helped by the confusing letters that were sent out to residents, the Hazard Map clearly demarcates what the scientists can do, assessing the overall features of the landscape, without bearing any assessment on properties, regulations, or individual landowners' role in those landscapes.

By trying to better align with residents on the shared purpose of creating knowledge of environmental hazards so that they can then take responsibility for their own risk, the new SB 80 bill gives definitional agency to residents to see wildfires as natural disasters they can mitigate instead of victims of risk that they have nothing to do with. Through redefining the map as a Hazard Map, public officials draw away from public definitions of risk as encompassing broader politically charged motives such as wider causes (poor forest management) or blame (arson) that are not the purpose or domain of scientists creating the maps. Hazard then invites public engagement around living on the land and protecting communities, making it clear that cause and

blame of the fires does not ultimately impact the map. While the new hazard map is still yet to be rolled out to the public, the urgent need to start creating safer communities and delegating resources to communities most vulnerable to fire is urgent. In my conclusion I will take up this last issue in discussing the Social Vulnerability Map outlined in this new legislation.

Conclusion

Through the case studies in this dissertation, I argued that the study of wildfires should not only be ecological, biological, and physical, but rhetorical. As wildfires intensify in every corner of the earth due to human-created climate change, I look to how climate converges with national, state, and local politics to mediate relations between humans and forested landscapes in Oregon. As I foregrounded in my introduction, the convergence of fire history, topography, climate, and vegetation make up a fire regime: an ecological tool used to determine a general pattern of wildfire in a particular ecosystem over time. However, by situating clashes between local politics and federal projects to scale policies regulating fire regimes, I show how the ecological is deeply impacted by the rhetorical through patterns of public debate.

The Oregon Labor Day Fires marked a visible turning point in state and local climate politics. Not only were the fires the most destructive and costly natural disaster in the state's history, but they also served as a political flashpoint demonstrating how public understandings of the emergency have immediate and long-term consequences for shaping fire regimes, both ecological and rhetorical. In the case studies, I highlighted how the government tried to establish definitional authority over wildfires with terms such as light burning, misinformation, and risk, but were vehemently refuted by locals who used on-the-ground experiences to push back on scientific expertise, forcing the government to find new ways to respond.

In this project, I look at the role of science in mediating, further aggravating, and sometimes creating some understanding in these tensions between the state and locals around wildfire through *definitions*. According to David Zarefsky, the mark of liberal presumption has for many years been "a commitment to an active state which is an active agent in generating problems to solve." Zarefsky elaborates by pointing to the stock issues in a policy debate. "To

define a condition as a problem is to invoke a frame of reference within which the severity of the condition is assessed, causality and blame are determined, and solutions are considered." Zarefsky turns to Frank Baumgartner and Bryan Jones who state further that "agreement on a particular issue definition almost always implies a consensus about what, if anything, government should do."[175] In my chapters, I demonstrated how definitional rhetoric is used by government officials identifying what they should do about the matter at hand and how publics push back on those government actions.

In Chapter One, I explained how the constitutive process of *defining* wildfires through public debate about "light burning" greatly shaped forests in the United States over the course of the 20th century. The United States Forest Service used *definitional authority* to justify their widespread fire suppression policy, a policy that was not well-adapted to the diverse forests of North America. By *defining* their opposition as "light burning," the USFS was able to effectively build up their own agenda and agency to control wildfires. My rhetorical analysis shows how "wildfire protection" and "light-burning" were created in tension with each other to forward the state's political agenda, not because there was complete scientific knowledge to support suppression, but because wildfires were framed as a pressing crisis to be solved through bureaucracy. Ultimately the "light burning" debate ending up hinging on poor scientific argument, as light burning was not thoroughly studied and USFS scientists ignored many observations from locals. This resulted in the ban on the local and widely varied "light burning"

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[175] David Zarefsky, "Argument in a Time of Change: Definitions, Frameworks, and Critiques," in *Proceedings of the Tenth NCA/AFA Conference on Argumentation* (Annandale, VA: National Communication Association, 1998), 6.

practices that, while helping to manage and steward forests for thousands of years, did not align with ecological theories of "climax" conditions that the USFS used to justify their total fire suppression regime, showing how science is political and colonial.[176] Today we can see how total fire suppression resulted in worse fires due to fuel build-up. Eventually, when more precise science was available, the USFS slowly incorporated prescribed fire into their strategies, but not until far too late in the massive development of Wildland-Urban Interface areas in the 1990s. Today, massive fuel build-up as well as lack of trust in government to manage forests looms over debates about how to best mitigate and prepare for wildfires in the face of climate change, in part due to the powerful definitional rhetoric used by the USFS in the 20th century.

Moving 100 years into the future to the Oregon Labor Day Fires of 2020, in my second chapter I focus on how political beliefs deeply influenced how residents acted during the wildfires event, resulting, for some, in resistance to evacuation orders by public officials. As with other climate-intensified phenomena such as hurricanes and floods, the social and human-made costs of poor preparation are what make fires a "disaster." However, in this case, the contrast between human causes could not have been starker: some who believed that wildfires are human-caused made a clear connection with the climate emergency, attributing the cause of the disaster to human-induced climate change, and others insisted that the wildfires were human-caused by politically motivated arson. In the Almeda Fire, we see how some public officials tried to

[176] In my case studies, federal political control was more important than the scientific practices of frontiers people on the ground. Those practices were stolen fragments of knowledge from distinct Indigenous scientific and cultural practices appropriated in the ongoing genocide and colonization of Indigenous peoples across the American West.

deescalate misinformation through a misleading association of their own, falsely suggesting that rumors from both sides of the political spectrum were equally prevalent. This rhetorical tactic allowed them to highlight the real emergency, *defining the situation* as a natural disaster, not a political one. On the other hand, in the case of the Riverside Fire, some public officials greatly exacerbated the misinformation through *failing to clearly define* the rumors about the fires and looters as false, and their messages were misread and spread by an oppositional public. Matters were made even worse when the oppositional public and officials aligned in perpetuating misinformation, as was the case with elected officials and officers who encouraged vigilante justice. This left public officials with a bigger problem: what to do when a wildfire, requiring evacuation by firefighters and managed as an environmental phenomenon, is no longer viewed as a natural disaster but a political one? I argue that in some important ways these extremist and even conspiratorial views alert us to a helpful reminder: wildfires were always political. Of course, I do not mean in the sense that they were being started through arson by politically motivated groups, but that wildfire in the settler United States has always been a political project that represents the tensions between government management of resources clashing with local interests. This lesson is an important one for public officials today. This case study showed how deep partisan politics and misinformation calls for more clear and helpful definitional rhetoric by officials that promotes community safety. Here, *defining the situation* efficiently and effectively is paramount to the public making informed decisions about what to do in emergencies, especially as they become more prevalent due to climate change.

Lastly, I looked at the wake of the 2020 Oregon Labor Day Fires that brought sweeping new policies for the first-of-its-kind wildfire omnibus Senate Bill 762. In my third case study, I showed how the public officials in charge of creating and carrying out the policy initially failed

to create a clear *definition* of wildfire "risk" for the public receiving notice letters about the new Oregon Wildfire Risk Map. Here, long-standing animosity towards state and federal forest mismanagement and distrust of liberal politics creating "climate policies," coupled with a need to refine the parameters of the map to better reflect the local landscape, caused thousands of residents to appeal their "risk" designations. I describe how in the re-mapping process through SB 80, the Oregon Department of Forestry used a rhetorical tool of *redefining* the map as a "hazard" map to reestablish their scientific efficacy and gain public input into the mapping process to manage risk in partnership with the public. In this case, the map takes the focus off who (political arsonists) or what (climate change or forest management) are to *blame* for the wildfires and refocuses on the scientifically defined natural features of the landscape that do not change in the short-term with modifications by landowners and make the land more prone to fires. Through this *redefinition* of "hazard map," "risk" becomes a shared process created through public input, improving its scientific accuracy and usefulness in keeping communities safer. In both Oregon Labor Day Fires case studies, public officials, and experts on the ground had to pivot to create better compliance through rhetorical strategies in times of crisis.

What Rhetoric Brings to Wildfire

In a presentation given to the Northwest Fire Science Consortium in November of 2023 about the new "hazard map," lead scientist Chris Dunn stated that, "the map really is capturing the dynamics [of risk] despite the rhetoric that's put out there."[177] In both cases with the Oregon Labor Day Fires, I show how public officials argue that they are trying to move past the rhetoric

[177] *The Oregon State Wildfire Hazard Map*.

to reveal facts and help the public. However, I argue that public officials need to start seeing themselves as the public rhetors they are. If they do so, they will be better able to attend to the definitional moves they are making to create goodwill with the public to communicate and keep them safe. In my analysis I show how their savvy rhetorical maneuvers empowered the public to make better decisions around safety and risk. In the #antifa fires case, public officials framed specific misinformation as coming from all sides, even when this was not true, to better shut down the rumors and evacuate people. In the case of the Risk Map, public officials used redefinition of "risk" to "hazard" in order to help the public better deliberate about their role in preparing and mitigating future disasters and build trust around the science behind the map. In both these cases, public officials were creating better opportunities for productive engagement about the issues the public can make a difference in, whether that be immediate safety concerns or future preparation. The 2020 case studies are contrasted by my first case study, where the federal government ultimately exacerbated wildfire risk because they were unwilling to listen to good arguments made by local experts. My analysis shows how in setting up an oppositional rhetoric that refused to take seriously the experience of people on the ground, the USFS created policies based in poor scientific argument, badly executed, shirking their responsibilities as public rhetors to address local concerns.

What Wildfire Brings to Rhetoric

Just as the study of rhetoric has much to contribute to wildfire, so too does the topic of wildfire have key contributions to make for the study of rhetoric. In this dissertation I have argued that wildfires teach rhetorical scholars something new about how definitional rhetoric works. My first case study follows suit with other definitional studies in the field that look at the importance of

preventing definitional hegemony by government authorities through opening the definitional process to local experts and the public. In the case of light burning, it was important to critique the total control that the government took over defining the terms and agenda for forest management and community protection. However, in the age of climate denial and misinformation, I turn my attention to cases that present new challenges wherein scientific and technical expertise should be empowered when faced with skepticism around public safety and health. While in some rhetorical studies, being grounded in local knowledge and on the ground expertise meant going against officials and experts often for just ends to help marginalized groups, this case study complicates the idea that local perspectives and experiences always correct overarching government policies to more just ends. As was the case in Oregon, listening to locals sometimes meant climate denial and conspiracy theories wherein the state and public officials were the ones promoting better outcomes for equitable community protection. As my project shows, in order to address issues of climate justice down the road and help scientists with the safety and health of communities, officials and experts needed to learn how to use rhetorical strategies in order to be heard and improve the ways the public understands issues.

Why It Matters

In a recent study published by *Scientific Advances*, researchers found that nearly half of the people exposed to wildfire in the state of Oregon have a high level of social vulnerability based on the parameters of socioeconomic status, disability, housing and/or language abilities. Between 2011 and 2021, that number of socially vulnerable people exposed to wildfire in Oregon grew 18-fold. This socially vulnerable population is mostly represented by people living in rural areas who are low income, lack stable housing or transportation, or are disabled. Erica Fleishman, an

Oregon State University scientist who contributed to the study commented, "These data show that there is no single strategy for wildfire preparation and response… instead, they indicate responses might be honed to reflect the needs of individual communities with different risk factors."[178] In this project, I argued that if these "responses… honed to reflect the needs of individual communities" are to be effective in keeping community members safe, they must rhetorically adapt to local publics through building better trust in public communication processes and products created. These responses must account for long-standing political divisions that shape how people relate to the forested landscapes they call home.

As just one example, massive issues around housing in Oregon continually intersect with climate justice. In 2023, Oregon Governor Tina Kotek declared homelessness in Oregon a state of emergency.[179] As is the case across the US, those most vulnerable to being unhoused are disproportionately people with disabilities, as the Department of Housing and Development reports. "Among adults, 17.7 percent of the U.S. population ha[ve] a disability whereas an estimated 42.8 percent of sheltered homeless adults ha[ve] a disability. A disability, particularly one relating to substance abuse or mental health issues, can make it difficult to work enough to

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[178]Lynne Terry, "As Wildfires Grow, Poor, Elderly Disproportionately Affected," *Oregon Capital Chronicle*, October 5, 2023, https://oregoncapitalchronicle.com/2023/10/05/as-wildfires-grow-poor-elderly-disproportionately-affected/.

[179] Julia Shumway, "Oregon Gov. Kotek Declares Homelessness State of Emergency, Signs Housing Executive Orders," *Oregon Capital Chronicle*, January 11, 2023, https://oregoncapitalchronicle.com/2023/01/11/oregon-gov-kotek-declares-homelessness-state-of-emergency-signs-housing-executive-orders/.

afford housing."[180] In the wake of the Almeda Fire in 2020 in southern Oregon, many unhoused residents had to shelter outdoors and were forced to relocate in hazardous air conditions and faced disproportionately harmful impacts from the disaster.[181] Many more people moved permanently out of the area or remain in temporary housing still in 2024 because of the lack of affordable housing.[182]

The Social Vulnerability Map mandated by the SB 762 legislation is intended to help determine who needs resources to prepare for future wildfires, including those with unstable housing and disabilities.[183] However, when public officials cannot complete the WUI and Risk Maps properly, the Social Vulnerability Maps are not able to do the work to help distribute

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[180] "The 2008 Annual Homeless Assessment Report to Congress" (U.S. Department of Housing and Development, July 2009), https://www.huduser.gov/portal/publications/pdf/4thHomelessAssessmentReport.pdf.

[181] Joe Opaleski, "Medford Residents to Sue over Camp Sweep during Wildfire," *Street Roots*, October 7, 2020, https://www.streetroots.org/news/2020/10/07/medford-residents-sue-over-camp-sweep-during-wildfire.

[182] Hillary Borrud, "Oregon Promised Permanent Housing for Wildfire Survivors. Victims Are Still Waiting 3 Years Later.," *Oregonian/OregonLive*, September 29, 2023, https://www.oregonlive.com/watchdog/2023/09/oregon-promised-permanent-housing-for-wildfire-survivors-victims-are-still-waiting-3-years-later.html.

[183] "Mapping Socially Vulnerable Communities" (Oregon Risk Explorer, n.d.), https://oe.oregonexplorer.info/externalcontent/wildfire/metadata/Overview_SVI_SB762.pdf.

protections to vulnerable populations with the urgency needed. Having better deliberation processes is crucial to getting resources in a timely manner to protect those in most need.

Defining Our Forests

On a final note, SB 762, along with creating the WUI, Risk, and Social Vulnerability maps discussed in this project, also passed along renewed programs for "forest management" through thinning. Thinning is the long-used practice of cutting down trees often to prevent forest fires, but is a blanket term used by the state to describe *commercial* thinning or clear-cutting, promoted by the timber lobby and popularly supported by both Democrats and Republican politicians in Oregon. In the public comment process for SB 762, dozens of experts and members of the public testified against the broad definition of thinning, arguing that clear-cutting has no place in a bill aiming to protect Oregonians from wildfires and climate change. In fact, as revealed in an investigative report by *ProPublica* in 2020, the (until recently) tax-funded Oregon Forest & Industries Council has spent an exorbitant amount of their budget promoting educational campaigns to promote the idea that logging is the alternative to wildfires, and even slandered scientists who are proving that in fact commercial thinning makes wildfires worse, not better.[184]

[184] Rob Davis and Tony Schick, "How a Public Institute in Oregon Became a de Facto Lobbying Arm of the Timber Industry," *Oregon Public Broadcast,* August 4, 2020, https://www.opb.org/article/2020/08/04/oregon-forest-resources-institute-osu-timber-industry-investigation-lobbying/; Tony Schick, "Despite What the Logging Industry Says, Cutting Down Trees Isn't Stopping Catastrophic Wildfires," *ProPublica,* October 31, 2020,

However, because of the urgency of the bill and the incredible power of the Oregon timber lobby, SB 762 passed without further refined definition of what kind of thinning would be allowed for "forest management." Like light burning 100 years earlier, the government had the power to ignore locals, favoring the need to show that they were doing *something* about the fires ("forest management"), over the testimonies of people on the ground warning them about the dangers of their practices. As more and more wildfires occur across the state, evidence is continually showing that many thinning methods of clearing trees are not what helps with fires, and the science is beginning to shift significantly, despite powerful interests trying to suppress the science against many Oregon politicians' financial interests. It took decades for the USFS to catch up to the science of light burning to manage forests. We do not have time to spare in preserving our old growth forests and protecting our communities from wildfires.

As I have argued throughout this project, rhetoric matters to wildfires and wildfires matter to rhetoric. I have demonstrated how definitional rhetoric was instrumental in the USFS gaining bureaucratic control over the management of our nation's forests, and how public officials and scientists used definitional rhetoric in more recent cases to promote community safety through public challenges around misinformation and risk. In one case, public officials had to overcome public challenges to safety with misinformation, while in the other, the public got the state government to reconsider their original definition of a public problem by changing "risk" to "hazard." In this work, I depict the tricky balance between government interests and local residents on varying ends of the political spectrum. As my last example of commercial

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https://www.propublica.org/article/despite-what-the-logging-industry-says-cutting-down-trees-isnt-stopping-catastrophic-wildfires.

thinning shows, we need to hold our elected officials accountable to enacting policies that reflect the best science, and as the Oregon Labor Day Fires show, we as scholars can help our public officials make our communities safer with better communication practices. As I have argued throughout this dissertation, the academic study of wildfire is paramount. As fire historian Stephen Pyne writes:

> Fire remains invisible intellectually. Out of sight, out of mind. Modern technology has removed fire as a distinctive presence. Enlightenment science has eliminated it as an autonomous subject. Earth, air, water—all have academic disciplines, even whole departments, devoted to their study. The only fire department at a university is one that sends emergency vehicles when an alarm sounds.[185]

Given the devastation that wildfires can cause, we would do well to study it. It is my hope that in this study I rendered visible some pathways for scholars of rhetoric to turn their attentions to wildfires as an intellectual topic worthy of serious consideration and shown how through attention to rhetoric and communication, we might better promote the study of wildfires to a transdisciplinary academic community and beyond.

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[185] Stephen J. Pyne, *Fire: A Brief History*, 2nd Edition (University of Washington Press, 2019), 196-196.

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