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*Perspectives on the State  
of Jefferson*

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# The State of Jefferson: Beyond Myth and Mindset, Toward Enhanced Conceptualization of a Region

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## Abstract

*The State of Jefferson, a ruggedly beautiful region consisting of swaths of southern Oregon and northern California, is often described as “mythical” or a “state of mind.” Introducing this issue of HJSR, this article lays out the basic regional features of Jefferson—its topography, rurality, traditional reliance on resource-extractive industries, and associations with secessionism—and poses the question: How might we conceptualize the Jefferson as more than just “mythical” or a “state of mind”? In discussing how the region as an object of study has been approached by geographers, the author highlights the importance of enhancing the manner in which Jefferson is narrated. Toward that end, two geographic metaphors are offered to frame understandings and discussions of Jefferson.*

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The focus of this special issue of *Humboldt Journal of Social Relations* is the State of Jefferson, a nebulously defined region comprised of swaths of southern Oregon and northern California. Drawing on case studies from a range of perspectives, the primary goals of this issue are (1) to draw attention to challenges and opportunities confronting communities of southern Oregon and northern California and in doing so (2) contribute to an enhanced conceptualization of the State of Jefferson as a region. Jefferson presents a multitude of spatially explicit social, political, economic, environmental, and other issues that should be of interest to researchers, yet to date the region has received scant scholarly attention. Thus, a secondary goal of this journal is to spur additional research within and about the region—in short, this edition of *HJSR* represents the start of a longer-term project.

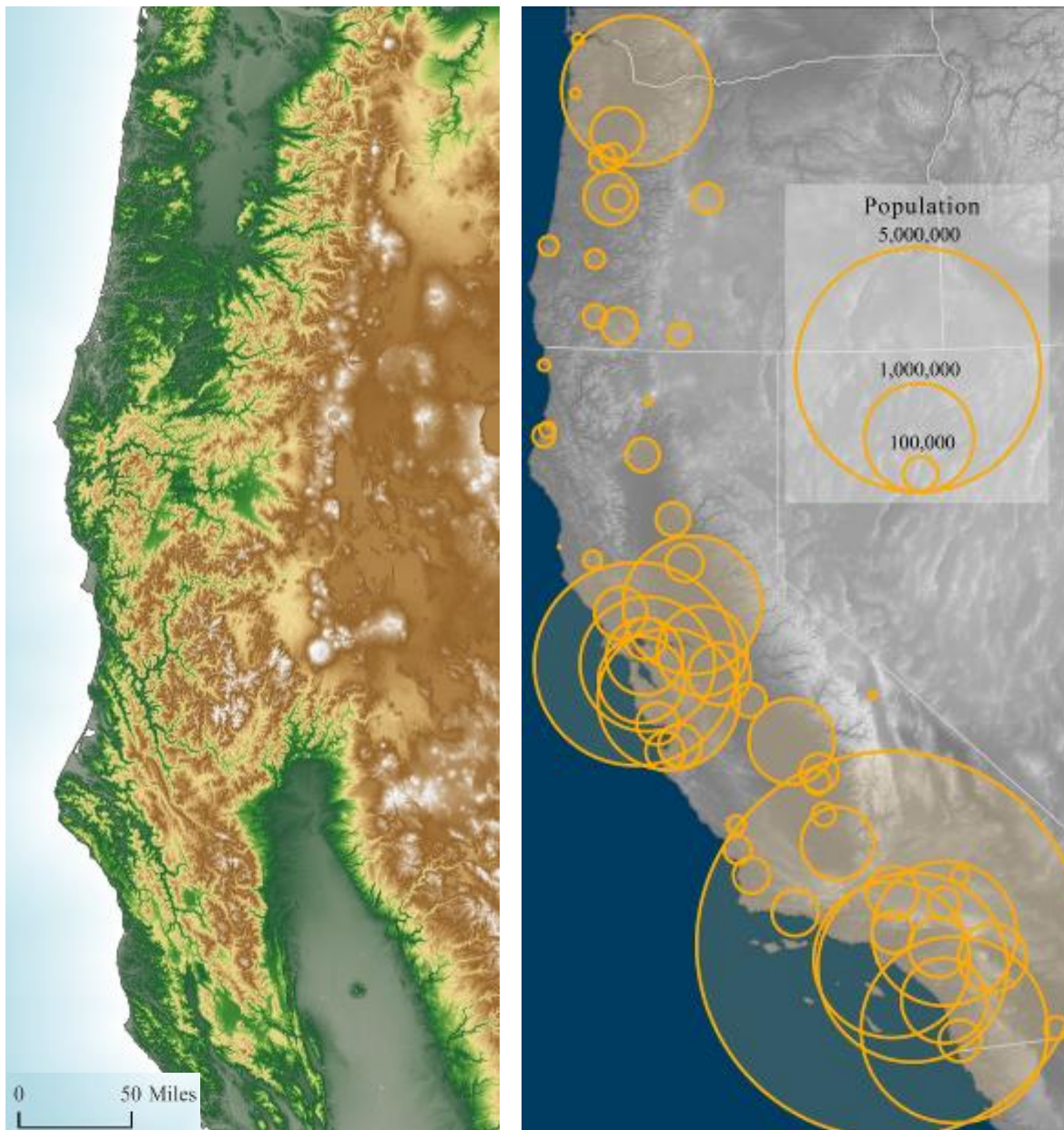
## Challenges in Conceptualizing Jefferson as a Region

A central challenge that has inhibited formal conceptualization of the State of Jefferson is its temporally and spatially fluid borders. *Where exactly is it?* The landscape of southern Oregon and northern California is punctuated with symbols of the State of Jefferson: the toponym and its logo are emblazoned on flags, t-shirts, bumper stickers, road signs, and buildings throughout the area. The region is even served by an eponymous radio station, Ashland, Oregon-based Jefferson Public Radio. A sense of place is certainly palpable despite being a fuzzily demarcated geo-cultural entity that has never formally existed—much to the chagrin of secessionists in the area.

BEYOND MYTH AND MINDSET

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Nevertheless, three basic regional characteristics can be identified: topography, rurality, and economy. Sandwiched between Oregon's Willamette Valley to the north and California's Central Valley to the south, Jefferson consists of a dramatic series of mountains and valleys (see Figure 1), creating a physical landscape described as "ruggedly beautiful" (Redding Record Searchlight, 2013). The region's rural settlement pattern also sharply contrasts with the urbanization of these two great valleys (see Figure 2). The economy of Jefferson's relatively isolated and rural settlements is defined by its traditional dependence on resource-extractive industries—most notably timber, but also minerals, fishing, and, more recently, marijuana. The

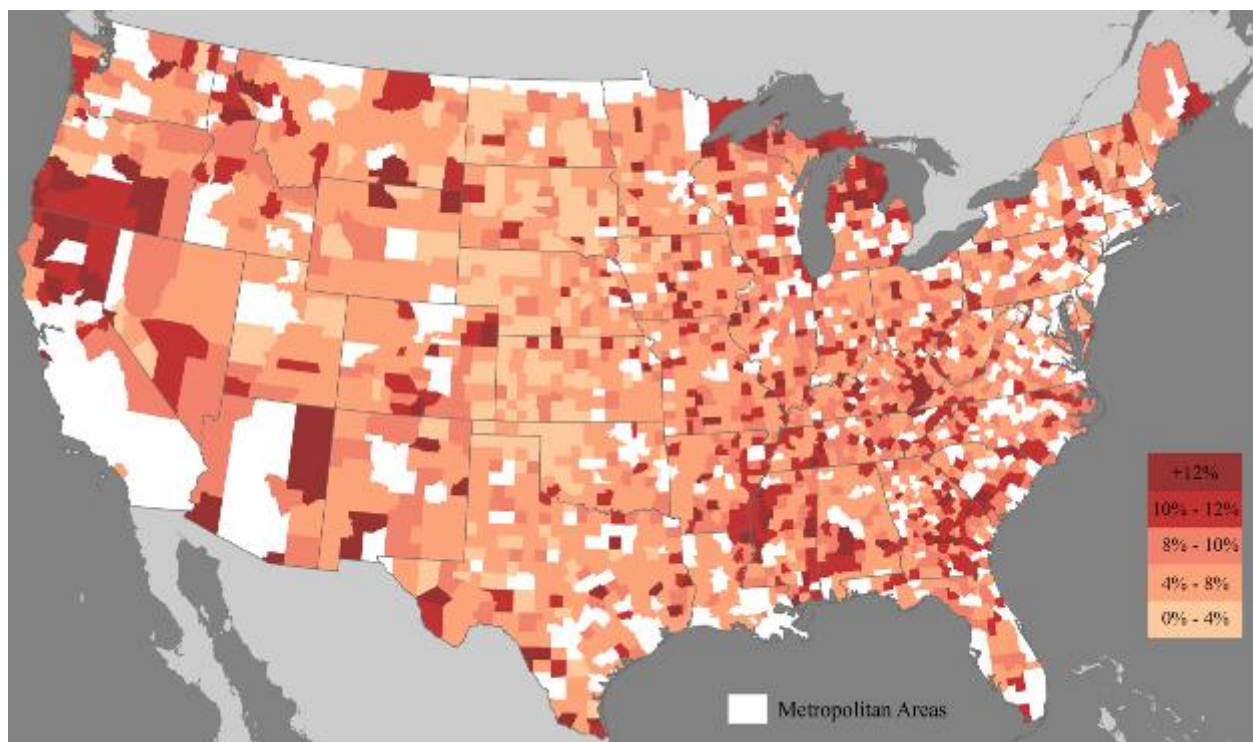


**Figures 1 and 2.** Left: Located between the Willamette Valley (north) and the Central Valley (south), Jefferson is defined topographically by a dramatic series of mountains and valleys. Right: Jefferson is a largely rural region, sharply contrasting with the urbanization of the two great valleys north and south of it (maps by Connor Mullinix).

precipitous decline of formal resource-extractive industries in the region, beginning in the latter decades of the 20<sup>th</sup> century, has left many communities in southern Oregon and northern California facing unemployment, poverty, and a host of other acute socio-economic challenges (see Figure 3).

A fourth important feature is Jefferson's close association with secessionism. Proposals to carve a new state out of southern Oregon and northern California date to the mid-19<sup>th</sup> century, but the most famous secessionist movement arose in late November 1941. That year the California counties of Del Norte, Siskiyou, Modoc, and Shasta teamed up with Oregon's Curry County to declare independence from their respective states and reconstitute themselves as a new State of Jefferson, to be headquartered in Yreka, California (see generally Laufer, 2013). The Jefferson secessionists felt that their distant state capitals favored the interests of urban centers and the seal of their would-be state—a gold pan inscribed with "XX"—was developed to symbolize their feelings of being double-crossed by Salem and Sacramento with particular regard to mineral extraction. Their specific grievance was the lack of state initiative in building roads to facilitate resource development, namely that of copper deposits prior to World War II when the market for such materials would have benefitted the region. Carefully staged photos of frontier rebellion appeared with reports of secessionism in newspapers throughout the country (see Figure 4, next page), creating the impression that a new State of Jefferson was plausible, if not imminent. However, the movement quickly dissipated amid a tide of national patriotism following the attacks on Pearl Harbor in December 1941.

Though failing to create a new state, the secessionists were successful in attracting attention and, in the process, constructing a powerful mythology that has fueled subsequent waves of secessionism in southern Oregon and northern California. But this "success" has



**Figure 3.** Counties associated with Jefferson post among the highest unemployment rates in the rural United States (2013 data from Bureau of Labor Statistics; map by Connor Mullinix).





**Figure 4.** The 1941 State of Jefferson secessionists hand out their “Proclamation of Declaration” to a passing-by traveler (photograph courtesy of Siskiyou County Museum).

impoverished how the region is understood formally. Talk about Jefferson, so tightly tethered to secessionism, often centers on the question of feasibility. *Do you think it can happen?* This is surely a dead-end line of inquiry.<sup>1</sup> Discussions that do transcend the question of feasibility are generally severely constrained in their narration because secessionism in the region has failed to produce political borders. Jefferson is therefore commonly narrated as “mythical” (e.g. Sutton, 1965; Shaw, 2000; Magee, 2005; Schwartz, 2013). The suggestion that the region is somehow unreal discounts the fundamental realities of physical and historical geography (topography, natural resources, settlement, traditional economic activities) that have played out within a specific geographic context. Such narration serves to distract from the real-life and everyday struggles of economic transformation, political disputes over land use (e.g. water rights, forestry practices, etc.), environmental concerns, and other pressing issues that are common to the region.

Another popular narrative is that Jefferson is a “state of mind,” meaning the “rugged individualism” of the pioneer spirit (e.g. Motaz, 1972; Thomas, 1984; Rock, 1999; Colby, 2000; Wilson, 2005; Tickner & Fiorini-Jenner, 2005). Or, as Wilson describes the regional mindset, “Jeffersonians have inherited [from the 1941 secessionists] an independent attitude and remain suspicious of state and federal governments” (2005, p. 22). This narration is just as problematic as the “mythical” Jefferson by being culturally exclusionary (notably omitting Indigenous residents), narrowly ascribing a certain type of reactionary politics to people of southern Oregon and northern California, and obfuscating the hand of government in subsidizing the region’s putative rugged individualism.

<sup>1</sup> For explanation, see Peter Laufer’s contribution to this issue of *HJSR* (especially p. 31).

Secessionism has reemerged in southern Oregon and northern California since confirming the theme of this issue of *HJSR* a year ago. In early September 2013, for example, the Siskiyou County board of supervisors voted 4-1 to secede from California and join up with like-minded counties to form a new State of Jefferson (Berton, 2013). Similar resolutions have since passed in the California counties of Glenn, Modoc, and Yuba; most recently, Tehama County voted to adopt a “Declaration of Support” for seceding from California (Associated Press, 2014; Redding Record Searchlight, 2014). With committees organized in more than 20 counties, the territorial vision of the current Jefferson secessionist movement far surpasses that of 1941 (see Figure 5). However, in June early 2014 the longtime Jefferson proponent, California’s Del Norte County, voted against adopting the declaration and neighboring Siskiyou County rejected a proposition to rename itself the Republic of Jefferson (Redding Record Searchlight, 2014). The timing of these events is serendipitous for the editorial staff and contributors of this issue of *HJSR* because the resulting media attention highlights the importance of examining the State of Jefferson not only for what it purports to be, but also for what it may not be.

Understandable are the anxieties of some researchers in engaging with a regional construct so closely associated with a reactionary political movement. However, the underlying circumstances driving the secessionists’ complaints are certainly deserving of scholarly inquiry.



**Figure 5.** The territorial vision of the current State of Jefferson secessionist movement is far greater than that of the 1941 movement (map by Connor Mullinix).



More fundamentally, these circumstances are rooted in a specific geographic context, begging for a more robust, more nuanced conceptualization of a region that, for better or worse, has become known as the State of Jefferson. To date, ideas of Jefferson have largely been shaped by secessionist mythology and mindset and narrated in narrow terms that, in the process of caricaturizing cultural and political dynamics, distract from real-life issues confronting southern Oregon and northern California. The challenge at hand is to put aside anxieties and engage with the following question: How might we conceptualize the State of Jefferson as more than just “mythical” or a “state of mind”? No definitive answer to this question is offered in the pages of this edition of *HJSR*; instead, its purpose is to bring attention to Jefferson so that its issues and identity can be more fully understood.

### The Region in Focus

Motivating the production of this issue of *HJSR* is not only a researcher’s concern and interest in *a* region; it is also motivated by a geographer’s concern and interest in *the* region, one of geography’s “central objects of study” that has waxed and waned in popularity over the past century (Allen et al., 1998). During the first half of the 20<sup>th</sup> century, when regional geography dominated the discipline, regions were treated uncritically—understood as existing objectively (Paasi, 1996). Geographers influenced by chorology (the study of place) worked to identify and delimit regions and take inventory of their characteristics (Johnston et al., 2000, p. 35). By mid-century this ideography had relegated the region to an intellectual backwater in the discipline, in part because many borders had become politically formalized.

The rise of “new regionalism” in the 1980s introduced new critical approaches to the concept. Human geographers began looking at regions in three ways: (1) sites of capital accumulation, (2) sites of social interaction, and/or (3) sites of identity formation (Gilbert, 1988; MacLeod, 2001). No longer viewed as objective entities, regions increasingly became understood as social constructs produced through institutions, discourses, symbols, and practices (Entrikin, 1996; Allen et al., 1998). Regions were also no longer viewed as discrete entities, but instead as the products of processes occurring at a variety of spatial scales. The state-centrism of the preceding era gave way to a focus sub-state and supra-state regionalism (e.g. Paasi, 1991; 2004), including cross-border regionalism (e.g. Krätke, 2002; Perkmann, 2003). This shift from “old” to “new” regionalism, as Alexander Murphy explained in the early 1990s, was partly driven by geographers’ growing attentiveness to the uneven dynamics of global capitalism. Yet Murphy cautioned against exaggerating the powers of globalization in shaping regions, contending that such “large-scale institutional and ideological developments” are mediated by a regional sense of place that is borne out of “place-specific activities, interactions and understandings” (1991, p. 29).

By the mid-1990s, the region again began losing its appeal to human geographers due in part to major theoretical shifts in the discipline and the perceived erosion of place and space by globalization. Specifically, a large and important body of work from post-structural, feminist, critical realist, and postmodernist perspectives illustrated the value of intensive, small-scale case studies in the production of geographic knowledge. At the other end of the spatial scale, accelerating globalization was argued to have created a borderless world where, ironically, regions had no place (e.g. Ohmae, 1995; Strange, 1996).

In recent years, as the “hyperbolic claims” (Elden, 2005, p. 9) of a borderless world have been critiqued with increasing frequency, a number of notable geographers have made the case for a revitalized engagement with the region (e.g. Paasi, 2009; Jonas, 2012; 2013; Agnew,

2013). Of particular relevance to this issue of *HJSR* is a recent forum in *Dialogues in Human Geography* in which Murphy cites the overwhelming predominance of small-scale case studies in his discipline and consequent need for an “expanded geographic engagement with grand regional narratives” (2013, p. 131). He defines a grand regional narrative as a “generalized, empirically grounded account of what is going on, or has gone on, in a region of significant size and importance to be widely viewed as a significant presence on the world stage” (p. 132). Underpinning this call for scholarship on large-scale regions is a concern with real-world outcomes because the manner in which a region is narrated figures prominently in public debates. For example, the Global North-Global South regional narrative is not only imprecise but also helps sustain environmental determinist stereotypes and undermines the idea that geographic spaces are modifiable.

While Murphy’s focus is macro-scale, his basic argument applies to meso-scale regions like the State of Jefferson, whose narration has been limited to only a few memes. In light of these matters, this issue of *HJSR* aims to contribute to a more robust narration and therefore conceptualization of Jefferson through a series of empirically rich cases. This multidisciplinary project is comprised of works by authors from a range of disciplines, including sociology, political science, journalism, geography, forestry, environmental planning, and the visual arts. Prior to introducing the contributions to this issue of *HJSR*, however, I offer two geographic metaphors to frame the understandings and discussions of Jefferson contained herein.

### Jefferson as a Borderland, Jefferson as a Periphery

Jefferson may be viewed as a *borderland*, which, as studied by geographers and other social scientists, is a type of region located adjacent to or around the political boundaries of nation-states. The concept can be applied to Jefferson, not least due to the presence of the Oregon-California border, because this is an area where populations converge and complex cultural and political interactions occur. Augelli writes that “borderlands tend to be zones of cultural overlap and political instability where the...identity and loyalties of the people often become blurred” (1980, p. 19). Wilson and Donnan (1998) also say borderlands are characterized by shifting and multiple identities. This coming together of diverse populations in borderlands, according to Dear and Burridge (2005), might produce two outcomes. First is *integration*, defined as

mutually-agreeable contact leading to interdependencies that cause little or no change in contact partners and which does not require their geographical proximity, merging, or adjacency. Though integration, the essential constitution of contact partners remains intact, sovereign and unaltered. (p. 303)

The second potential outcome is *hybridization*, or the

contact that creates novel forms and practices that exist independently of antecedent forms and practices and requires that engaged agents be geographically adjacent for their production to occur. In short, hybrids exist when different cultures come together in the same place to create something that did not previously exist. (p. 303)

Borderlands are also shaped by their distance from state centers: the greater the distance, the weaker the bond, often resulting in a feeling of political marginalization (Rumley & Minghi, 1991; Kaplan, 1999). Feelings of extreme marginalization can lead to borderland residents seeking the creation of autonomous regions with a different set of rules and privileges (Mikesell & Murphy, 1991).

Jefferson may also be viewed as a *periphery*. This concept comes from Immanuel Wallerstein's macro-scale approach to world-systems analysis (1979; 2004). Whereas social scientists have traditionally taken the nation-state as their primary unit of analysis, Wallerstein argues that a single world-economy exists with an international division of labor. He separates the world into areas along a spectrum of economic functionality within a global capitalist system: at one pole is the *core* (the so-called First World), countries focused on higher-skill, capital-intensive production of goods and services; at the other pole is the *periphery* (the so-called Third World), countries focused on low-skill, labor-intensive extraction of raw materials; in between is the *semi-periphery*, exhibiting characteristics of both the core and periphery. The core and periphery are dependent on each other as the periphery sends low-value raw materials to the core for transformation into high-value consumer goods, which are then sold back to the periphery. In this self-reinforcing cycle, the dominance of the core over the periphery is ensured by global-scale political structures established through colonialism. Economic development in peripheral countries is consequently problematized.

Although Wallerstein's world-systems framework considers geopolitics and the comprehensive historical development of the capitalist world-economy as a whole, geographers recognize that capital accumulation occurs just as unevenly *within* nation-states. Indeed, concepts such as core, semi-periphery, and periphery have been applied to intrastate analyses of socio-spatial relations (e.g. Hanna, 1995; Taylor, 1989; 1997). Considering Jefferson's historical reliance on resource-extractive industries and recent struggles to create new, post-extractive and post-industrial economic bases, the concept of "internal periphery" could be applied to the region.

## Overview of Issue

The papers selected for inclusion in this issue of *HJSR* represent the eclectic possibilities for Jefferson regional studies. As a body, the articles contribute a more robust narration of Jefferson by providing greater historical contextualization, bringing Indigenous perspectives into the discussion, confronting socio-economic challenges, addressing environmental issues, and considering potential futures for the region.

The collection opens with Peter Laufer's "All We Ask Is To Be Left Alone." Drawing on archival resources as well as interviews and personal observations, Laufer historicizes State of Jefferson secessionism and places it in the region's current context. His investigation of the 1941 secessionist movement exposes some the year's most notorious events as having been staged in collusion with national media for the consumption of audiences across the country. That the mythology of 1941 endures, inspiring secessionism in the borderland region today and continuing to fascinate audiences afar, begs the question: To what extent is the story of Jefferson an American story?

Second is "Sawdust Empire, Sawdust Mountain, and Beyond: The Challenges for the State of Jefferson as Seen Through the Photographs of Eirik Johnson's *Sawdust Mountain*" by Gordon and Peter Stillman. By interpreting photographs of contemporary Jeffersonians and the landscapes they inhabit, the Stillmans analyze how the region's boom-and-bust history of

logging and fishing has shaped a people who today, with their traditional economic activities in sharp decline, face an uncertain future. Will they continue to pursue resource extraction, modified to suit contemporary values? Will their rural landscapes give way to suburbs? Or will they retreat from the very land that shaped their identity? In posing these questions, the Stillmans suggest a peripheral existence for their subjects.

The following three articles bring Native Americans into the Jefferson narrative as they confront issues related to the continued settlement of Klamath Basin tribal lands by Euro-Americans. First is Laura Hurwitz's "Got Land? Thank an Indian: Settler Colonialism and the White Settler in the Karuk Ancestral Territory." Through a series of interviews, Hurwitz examines the complexities and ambiguities that she and other white settlers living in the Karuk Ancestral Territory face while taking accountability for their involvement in a colonial system. In addition to exploring the ongoing process of Indigenous disenfranchisement common to the American West, Hurwitz also upsets the mythology of Jeffersonian rugged individualism by seeing borderland settlers much like the Stillmans view the subjects of *Sawdust Mountain*—grappling with fragile identities and facing insecure futures.

The second article addressing the legacies of Euro-American settlement of tribal lands is Kari Norgaard's "The Politics of Fire and the Social Impacts of Fire Exclusion on the Klamath." Norgaard argues that white settlers have not only affected Indigenous livelihoods through land parcelization and private ownership but also by interrupting and preventing traditional land-management practices. In doing so she draws attention to the changing biogeography of Jefferson following introduction of national fire suppression policies. Using data from interviews, surveys, and other documents, Norgaard specifically examines how fire suppression has disrupted the processes by which biodiversity was made greater by Indigenous activity, which in turn has negatively impacted the Karuk people's cultural practices, political sovereignty, social relations, subsistence activities, and their mental and physical health. The question of identity is again addressed in this article.

The final contribution examining the legacies of Euro-American settlement of tribal lands is "Who Will Own the Mazama? Tribal Power and Forest Ownership in the Klamath Basin" by Erin Kelly and Hannah Gosnell. Using the Mazama forest tract as a case study of changing power relations between Native Americans, timber companies, and private landowners, Kelly and Gosnell explore a complex history of tribal land ownership over the past 150 years as the region has moved from an extractive to a post-extractive economy. The Mazama was originally part of the Karuk Ancestral Territory in the Klamath Basin before it became federal property and then logged by private interests. The tract—called a "tree farm" for much of the 20<sup>th</sup> century—was initially sold to a large timber company before a series of post-1980 sales to smaller entities. In recent years, as the timber value of such tracts has declined, companies have begun to sell parcels to suburban developers. Kelly and Gosnell see the current post-extractive economy as a potential boon for Native American tribes who may finally have the opportunity to procure ancestral lands that, as noted by Hurwitz and Norgaard, have been illegitimately acquired, settled, and degraded by Euro-Americans.

Two subsequent articles are included as examples of how economics in the State of Jefferson may operate going forward. Seth Crawford's "Estimating the Quasi-Underground: Oregon's Informal Marijuana Economy" examines Oregon's marijuana "shadow economy" using web-based surveys to identify the most significant factors related to private marijuana use and sales. His goal is to determine the extent to which legalization may benefit the state through tax levies and a decrease in arrests and incarceration. After discovering that marijuana could

currently be the state's most important crop, and has the potential to become the third largest commodity overall, Crawford recommends that future levies be assessed keeping in mind the importance of this crop to local economies. He specifically notes that the production and sales structure of the industry has developed to benefit economically depressed areas and individuals. Of particular interest to Jefferson scholars is his discovery that several southern Oregon counties currently hold the most medical marijuana permits per capita, that most growers and vendors appear to engage in this "shadow economy" to supplement otherwise meager incomes, and that state-level regulation has the potential to further cripple those counties in Jefferson.

Ed Madison's "The State of Jefferson and the Future of Regional Journalism" addresses the recent national movement toward media consolidation in rural areas. This phenomenon leads to underrepresentation of such areas, contributing to regions like Jefferson becoming further marginalized. Madison explores university-sponsored, student-driven coverage as a possible solution to journalistic silence in Josephine County, Oregon. He details the experience of University of Oregon students in covering news in Grants Pass, complete with practical examples of the challenges and opportunities afforded by arrangements with local law enforcement. The future of journalism in regions like Jefferson may lie in partnerships between educational institutions and local municipalities.

A third article related to possible futures is "Scenario Planning for Building Coastal Resilience in the Face of Sea Level Rise: The case of Jacobs Avenue, Eureka, CA" by Kerry McNamee, Evan Wisheropp, Christopher Weinstein, Andrew Nugent, and Laurie Richmond. The authors were tasked with compiling a feasibility study of management options accounting for sea level change for an economically important area of Eureka, Humboldt County, California. Jacobs Avenue, they argue, may be representative of other coastal communities in northern California and southern Oregon that are experiencing the most rapid rates of sea level rise compared to the rest of the West Coast. They set forth three scenarios: no action, rebuild/fortify, and strategic retreat. After taking finances and residents' sense of place into account, the authors recommend a combination of rebuilding/fortification and strategic retreat. The consideration of strategic retreat echoes the Stillmans' suggestion that one possible future for the State of Jefferson is retreat, where residents realize the near futility of resisting the decline in traditional economies and instead let nature take its course.

The final two entries represent alternative conceptualizations of Jefferson, both with an artistic inclination. The first, Becky Evans' "Learning the Klamath Knot...and Creating a Bureau of Reclamation," follows the author as she moves through the region collecting materials and inspiration for creating what she calls the "Bureau of Reclamation." In her work, Evans uses locally sourced material to create artwork that reflects the identity of Jefferson as both wild and tamed; her goal is to reimagine the region without human influence, including through imagined removal of dams.

The second is an interview with the author of *The Oregon Experiment*, Keith Scribner. Scribner wrote this fictionalized account of two couples living in Oregon at the time of a secessionist movement modeled after that of Jefferson. He writes not only about separation at the political level, but also at the personal level as he explores the chasms between each of his main characters. This reimagination of secession as a challenge to state- and self-integrity is compelling in light of other articles in this issue that touch on the meaning of Jefferson to different groups and individuals.



This special issue of the *HJSR* also includes two geovisualizations of Jefferson's economic landscape and temporal location among other 20<sup>th</sup>-century secession movements. Six reviews of recent books dealing with regional topics conclude this issue, each contributed by Humboldt State University faculty and students.

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# All We Ask Is To Be Left Alone

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## Abstract

*Since the mid-19th century, disaffected citizens of California's far northern counties have conspired with their fellows in southern Oregon to break free from distant state governments and remedy by themselves the social and economic ills they blame, in part, on the relative unimportance the rest of their states attaches to them and their territory. Impoverished relative to the urban centers of Oregon and California, the Jeffersonians' sense of economic and political marginalization strengthens their connection to a regional identity. Jefferson's population today is at most just over half a million, a tiny fraction of California and Oregon. But the frustrations that motivated these iconoclasts to seek relief via threats of autonomy continue, and their experiences provide a window to understanding similar frustrations across the United States. The growing distrust of government, confusion about what constitutes a vibrant democracy, the rise of populist leaders—all factors on the national stage—are key themes in the regional story of Jefferson.*

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It is in the *Yreka Mountain Herald* where I've found the earliest recorded announcement of a secessionists' conspiracy in what's become known as the State of Jefferson. In the January 14, 1854 edition of the newspaper—less than four years after California became the 31<sup>st</sup> state and just over five years before Oregon became the 33<sup>rd</sup>—a notice headlined “Siskiyou Mass Meeting” called on citizens to meet in the Yreka Hotel that Saturday evening “for the purpose of taking measures to secure the formation at an early day of a new territory out of certain portions of Northern California and Southern Oregon” (*Yreka Mountain Herald*, 1854). A supportive adjacent letter to the editor argues in favor of the idea with a simple plea: “Let us then have a New Territory, and let power, civil and military, pass into hands who understand our wants and will, and let them wield it in subservience [sic] to our wishes.”

Even before California became a state there were suggestions it should be cut into smaller political entities. And as relatively recently as 1978 the Assembly Bill 2929, introduced by Assemblyman Barry Keene (and cosponsored by 14 of his colleagues), called for the “consent of the Legislature” to the secession of much of the north part of the state. “The new state shall be known as ‘Alta California’ and shall consist of that territory lying north of a line representing the crest of the Tehachapi Mountain Range and extended therefrom west to the Pacific Ocean and east to the eastern boundary of the State of California,” read the bill’s legalize. “The State of California,” promised the legislators, “shall retain the name ‘California’ and shall consist of all territory south of the new state.”

The bill died, but a footnote to it adds some perspective to the history of dividing California. It reminds us that the first attempt was when California was still Mexican territory, back in 1825 (just four years after liberation from Spanish rule), and that despite the fact that most contemporary split talk is instigated in the north, southerners called for separation in 1852 on through 1859, and again in 1907. Another footnote to Barry Keene's state-splitting legacy is indicative of the distaste many of us from northern California feel for our southern Californian brethren. When Keen was asked about the locales for capital cities of the two Californias, he agreed that the north should keep Sacramento since it likely would fall in northern territory. As for the south, "That's their problem," he said. "I suggest Disneyland" (Di Leo & Smith, 1983, p. 165).

Today travelers racing up Interstate 5 toward Yreka from Sacramento and points south cannot miss the huge letters screaming "State of Jefferson" painted on the roof of a hay barn that faces oncoming freeway traffic (see Figure 1).



**Figure 1.** The State of Jefferson barn located south of Yreka alongside Interstate 5 (photograph by Sara Matthews).

Unlike Yreka, Port Orford, Oregon, offers no obvious suggestion that it's a capital of Jefferson. Yet if there is any one character in this story who can stake a claim to being the George Washington of Jefferson it must be Port Orford's first mayor, Gilbert C. Gable—even though he died in 1941 just days before local boosters declared Jefferson free of California and Oregon. I've arrived at this fogbound, desolate-looking outpost in search of the character, or at least his legacy.

Jefferson legacy and history come alive in the squat Port Orford City Hall. A sign out front identifies that the "Mayor Gilbert E. Gables Council Chambers" is inside.

Inside is Mayor Gable's official portrait, a photograph hanging on the wall behind the city councilor's chairs, and centered between the American and Oregon flags. He looks almost movie-star-handsome, staring with what seems like melancholy acceptance at the camera, the wide suit coat lapels and slicked back hair both anchoring him in the late 1930s or early 1940s.



In a display case is a reminder of one of Gilbert Gable's earlier careers: an announcement from his agent, the Famous Speakers Bureau, saying that he is just back from the American Southwest and available to lecture for a fee. "Probably no living man has gone happily and delightfully through an experience more packed with spectacular achievement in explorations, scientific discoveries and the romance of pioneering adventure," exudes the brochure. It promises that Gable will tell stories of finding the world's largest trove of dinosaur tracks and a lost Indian city while finding time to experience "native religious rites as a brother of the tribe." The city hall tribute belies Mayor Gable's modest characterization of himself just a couple of days before he died as "the hick mayor of the Westernmost city of the United States" (Delaplane, 1941b, p. 1).

Throughout the 1850s the Indians and white settlers fought over Jefferson land and its use. The settlers wanted to farm and mine the natives' ancestral home territories. When I returned to Eugene from my visit to Port Orford I sat in the somber special collections reading room in the University of Oregon's Knight Library, reading through the Cayuse, Yakima, and Rogue River Wars papers. The collection of original letters written by soldiers, politicians, businessmen and farmers brings the genocide perpetrated in my neighborhood into stark relief. As the library's own summary of its primary sources concludes, "Many tribal members succumbed to either military attack or disease, and most of the remaining populations were sent to live on reservations." The carefully preserved letters are a reminder that the settlers suffered, too. This was brutal war. There are letters to and from newspaperman and Oregon Territory Governor George L. Curry recounting details of ongoing conflict (an Indian massacre, an attack by settlers, stolen guns and animals). The correspondence makes the Wild West feel real and recent in the silence of the high-ceiled reading room.

I held a letter dated July 15, 1856 from Thomas Van Pelt to John K. Lamerick, a commander of the Oregon Volunteers. The elegant cursive is written in sepia ink. "We have to take up our rifles and go fighting again," he writes, because "the redskins are not satisfied or whipped." He recounts fighting in the Coast Range between Crescent City and Port Orford. "They were fired upon by a party of Indians and two of them were kild [sic] on the spot." Van Pelt reports his fast response. "I immediately raised 20 men," and they headed "to the place of the slaughter, and found and buried the bodies of the 2 men." Van Pelt offered his military expertise to the war effort in exchange for a commission with the Volunteers. "I have had considerable experience in fighting Indians. My manner of fighting has always bin [sic] successful." He calls on Lamerick to "attend to this business immediately and relieve your fellow citizens on the coast of southern Oregon. If you comply with this important request, I will raise the men. With very much respect I remain your humble servant."

While in Port Orford I secured appointments with two longtime prominent residents. Dolores Mayea, who informs me when I ask for a Sunday morning appointment to come anytime because "I don't go to church," and 93-year-old Lucille Douglass, who comes up with even a better line when I ask if we can meet. "I'm not going anywhere," she informs me.

Dolores Mayea lives along Garrison Lake, just a few blocks from the Highway 101 main drag through Port Orford—Oregon Street—and just east of the sand dunes that dominate so much of the Oregon coast. The lake was named for John B. Garrison, listed in some accounts as one of original pioneers who came to what was not yet known as Port Orford in 1851 aboard the steamer Sea Gull (and who escaped north after the attacks at Battle Rock) (CLR, 2014). Hers is a 1950s-style ranch house that would look comfortable anywhere in the American

suburbs. The mantle is lined with family photographs going back generations to a formal black and white study of her parents. Her father was born along the southern Oregon coast—a logger, rancher and land developer. Her mother moved west with her family from Idaho, looking for work. This has been Mayea's home for 61 years, the place where she and her late husband raised five children—and all of them left Port Orford for lives lived elsewhere.

A handsome, robust woman in her mid-80s, Dolores Mayea leans back in what looks like it must be her favorite chair, the sparkling lake providing a backdrop over her shoulders and tells stories of a city that's disappearing—no jobs and no next generation. The kids get out of high school and they skedaddle. "There isn't any work here," she laments. "There are no more mills. There's no more anything. There's some fishing. But the regulations are just getting worse and worse and worse all the time." Her voice drops as she says with finality, "It's sad."

That seems an appropriate word for Port Orford: sad. One out-of-business storefront after another lines Oregon Street, jobs are few, and a brain and brawn drain all add up to sad times for Port Orford no matter how spectacular the countryside looks.

"In the '50s we had all kinds of businesses." Mayea shows me a couple of old newspapers from those days, the pages jammed with display advertising for local businesses. "When our kids were growing up we had a couple of dress shops, a shoe store, two grocery stores, three gas stations, a men's clothing store, restaurants. We had a wonderful drug store, and a variety store."

"You could get what you needed without leaving town," I offer.

"Right. It has changed," she says with complete resignation, "considerably." She expresses no expectation that those glory days will return. "Art galleries, that's all we have anymore."

"What's it like," I ask, "to see the place where you've lived all your life deteriorate?" Deteriorate is the correct word. There is nothing much compelling about the streetscape in Port Orford, unless your eye is lured by the desolate and the dilapidated.

"It's sad," she says again, a statement that seems odd given how delightful her home and its location appear. The devastated economy does not diminish the spectacular natural beauty of the place: soaring headlands, broad beaches, glorious sunsets (when the fog lifts!).

Mayor Gable and his contemporaries—and Mayea remembers the mayor from her childhood—wanted the government to build better roads in order to make exploitation of Jefferson's minerals and timber more efficient.

"And we still don't have adequate roads," she tells me.

**A**cross the highway from Dolores Mayea's place and just down the street from the blue and white Grantland Mayfield Gallery is the faded glory of Lucille Douglass's house. It's a classic 19<sup>th</sup>-century Victorian-influenced two-story wood frame structure sorely in need of paint and repair, a lot of paint and repair. Lace curtains decorate some windows; one is boarded up with a piece of plywood. Weeds fill the yard; the porch is out of plumb.

Lucille Douglass invited me in, blaming her bent body on a fall down the stairs, and warning us from expecting to learn much from her because she suffers from Alzheimer's disease. "The last two months," she insists, her voice strong and clear, her hair white. "I've lost my memory. With my sister in Seattle, that's all I talk about now. She thinks she's going the same way. Alzheimer's. A dirty word." She titters, that's the best word for the cynical laugh that follows her self-diagnosis. "Let's get back to Mayor Gable," she orders about our

interview, showing no overt signs of dementia and acting like a woman accustomed to being in charge.

“He was a doer,” she says about Gable, although she only remembers meeting him, not knowing him. “I think I was still in high school when they dedicated the new jetty down there.” That was 1935. “My memory is slipping. I’m going to use that as an excuse.” We’re sitting around a large dining table in a cluttered room. She points to a drawer and offers me the opportunity to root around in it. “That’s mom’s filing cabinet.”

The drawer is full of family papers: birth and death certificates, that sort of thing. And tucked away in the family history is a yellowing copy of the *Port Orford Post*, dated December 5, 1941—in fine shape except for a few crumbles and tears. “Mayor Gilbert Gable Dies Suddenly Here,” is the banner headline.

“Well, I’ll be darned,” she says, opening the paper and offering a “Whoops!” as a page of the yellowing artifact rips in her hands. “He succumbed to indigestion,” she reports after glancing at the obituary.

Hundreds of miles south, the *San Francisco Chronicle* scooped the *Post* by a day with news of the mayor’s demise. “I suppose I was the last newspaperman to interview him,” wrote the paper’s Stanton Delaplane (1941b), who was back at his *Chronicle* desk after writing the series of reports on the Jefferson secession movement that would win the Pulitzer Prize for him and his paper. “A friendly, warm talk,” Delaplane called his visit, “in a redwood cabin while the Oregon skies poured dark rain into the pine-covered hills.” Gable, he surmised, probably knew that Jefferson would never become an independent state, but figured the massive publicity generated by threats to secede could force Salem and Sacramento to be more responsive to Jefferson’s cries for help.

“The other night in Oregon,” Delaplane’s dispatch continued, “I accused him of being a romantic. I said, ‘I’m going to write that Gilbert Gable is watching the sun go down each evening over the Pacific with a golden dream in his eyes.’ And he laughed and said, ‘That’s newspaper stuff, all right.’ He died yesterday of acute indigestion,” Delaplane stuck with the official cause of death despite talk since of alcohol abuse, but added, “and perhaps he was too tense.” Referring to the national publicity Gable generated with his talk of Curry County secession from Oregon, Delaplane called the mayor “a pioneer who used the tools at hand to fulfill his dreams of the West as men a century ago used long rifles and axes to build the Nation. He had an historical future, not as a forty-ninth State Governor, but as one of the last pioneers.”

More than 70 years later, James Auburn is Port Orford mayor. His vision for his forlorn city does not mirror his predecessor’s, but as he fantasizes it to me, it sounds just as dreamy, just as far-fetched and just as—to be blunt—nuts. Mayor Auburn does not see Port Orford as a rival to Portland and San Francisco. He knows there is no potential at this most westerly municipality on the Lower 48 for a world-class city and a global port. Mayor Auburn fancies windswept, fogbound, still-isolated Port Orford as the next Carmel-by-the-Sea. Mayor Auburn, like Mayor Gable before him, is no rube. He is a physicist with a PhD from Oregon State University. He spent years in the Navy and working for Bell Laboratories back East before returning to Oregon and moving to Port Orford, the spot he chose years before as an ideal locale for retirement.

“I really fell in love with the place,” he explains.

But it's hard to imagine he researched much when he decided to equate Port Orford with Carmel. Port Orford is wetter each average year than Carmel by—dramatic pause—over 51 inches of rain (Weather Channel, 2014). And what about Carmel's fine dining, the gracious architecture, the elegant shops, the romantic ambiance, the beaches, the sun—the warmth?

"The town has changed quite a bit since then," Mayor Auburn says thinking back to days when Gilbert Gable was the city's mayor. "I think back in the early 1940s we had more bars and saloons in town than we had churches and now it's reversed. We probably have more churches than bars."

Of course I ask him why.

"It was a lumbering town back then," he reminds me, noting the mills in the city that ran long hours, filled with thirsty workers. "There are no mills in town now."

The 1941 Jefferson state escapade began in earnest October 2, 1941. A group of frustrated businessmen—inspired to act by Mayor Gable—addressed a session of the Curry County court at a meeting in Gold Beach, the county seat. The movers-and-shakers were seeking redress for their complaints about poor roads. Easy access to the county's natural resources—particular metals of value for the expected upcoming war effort—was impossible. The petitioners blamed the bad roads on disregard of Curry County by those Salem politicians representing the rest of Oregon. The court named a commission (Mayor Gable, of course, included) to study the complaints and Gable's attention-getting secession idea. The publicity-savvy mayor publically floated his brainstorm: join Curry County to California in hopes of getting better treatment from Sacramento than the passed-by county was getting from Salem. Culbert Olson, California's governor, was bemused when he heard the news, offering a sound bite that set the stage for the upcoming secession show when he said he was "glad to know they think enough of California to want to join it" (Oakland Tribune, 1941).

In Portland, the *Oregonian* mocked the news in an editorial titled "Curry Beware." The newspaper warned of unintended consequences. "If ambition be realized, Curry would of course immediately acquire the glorious climate of California and become a haven for retired mid-west farmers; development of its mineral riches would add much more to the population. Gold Beach would become a metropolis with offensive slums, and Latin quarters, and traffic problems and police scandals and what not to cause dislike of it throughout the hinterland. Whereupon the hinterland would logically secede from Gold Beach." The editorial concluded with a snide plea. "The Curry county plan to become a county of California is so full of potential disaster that once again its people are beseeched to pause and consider" (Oregonian, 1941).

Dismissing the public derision, a meeting was called for in Yreka. There Mayor Gable rallied representatives from Del Norte and Siskiyou counties on the California side to join what became his movement for independence now that Governor Olson had snubbed his overture to become a Californian. The Yreka Chamber of Commerce voted to study statehood for the loose alliance. Next on the statehood bandwagon was the local organization of young civic leaders, the Yreka 20-30 Club. Its members announced that the confederation would secede on Thursdays in "patriotic rebellion" against Oregon and California.

Enter Stanton Delaplane, the San Francisco scribe who knew that there are no slow news days, only slow news reporters.

Stanton Delaplane was a reporter in the tradition of that classic tale of newspapering, the Ben Hecht and Charles MacArthur play, *The Front Page*. His was a world populated by figures like the fictional star reporter Hildy, who promised his fiancée in the Billy Wilder film version, “I’m going to cut out drinking and swearing and everything connected with the crazy newspaper business! Honey, I’ll never even read a newspaper.”

Bill German edited the newspaper’s stories about Mayor Gable and his nascent statehood movement. “I was one of Delaplane’s editors in the exciting year of 1941,” he told me when we met. I wanted editor German’s take on the rumor I’d been picking up that it was Delaplane who wrote the State of Jefferson’s famous “Proclamation of Independence” for the secessionists and that it was Delaplane who suggested that they throw a roadblock across Highway 99, both to help out the cause and to provide himself with good copy for the *Chronicle*.

The Jefferson series was the second Pulitzer Prize for the *Chronicle*. “There was no story there really,” is Bill German’s interpretation of the front-page splash the paper gave the Jefferson dispatches. “It was never going to happen,” he says about secession. “I knew Delaplane and I knew that whatever he was writing, two thirds of it probably was stuff he was making up.” It won the Pulitzer, German believes, because the Prize committee was looking for a story that had nothing to do with the expected war. The committee said otherwise, noting that it awarded Delaplane the prize for distinguished reportorial work during the year 1941.

“That winter was a very grim and sad time for America,” Bill German remembers. “The Japanese were going to land. We had a blackout every night. It was a lucky thing for the *Chronicle*,” he says about the prize, “and a wonderful thing for Delaplane.”

Not that German is necessarily being judgmental when he calls the bulk of Delaplane’s Jefferson reporting fiction. “He had a knack,” he adds with approval, calling Delaplane’s prose “shiny and wonderful” with a tone of voice I’m already beginning to recognize expresses German’s droll sense of humor, and which is augmented by an extra sparkle in his eyes. “He said he went up there and these people had no idea of how you promote something. Mayor Gable thought it was a great idea to give out the proclamation to motorists as they were crossing the border.”

I interrupt the retired editor. “You’re saying the roadblocks and the Proclamation of Independence were Delaplane’s ideas?”

“I can’t prove that,” he says. “But in interviews, he said that.”

Deep in the special collections of the Mill Valley, California, library, Delaplane himself checks in with details about his Pulitzer-winning escapades in Jefferson. The year is 1978, 37 years after he filed his dispatches from the north country (and 10 years before he died at his typewriter: his last *Chronicle* column was published that day). In October 1978 Delaplane sat for an interview with Mill Valley historian Carl Mosher.

“I began taking charge of it,” he told Mosher about the nascent secessionist movement. “I could see they needed little help.” As he talked with Mosher, Delaplane explained how he helped create the breaking story he was covering, calling it “a press agent kind of thing.” He called Mayor Gable “a simple, barefoot press agent [who] got himself elected mayor of Port Orford. He was press-agenting it,” Delaplane said about Gable’s initial calls for secession, “and I was press-agenting it. So we got together in a little cabin in a small town in Oregon” (Mosher, 1978).



Carl Mosher interrupted and suggested that the two compared notes that rainy night of talk and drink.

“Compared notes and decided how we would do it,” Delaplane agreed. The only thing the matter with it was he died the next day of a heart attack.” The newsman soberly analyzed what happened next. “It made for a very dramatic ending to a seven-day series, and I think that is what impressed the Pulitzer Prize committee.” The Jefferson secession, explained Delaplane, “was the kind of thing that I think appealed to them—the last frontier, the guys up there packing guns and things like that. It was the right place to be at the right time,” he said about his assignment to the story, “which is the most of anybody’s business: to be in the right place at the right time.”

The legend of the 1941 Jefferson movement is based on the Proclamation of Independence and on the Highway 99 roadblocks. In the interview with Mosher, Delaplane takes full credit for creating the headline-making elements of the news story he was sent to report.

**T**he 1941 Proclamation of Independence remains popular throughout Jefferson. The handbills announced:

*You are now entering Jefferson the 49<sup>th</sup> State of the Union.*

*Jefferson is now in patriotic rebellion against the States of California and Oregon.*

*This State has seceded from California and Oregon this Thursday, November 27, 1941.*

*Patriotic Jeffersonians intend to secede each Thursday until further notice.*

*For the next hundred miles as you drive along Highway 99, you are travelling parallel to the greatest copper belt in the Far West, seventy-five miles west of here.*

*The United States government needs this vital mineral. But gross neglect by California and Oregon deprives us of necessary roads to bring out copper ore.*

*If you don’t believe this, drive down the Klamath River highway and see for yourself. Take your chains, shovel and dynamite.*

*Until California and Oregon build a road into the copper country, Jefferson, as a defense-minded Sate, will be forced to rebel each Thursday and act as a separate State.*

*(Please carry this proclamation with you and pass them out on your way.)*

The Proclamation of Independence was signed by the State of Jefferson Citizens Committee, which announced its temporary state capital: Yreka.

**B**y November 29, 1941 the motley Jefferson players who formed the State of Jefferson Citizens Committee started taking themselves seriously, or so they said in a letter to officials in both Oregon and California, a letter demanding better roads. “Gentlemen you are playing with T.N.T.,” they wrote. “And we are serious.”

When Mayor Gable died he was calling himself “the acting chief executive of the new state” under authority he apparently granted to himself (Davis, 1952). The leadership void quickly was filled by another self-appointed guardian of the new state, California State Senator Randolph Collier. “Gilbert Gable would not want us to falter now,” he told anyone who would listen, “after the project he supported so long and so well was near success” (Wilson, 2005, p. 22). Senator Collier and other self-appointed Jefferson movers-and-shakers picked a retired Crescent City judge, John Childs, as their new “governor.” Judge Childs was experienced at the role of pseudo-governor. Back in 1935 he had organized leaders of neighboring counties to his own Del Norte who were frustrated by bad roads. They threatened secession from California to draw attention to their complaints.

The 1941 ad hoc State of Jefferson Citizens Committee decided to stage a secession parade through downtown Yreka and a rousing speech by “Governor” Childs at a rally in front of the courthouse. Or perhaps the newsreel crews sent to Jefferson from Hollywood directed the committee to organize the march and rally because their cameras needed the “news.” Which came first seems lost to memory and history. Aiding and abetting the carnival atmosphere was the *Siskiyou Daily News* and its coverage of the statehood movement. “Please attend the filming and be photographed,” cajoled the newspaper. “Please wear Western clothes if they are available. Parents are urged to bring their children. Two hundred people in western costumes will be selected to march past the cameras for close ups” (*Siskiyou Daily News*, 1941). Hundreds of locals responded to the paper’s call. They paraded with torches up Miner Street. They crowded in front of the courthouse to hear their new “governor” speak. Many obeyed the request that they wear Western clothes.

When I screen the scratchy old black-and-white remnants of newsreel footage, the parade and rally scenes look like the set of a Hollywood Western. In fact, that’s what they were. Former California State Historian W. N. Davis, Jr. called the entire show “a staged production.” He cites a newsreel cameraman shouting “Action!” *a la* Hollywood, followed by specific instructions to the players from the production’s director. “Get over there and be looking at the map,” the extras are told. A map of Jefferson was posted next to the speakers’ platform. “Don’t look at the camera!” As the cameras rolled, the orders continued. “Show a little enthusiasm. Wave your arms!” Hollywood knew what it wanted. “When the governor is introduced, throw you hats into the air!”

Despite the silliness on display, the grievances of the isolated counties were real and at least some of the actors began to believe their own secessionist propaganda. “Governor” Childs spoke for them when he concluded his inaugural speech with a rousing, “Yes, we’re in earnest about this matter of the State of Jefferson.”

The next day the *New York Times* soberly reported the story under the headline, “‘49<sup>th</sup> State’ Elects Its Own ‘Governor’.” The unnamed *Times* correspondent reported with a Yreka dateline, “Rebellious citizens of the five counties, angered by the failure of the two States to provide good roads and help promote the development of the mineral resources of the region, cheered the new ‘Governor’ as he delivered his acceptance speech on a platform flanked by a portrait of Thomas Jefferson and a map of the border counties” (*New York Times*, 1941).<sup>1</sup> The article describes a “flag-draped Main Street” and “pistol-belted miners” marching down it, many waving placards with legends that continue to be quoted by Jefferson enthusiasts: “Our

<sup>1</sup> Oregon’s Curry County, along with Siskiyou, Del Norte, Lassen, and Trinity counties in California, made up the 1941 version of Jefferson.

Roads Are Not Passable/Hardly Jackassable” and “The Last Frontier/Our Roads Are Paved With Promises.” With a dramatic flair that the newsreel manipulators could envy, the *Times* story reported, “Mountain horsemen barricaded the main highways once more to inform”—and here it quoted the Proclamation of Independence Stanton Delaplane took credit for writing—that Jefferson was in “patriotic rebellion.” The only hint in the 1941 *Times* story that the secession movement was theater comes in its last sentence, an acknowledgment that the late Mayor Gable conjured up the whole scheme. “A former New York and Philadelphia explorer and publicity man,” reports the paper, “he conceived the ‘secession’ movement as a regional advertising stunt.”

As the stunt snowballed, Delaplane reported that Jefferson merchants were talking about placing “good road” buckets next to their cash registers to stash sales tax revenue pennies, which would be seized by the new state if Oregon and California did not do more for Jefferson. “‘No more copper from Jefferson until Governor Olson drives over these roads and digs it out of Siskiyou’ was the slogan today,” he reported (Delaplane, 1941a, p. 7). A telegram was dispatched to Governor Olson. “If California wants copper,” it said referring the three percent state sales tax, “they can come up here and dig for it. We have plenty” (Davies, 1941, p. 25).

“Governor” Childs embraced—at least in his public speeches—the notion that Jefferson would be better off without Salem and Sacramento. “The State of Jefferson is the natural division geographically, topographically and emotionally,” he announced. “In many ways it is a world unto itself,” he rhapsodized about his homeland, calling it “self-sufficient with enough water, fish, wildlife, farm, orchard land, mineral resources, and gumption to exist on its own” (Nolte 2001). No question that there was no gumption shortage.

Watching the newsreel footage is entertaining. At the side of the road is a sign delineating the Oregon California border—it’s not an official highway sign; it’s obviously been created for the photo op. A couple of cars (a sedan and a coupe with the rounded fenders, split windshields and streamlined look of the late 1930s and early ‘40s) cross in front of the sign. Five men costumed in that aforementioned Western clothing ride their horses toward the sign as two others on foot run into the frame with a rolled up replacement sign that they tack in place reading, of course, “State of Jefferson.” The horsemen dismount and they all cheer the sign, waving their hats and rifles triumphantly over their heads. Next the crew runs over to fetch their blockade. Another sign is staple-gunned in place: “Stop/State of Jefferson/Border Patrol” and it’s illustrated with the state seal’s double cross. Guns are drawn again—pistols and rifles—as a car approaches on cue and is stopped at the barricade. A “Proclamation of Independence” flyer is thrust in the passenger side window and as soon as it’s accepted the barricade swings aside. Suspension of disbelief for the viewer is just about impossible as cars speed up to the roadblock and slam on their brakes, the passengers taking the flyers as if such stops were routine, and the barricade swinging open just as soon as they grab the piece of paper.

Trucks spinning their wheels in mud show off the bad roads. The *Siskiyou Daily News* edition with the headline “Jefferson—51<sup>st</sup> State!” rolls off the press. At a Lions Club meeting the front page is held up for the assembled members, as is the double cross state seal painted on the gold pan. The crowd applauds. Collier hands the “governor” the state seal, and Childs holds it aloft. Next Judge Childs takes the leash of one of two bears brought to the carnival, Itchy and Scratchy. The newsreel boys must have been thrilled by the bear action.

Cut to the parade up Miner Street. “Oregon Forgot Us,” reads one sign. “Defense Needs Roads,” says another. Marchers carry torches, and one holds up a line drawing of Thomas Jefferson. “Give Us Roads or Else,” warns still another sign. There is a corps of uniformed

drum majorettes. Mud-splattered flatbed trucks filled with school kids waving still more signs as they ride up Miner Street, “V for Victory/Minerals for Defense/Money for Roads.” And the Sheriff’s Posse on horseback is the parade’s rear guard.

The newsreel shots from the courthouse lawn show a packed crowd, most of the men’s heads covered in typical 1940s-style fedoras. Judge Childs, dapper in a double-breasted suit with his white hair and wire-rimmed glasses, looks the part he’s playing: governor. He shakes hands with the other dignitaries, including Senator Randolph Collier, before he makes his rousing inauguration speech.

The black and white footage was never screened in theaters. Pearl Harbor was attacked before the film was processed, reproduced and distributed.

The 1941 protests continuing in Jefferson—whether frivolous or sincere (or both)—did not go unnoticed in Sacramento. One Fred W. Binks, the chief of the California Department of Finance Division of Budgets and Accounts, drafted a report titled *Fiscal Problems in the New State of Jefferson*, which he submitted to his boss on December 4, 1941, the same day Jeffersonians staged their torch lit parade in Yreka.

The financial picture painted by the economist is not a pretty one. “Independent status for the ‘State of Jefferson’ would be gained at the cost of luscious fiscal plums now enjoyed by the four California counties participating in this movement,” Binks concluded. His specific numbers are stark and question the vociferous complaints from the north country that Sacramento ignored Jefferson. “As a whole, these counties receive approximately \$1.32 from the State of California for each dollar paid in State taxes. In addition to this thirty-two cent direct bonus, the California ‘Jeffersonians’ receive free the multitude of general services provided by their present state government.” Binks listed access to higher courts, services of state departments such as Public Health, incarceration of Jefferson criminals in state prisons and the California Highway Patrol policing Jefferson roads all as representative examples. When he broke down the figures for each country, the balance sheet for Del Norte County (“Governor” Childs’ home) made the complaints of abandonment look ridiculous. For each dollar Del Norte sent south to Sacramento, the county enjoyed \$2.16 in services.

“All things considered,” reiterated Brinks, adding what sounds like a taste of urban arrogance, “the ‘State of Jefferson’ has made a rather good fiscal deal, whether the people there know it or not.” The report details several tax options Jefferson could consider to raise the funds needed to replicate services it then received from Sacramento, and argues why none is better than the status quo. “There seems to be only one tax capable of supporting the new State,” Brinks proclaims from his comfortable California state office building. “If the citizens of Jefferson could place a small tax upon the amusement which the people of California and Oregon are obtaining from their antics, the fiscal problems of the new Commonwealth would be solved for years to come.” Fred W. Binks: a bureaucrat with a sense of humor.

In a 2011 *New York Times* story about Riverside County Supervisor Jeff Stone talking up his idea to carve a South California out of the Golden State, Delaplane’s Jefferson stunts are legitimized once again in the paper’s news pages for a new generation. With no hint of skepticism the paper reports, “The closest any campaign came to success was in 1941, when several counties in northern California and southern Oregon campaigned to form the state of Jefferson. At the time, the counties said they did not have enough roads and created a ‘Proclamation of Independence.’ But just as the movement was gaining traction, Pearl Harbor

was attacked and residents put aside their dreams for a new state to work on the war effort” (Medina, 2011, A18).

Yes, that was the official version from “Governor” Childs. He professed statesmanship when he announced that Jefferson statehood was on hold for the duration. “In view of the National emergency,” the “governor” proclaimed as his last official statement, “the acting officers of the provisional territory of Jefferson here and now discontinue any and all activities” (San Francisco Chronicle, 1941). He claimed that the plot to secede was a success because it drew attention to the region’s need for better roads. “We have accomplished that purpose,” he declared.

Baloney, Delaplane told historian Carl Mosher. “They would have dribbled along with it,” he said about the Jefferson players and their zeal for the spotlight, “and if it had gone on,” he forecast about the escapade, “it would have gone downhill.” Walter B. Stafford, the editor of the *Siskiyou Daily News*, agreed. Stafford was responsible for the editorials advocating not just Jefferson but also the street theater that so intrigued the national audience. Yet on December 6, 1941, at a meeting of the amorphous citizens committee, he told his publicity-hungry colleagues it was time to shutter the show. “Next week,” he forecast, “someone else’s cat will be up a telegraph pole and getting all the publicity” (Davis, Jr., 1952, p. 135).

California State Historian W. N. Davis, Jr. studied the citizens committee and determined it was a loose amalgam—each member exerted whimsical pseudo authority “speaking his own mind to willing listeners, picked up and added to the ‘secession’ story. It is true,” he wrote in the *California Historical Society Quarterly* (1952), “by the time the movement reached its climax, a few of the promoters had shouted themselves into believing secession would be a good thing if it were constitutionally possible, but the feeling was nowhere widespread, as the press accounts would have one believe.”

We’ve been carving up our states since they were colonies. King Charles II gave the land that became Pennsylvania to William Penn in 1681 and he extended his reach to include Delaware. In 1776 Delaware not only signed the Declaration of Independence from the British Empire, it established itself as a state independent from Pennsylvania (Munroe, 1984). In 1764 the Crown gave Vermont to New York and in 1776 Vermonters asked the Continental Congress to admit them to the nascent nation as a separate state. New York objected and Vermont remained tied to its influential neighbor. A year later the tough Vermonters declared their independence from New York, but it wasn’t until 1790 that New York relinquished its claim, and it took until 1812 for the two states to agree on the boundary line between them (Morrissey, 1981). Maine started wrestling itself away from Massachusetts after the Revolution, but it took until 1820 for it to become part of the Union as a free state, while Missouri joined as a slave state. The Missouri Compromise added the two states without interfering with the nation’s balance of free versus slave states. West Virginians chose to remain in the Union when their neighbors seceded and attached their portion of the Old Dominion to the Confederacy.

Almost every state incubates some sort of Jefferson-like separatist movement. Residents of northern Minnesota, northern Wisconsin and the upper peninsula of Michigan talk of forming a state called Superior. They’ve been talking about it since the mid-1800s, a sure sign of that Superiorites of Finnish descent call *sisu*, courage and persistence (Twining, 1977).

In the early 1800s the Hudson’s Bay Company was referring to the Pacific Northwest as the Columbia District. Thomas Jefferson looked west and saw at the trading post that developed into Astoria, Oregon, “The germ of a great, free, and independent empire on that side of our

continent, and that liberty and self-government spreading from that side as well as from this side, will ensure their complete establishment over the whole” (Jefferson, 1813). It’s a quote Jeffersonians of all types like to seize as evidence of their independent heritage (often ignoring the slaughter with guns and disease that their land-grabbing immigrant precursors perpetrated on the vulnerable natives who they encountered during their Manifest Destiny-fueled march west across the American continent).

The year 1971 was a resurgent one for Jefferson. On the Oregon side, Josephine County Commissioner Kenneth W. Jackson traveled to a meeting of Oregon counties far across the state in Pendleton, carrying with him Jefferson T-shirts and a double cross flag. He promoted what would be—now that Alaska and Hawaii were part of the Union—the 51<sup>st</sup> state, advertising Grants Pass (his county seat) as its capital. Down in California at the same time, Siskiyou County Supervisor Earl Ager was remembering his days back in 1941, parading for Jefferson on the streets of Yreka. He agreed that the cause was still valid, but wanted the capital on the California side of the line (Rock, 1998). Supervisor Ager spouted radical goals for a Jefferson he proposed to lead as its first governor, and he insisted that—unlike the heritage of the 1941 action—his call for Jefferson was no “publicity stunt.” Vigilantes instead of police would be the answer to street criminals, he bragged. “The people of northern California and southern Oregon would take care of these sons of bitches. They wouldn’t need police.” This elected county official had ideas for those already tried and convicted of crimes. “There’s a lotta guys in prison that oughta be hung. If they hung ’em the first time they were put in prison they wouldn’t have to worry about putting them there a second time.”

Supervisor Ager’s target was not just the criminal justice system. He wanted to protect Jefferson’s natural resources from exploitation by southern California and northern Oregon. “I think we could pull our own weight in Jefferson just fine,” he told Redding newspaper reporter Garth Sanders, Jr. in November 1971, 30 years after “Governor” Childs in his inauguration address claimed such independence (Sanders, 1971, p. 1). “All we’d have to do is shut the water off to southern California and we’d have no problem bargaining with them.” Reporter Sanders helps us get a sense of Earl Ager’s personality. In his front-page story with its banner headline, Sanders tells us Supervisor Ager “snorted” and “snapped” his answers to questions, including the crucial, “Who should be the governor of Jefferson?”

“Me, that’s who!” he snorted and snapped.

In 1978 a depressed Klamath Falls turned to the Jefferson legend for help and staged the Jefferson State Stampede rodeo. The Oregon governor at the time, Vic Atiyeh, rode in the Main Street parade and joined Klamath Falls lawyer and longtime state legislator Harry Boivin for what the two called a summit meeting. Boivin was anointed governor of Jefferson for the duration of the rodeo. Klamath Falls funeral home director Jim Ward served as Jefferson secretary of state during the rodeo days. “It was just to try to get some business stirred up,” he said later. “The downtown area was slumping, and things were at a dead end here” (Kepple, 2000, p. 1).

On California Street in Jacksonville I sit myself down on a bench and study the red brick United States Hotel across the street. Built in 1880, the building is elegantly restored and for sale for just under \$1.5 million. The United States Hotel sits on the site of what was the Union Hotel, the locale where that meeting called by the *Yreka Herald* “for the purpose of taking into consideration the propriety of organizing a new territory (to be called Jackson), and

to devise means to effect the same” occurred on January 7, 1854 (Sutton, 1965, p. 56). Long before Jefferson there was Jackson.

On this summer evening, the 19<sup>th</sup>-century buildings lining the few blocks of downtown Jacksonville sparkle. Except for the automobiles and the tourists, it’s easy for me to sit on the bench and daydream, imagining the movers-and-shakers back in 1854 at a boisterous gathering, resolved to carve their own political entity out of their piece of Oregon and California. They agreed on language for a protest to Congress, part of their campaign to create Jackson Territory. “Resolved,” they wrote, “that we will use every exertion to prevent the formation of a state government in Oregon with its present boundaries” (Sutton, 1965, p. 56).

A leading Oregon politician at the time was General Joseph Lane. Lane was territorial governor and Oregon’s delegate to Congress. His son-in-law, Lafayette Mosher, presided over the Jackson Territory organizing meeting. But General Lane was a pragmatist and he refused to back the Jackson movement. The general, who earned his stars fighting in the Mexican-American War, was a Southern transplant to the Pacific Northwest. Son-in-law Mosher was an alleged member of the Western Division of the Knights of the Golden Circle (Watson, 1989, p. 3C), a secret society that promoted slavery. The combination of Lane’s Southern roots and slavery sympathies fueled fears that the Jacksonites wanted to create a slave state on the West Coast. General Lane worried that the Jackson Territory campaign would interfere with his grander goal of statehood for the Oregon Territory. The natives who lived on and from the land the settlers were mining were harassing gold prospectors along the Rogue River and armed conflicts between settlers and natives distracted the early separatists. The Jackson Territory faded to black.

General Lane saddled up his warhorse once again and led volunteers in the vicious Rogue River Indian Wars of 1855 and 1856. He was wounded in the battle of Evans Creek, “felled by a Minié ball in his right shoulder” (Campbell, 2010). Several hours later the Rogues fighting Lane’s volunteers yelled for a ceasefire. Lane, along with interpreters, met them on the battlefield and the two sides scheduled talks. “The Indians, as soon as our firing ceased,” wrote one of Lane’s soldiers later, “carried out water to our wounded men, and furnished a party to assist in conveying the litters with our wounded for 25 miles, through the mountains” (Beckham, 1971, p. 121). Treaty talks presided over by Lane a couple of weeks after the battle resulted in the Rogue River Indians agreeing to peace in exchange for their land. The Indians were granted a temporary reservation on the north side of the Rogue. That peace ended when white settlers fighting under a flag labeled with the word “Extermination,” and who called themselves the “Exterminators,” surprise attacked one of the Indian camps, killing about two dozen men, women, and children. The massacre—led by a settler named James Lupton—provoked the final battles of the Rogue River Indian Wars. Lupton died at the scene, an arrow through his lungs. His legacy: the cowardly assault and murders are known to history as Lupton’s Massacre (LaLande, 2014). Indians retaliated, but they eventually were outgunned. The white settlers were reinforced when a platoon of Army soldiers joined the fight. Those soldiers were not expecting to fight in what became the toughest battle of the Rogue River wars. They were a detail of engineers, assigned to carve a route through the rugged coast range from Port Orford to the inland Applegate Trail—the beginnings of the bad Jefferson roads Mayor Gilbert Gable was campaigning to improve with his initial call for secession. Known as the Battle of Hungry Hill, the location of the pivotal fight was confirmed by Southern Oregon University archaeologists in late 2012 when field work uncovered unfired .69 caliber musket balls of the type that were used in the Springfield muskets issued to Army dragoons in 1855



(Register Guard, 2012). The Rogue River Indian Wars finally ended when the indigenous tribes who lived around Jacksonville were forced far from their ancestral homelands—the *ur-Jefferson*—and off to a reservation west of Salem (LaLande, 2014).

When Oregon became a state in 1859, its borders included Jacksonville and one of its first two senators was Joseph Lane. His Oregon political career collapsed after he unsuccessfully ran for vice president of the United States in 1860 on a pro-slavery ticket with presidential candidate John C. Breckenridge. Lane's term in the Senate ended in 1861 and he moved home to Roseburg, along the Umpqua River, on the northern border of most Jefferson maps (Douthit, 1995).

The State of Jefferson charade resurfaced most recently when the Siskiyou and Modoc County Board of Supervisors voted in 2013 to secede from California.

"We just don't seem to have any control over our government," Siskiyou Supervisor Marcia Armstrong fumed as she voted to leave the Golden State.

Armstrong and her rebel colleagues can vote to form a new state as often as they wish, of course. A vote for statehood may make them popular with some of their constituents. It may make them feel giddy, powerful and connected to the colorful local history of southern Oregon and northern California.

But what Jeffersonians ought to know by now is that they will never carve a new state out of the wilds between Roseburg and Redding.

My wager is that Armstrong and the other supervisors know their US Constitution. Creating a new state out of the existing one requires approval from Sacramento (and Salem, if counties on the Oregon side of the line accept Siskiyou and Modoc's invitation to join them), along with an okay from the politicians in Washington, DC.

Every few years since, a creative manipulator such as Supervisor Armstrong gins up the Jefferson story—knowing full well, one would hope, that the 38 million people in the rest of California never would allow the handful up in Jefferson to depart with their precious water and pristine wilderness playground.

Armstrong and the others must realize that Democrats in a pretty much equally divided Washington would never accept two new senators from what would be a red state with a smaller population than my college crossroads Eugene.

And as a supervisor she must read her county's budget: More funds still come north from Sacramento to pay the bills for roads and social services in Jefferson than go south as taxes.

There are legitimate complaints throughout Jefferson. Contested water rights, endangered fisheries and unresolved land use disputes combine with an inadequate job market.

The result is discontent in what should be a paradise. The conflicts alienate neighbors: native peoples, descendants of Oregon Trail-era settlers, and recent equity-flight urban immigrants. But the political tools for dealing with these problems exist within the region's operative political structures.

Pretending that statehood would solve them is a sideshow.

That the elusive State of Jefferson resurfaces from time to time is a good thing. It allows peeved locals to air complaints even as it offers an entertaining story that the rest of us can relate to—we all, at one time or another, want to fight city hall.

But the Jefferson story needs new life. It's not enough to keep recycling the same old thing. After spending a year wandering around its back roads and talking with its citizens, I'd like to offer Jefferson an idea that will brighten the spotlight Armstrong and others seek.

Jefferson is somewhat mundane for a state name. I propose the Jeffersonians jettison Jefferson and call their place in the sun (and often the rain) Garbo. Once retired from acting, Greta Garbo became famous for wanting to be left alone. Aggrieved Jeffersonians say they want to be left alone.

Garbo has a nice ring to it—enigmatic, private, with a wry nod to celebrity. For a place where history, in fact and fancy, was created by the deft use of publicity, the name Garbo would put bland Jefferson in headlines around the world. Imagine the intrigue inherent in places with names such as Ashland, Garbo, and Grants Pass, Garbo, and especially Eureka, Garbo.

Garbo, an ideal name for a place that just wants to be left alone.

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# Sawdust Empire, Sawdust Mountain, and Beyond: The Challenges for the State of Jefferson, as Seen Through the Photographs of Eirik Johnson's *Sawdust Mountain*

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## Abstract

*Eirik Johnson's Sawdust Mountain portfolio of photographs explores the past, present, and possible futures of the rural Pacific Northwest including the State of Jefferson. Jefferson has been dependent on and shaped culturally and economically by logging and fishing, but these extractive industries have been transformed by technology and are declining in importance. Johnson's photographs portray specific instances of these shifts and the uncertainties and ambiguities of the present. His photographs suggest three possible directions for Jefferson's future. One is continued resource extraction, modified to suit contemporary attitudes and values; a second is suburbanization; and a third involves a relative retreat, leaving the area remote, and allowing nature to regrow. Johnson's photographs allow us to experience visually the changes in and possibilities for Jefferson.*

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## Introduction

Eirik Johnson's photographic series, *Sawdust Mountain*, and his book by the same name (Johnson, 2009) document the current state of the traditional industries and culture of the Pacific Northwest (PNW), including the State of Jefferson (SoJ). Before the rise of aerospace and silicon industries, the region's largest industries were logging and fishing. Environmental, economic, and demographic changes over the last century have reduced these industries dramatically and greatly affected the livelihood and futures of the residents of the PNW, challenging the identity of the residents and the region itself.

Johnson's photographs document the greater PNW as well as the State of Jefferson, and in this article we<sup>1</sup> use Johnson's photographs to explore the past, present, and future of the State of Jefferson. While his photographs do range beyond the official boundaries of the SoJ, many of the photographs fall within this physical boundary, and all the photographs explore themes relevant to the SoJ, including the growing urban-rural divide, the human relationship to nature, the changing economics and environment of the area, and how all of these issues will affect the future of the people and place of the SoJ.

This project is a very personal one for Johnson. As a Seattle native and resident, his identity and history are tied to the region. His impetus to begin the project was to create a personal reflection on "the region's past, its hardscrabble identity and the turbulent future it must navigate"<sup>2</sup> as the pillars of PNW identity—salmon and forest—have declined while new high-tech industries have moved in. This article interprets Johnson's reflections as documented in his photographs in relation to the State of Jefferson's identity and uncertain future.

One of the first photographs in the monograph of *Sawdust Mountain* is "Starlite Drive-In, Roseburg [Jefferson], Oregon" (see Figure 1). The image depicts a drive-in screen reflecting the lights of cars and gas stations off of Interstate 5, with the sun setting behind it. The screen is much brighter than its surroundings, with the trees behind completely dark, and on the screen is a shadow of trees and power lines.<sup>3</sup>

This image sets the framework for this article and touches on many of the interpretive strategies used by Johnson. To begin, the subject of the photograph, the movie screen, recalls



**Figure 1.** "Starlite Drive-In, Roseburg, Oregon" (Johnson, 2009, p. 13; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006591/full>).

cinema and the narrative arc of most movies with an introduction that sets the stage for the story to unfold, a longer middle section that builds up to the climax or crisis, followed by the denouement.

This cinematic plot arc is mimicked in the elements that compose “Starlite Drive-In.” In the beginning (“the beginning” from the point of view of Anglos) when the Anglo settlers came to the Northwest for its abundant natural resources, they struggled to fell giant trees, and these resources remain behind the screen in Johnson’s image: the drive-in is built against a forested hill. The narrative’s middle is represented by the screen and the cleared parking area: human technology and culture building into nature and clearing spaces for human action. Improved technologies, along with the rise of cities, rails and roads, and culture (e.g., literature, movies, libraries, restaurants), are all part of the development of the area. The drive-in screen is a sign of civilization domesticating untamed wilderness, bringing culture to the area, and indicating the rise of population and settlements. And the ending, or the climax between the middle and the denouement, the Starlite Drive-In as it exists in the photograph shows exhaustion and abandonment (it closed in 1997)—but also provides hints towards the future.

The drive-in movie theater is a disappearing pastime, fittingly at the end of a specific epoch, the end of plentiful lumber and salmon, the exhaustion of much of the natural resources of the area, the current abandonment of mills and homes added to the generations-old loss of commercial fishing. The drive-in is being replaced by newer technologies, much as logging and fishing have been overtaken as employers and profit-makers in the PNW by high-tech companies like Intel, Microsoft, Boeing, and the thousands of tech startups in Portland and San Francisco. Interestingly, the screen is also an odd preview of this technological boom, for the drive-in screen itself is an antiquated form of the new technologies (phones, computers, tablets) that all rely on screens.

The screen no longer plays movies; it only reflects light from I-5 and shows the shadows of trees and electric wires. But these reflections indicate three possible futures for this abandoned space, three possible endings of the cinematic plot arc of the photograph. One is that, although the drive-in may disappear, the area’s resource extraction will continue, perhaps with modifications responding to contemporary concerns. Another, suggested by the telephone wires and the light from I-5, is increasing population and suburbanization. Perhaps the screen will be cleared for development as better infrastructure allows more people to move in. Just as some logging companies have now become land companies, selling their clear-cut land as suburban lots, the drive-in’s owner might try to clear the area and create suburban lots—transforming the area, and Jefferson, by encouraging an influx of people, turning the ecosystem into suburban tract housing, and replacing a traditional communal gathering spot with the atomization of suburbia. Johnson’s image itself implies a third possibility: he captures a moment that the viewer can understand as the passing of an ecological and cultural balance when the drive-in and the forest coexisted; that moment and that specific balance have passed with the closing of the drive-in, but perhaps a third possible future is the reestablishment of a pact between human beings and nature—not with drive-in theaters, emblems of the past, but with new forms of human interaction with nature.

In this article we discuss how Johnson’s photographs reflect on the history of the SoJ as represented in the narrative arc of the “Starlite Drive-In”: how his photographs rely on the past history and identity of the region; how they present the current crisis represented in the changing timber and fishing industries; and how they raise questions about the future while also suggesting potential future options for the region. In particular, we explore the changing

relationship between humans and nature, the developing rural-urban divide, and the resulting possible modifications in the region's identity. With a specific look towards the future, we present three possibilities for the SoJ in the face of a seeming identity shift due to the magnitude of the transformations in the area. All three of these options are present in "Starlite Drive-In" and many of Johnson's other photographs, and of course some of these options will be highly localized in the SoJ and will last for different periods of time. Before we address these issues through Johnson's photographs, however, we need to contextualize Johnson's photographic project within the changes occurring in Jefferson and within his book's written materials, which, like the photographs, respond to these changes.

### The State of Jefferson

The State of Jefferson is in many ways its own part of the world and is distinctive even within the PNW. Jefferson differs markedly from the populated urban areas characterized by aerospace factories (such as Boeing), silicon industries (from Microsoft to start-ups in San Francisco), and national and international businesses and trade. Jefferson is still overwhelmingly rural; much of the land is still sparsely populated. Its economy is still tied to resource extraction. The values that define the rural areas of the PNW come from long practices of extractive industries of logging and fishing; they are values centered around hard work, outdoor activities, the heroic struggle of human beings in a natural world whose trees are awesome, where timber can be logged and fish caught only by skilled individuals working together with others, in occupations where danger lurks with every felling of a tree, every fishing trip into open waters.

But for decades the major extractive resources of Jefferson and the entire PNW—especially fish and lumber—have been in decline. Old-growth forests have been depleted and patterns of international trade have shifted. The Oregon counties of the State of Jefferson have seen their timber production plunge from the 1950s, when newspapers called the Coos Bay region of Coos County "the lumber capital of the world" (Robbins, 1988, p. 107). In Coos County itself, the timber harvest has dropped almost 50% from its high in 1955 to 2004, around the time Johnson was photographing the area; in every other SoJ Oregon county except Klamath, the percentage decrease has been higher.<sup>4</sup> Concurrently, rural employment has been declining.<sup>5</sup> Wages from lumber have been falling in Oregon, if anything more sharply than production.<sup>6</sup> Much remaining timber production is from tree farms, planted monocultures of fast-growing timber.

The drop in salmon production began earlier and has been even more severe.<sup>7</sup> Even before 1900 the urban need for energy began its relentless increase, and rivers were dammed to produce electricity. The first permanent dam that blocked almost all salmon on the Rogue River was constructed in 1890, and as more dams have been built salmon populations and commercial salmon catch have plummeted (Taylor, 1999, p. 152). Even though most of the dams on the Rogue River have now been removed and there is hope for a return of the salmon, the return of large-scale commercial fisheries seems unlikely.

In the process of this decline, the landscape throughout the PNW has been markedly altered: old-growth forests have been replaced by tree plantations and free-flowing rivers by dams and reservoirs—even with the dam removals the Rogue still has a large electrical power dam on it. These transformations mean less monetary wealth for the area and, as jobs decrease in number and become more automated, the process of identity-formation through work changes.



At the same time, the State of Jefferson and its residents are caught in another bind that hinges on economics and identity. The SoJ is partly defined by the urban-rural divide that now exists within the Pacific Northwest: the opposition between Portland, Seattle, and San Francisco-San Jose, on the one hand, and the rural areas of the PNW runs deep. Jefferson's citizens inhabit one such rural area, remote from population centers, still bound to traditional activities like mining, logging, hunting, and fishing; rural inhabitants value their remoteness, which insulates them from the influences and corruptions of the city. Ironically, obtaining economic value from these extractive industries, where (and if) they can exist profitably, requires adding infrastructure such as ports and roads to take products to market or ship them around the world; it also, to residents of Jefferson, requires freedom from state and Environmental Protection Administration (EPA) regulations, which are generally seen as misguided governmental intrusions by outsiders. But the infrastructure necessary for this economic activity undercuts the remoteness and rural qualities of the State of Jefferson, and leaves it open to outside visitors who frequently want to see not a nature managed for economic value but a pristine nature devoid of human activity, visitors who want those state and EPA regulations to help maintain nature unspoiled. Already, the Jefferson cities along I-5 are growing in population, and the Rogue River's relative openness may mean an increase in tourists sport-fishing for salmon and steelhead. How will the urban-rural divide play out in Jefferson if it builds roads and other infrastructure?

For the SoJ as throughout the rural PNW, ways of living—the extraction of natural resources, the remote rural life, the values of independence and hard work—that created identity, pride, and a sense of place are coming to a close. There are no obvious new directions to follow, no readily discernible new ways of earning a living that will both reflect the rural, hard-working values of the state and sustain an identity for its citizens that can give them individuality, independence, and value. What will happen to the people and the settlements of Jefferson?

Johnson's photographic explorations of the region address these questions and uncertainties as the region undergoes significant disruptions; he presents and interprets in photographs possible meanings of such changes. The natural resource industries had been the bedrock of the region: they had harnessed nature, constructed communities, and developed the region economically—and, at the same time, had used modern technology and corporate power to lay bare the land and dam the salmon rivers. These accomplishments and costs have all been in flux, as the region was adjusting to the decline in the resource-extraction industries and facing a turbulent, uncertain future. Johnson's photographs portray the environment, natural and human, as responding to and transformed by the human (and corporate) activities of logging and fishing. The PNW is a place where, as Johnson says, 90% of the old growth forest is gone, the salmon catch is down by more than 90%, the good-paying jobs are long gone, and observers and inhabitants alike wonder what will happen now that these cultural pillars of the PNW have been so reduced.<sup>8</sup>

As he was taking the photographs for this project, Johnson described himself as wandering through makeshift landscapes containing makeshift—and shifting—displays of humanity, where the human attempts to construct a life and a living involved sometimes continuing to work on nature, sometimes improvising other jobs. The places and people in Johnson's work inhabit a kind of "in-between" status, never settled, never constant. Johnson's photographs depict places and people at a moment in time, as they are disappearing but before they have disappeared, a kind of living history or living memory. As he captures transitoriness,

he asks questions about what the future can be, but he refrains from answering them, or at least from answering them in any simple, straightforward, or univocal way. For instance, some photographs intimate the environmental and human costs of logging and fishing; but at the same time, as other photographs indicate, human beings need timber for shelter and fish for food. When after a lecture he was asked if his work was political, he answered: it is not political in the sense that it does not have a single point of view, perspective, or ideology that it pushes; but it is political in that it documents and makes public the environmental and human consequences of the extensive fishing and logging.

Johnson's photographs speak directly to transformations occurring in the rural PNW. Resource depletion and changing markets have meant that the fish and timber of the area no longer have the political and economic importance that they used to, and most of the mills have closed, so that the possibility of finding the traditional jobs of the rural PNW is very uncertain. The timber industry and the salmon are still present, but Johnson's images do not display giant trees, untouched wilderness, heroic loggers, or salmon swimming upstream. Instead Johnson presents landscapes whose traditional extractive industries are maintained through salmon hatcheries and tree farming, where a mill might close any day, and where the future is uncertain. As his images suggest the disruptions, they also indicate that the identity of the region is still deeply rooted in its traditional trades. As the raw materials are depleted and the mills close, what will happen to the people who used to work them and who formed their identity by their work? What will happen to the communities whose livelihood and sense of identity were formed by these jobs? How might the SoJ and the PNW respond to this turning point? To interpret Johnson's exploration of these questions, we look to the book's written material and to Johnson's other images to fill out the narrative arc introduced by the "Starlite Drive-In."

### **The Beginning of the Narrative Arc: The Anglo Settlers of Jefferson**

The Starlite Drive-In image suggests a narrative to the history of the State of Jefferson. As the Anglo settlers arrived, much of the SoJ was seen as pristine, idyllic, or untouched nature, rich in natural resources such as fish and timber. Because some salmon runs were more plentiful than the settlers could imagine and some trees more imposing than any they had ever seen, and because the area itself seemed remote from other human habitation, nature in Jefferson was awesome, fearsome, and terrifying. At the same time, the settlers who braved the trek to Jefferson had to confront that sublime and terrifying nature—and that confrontation required heroic human action, the skills, quick thinking, and cooperative actions of loggers, fishers, miners, and others in extractive industries.

The photographs in the book are framed by a foreword by Elizabeth A. Brown,<sup>9</sup> an essay by Tess Gallagher, and a poem by David Guterson, and these framings refer to the first stage in the narrative arc, when human beings confronted a wild and untamed nature. Brown puts Johnson's photographs into a context of western photographers. Her "Introduction" notes that Johnson "touches back to the epic scale and sublime beauty of Carleton Watkins's photographs" (Johnson, 2009, p. 5-6). Watkins, a mid-19th century photographer, exposed the country to the sublime grandeur of Yosemite through his stereographs and plate photographs, helping persuade the US Congress to pass an Act in 1864 declaring the area inviolable, dedicated "for public use, resort, and recreation."<sup>10</sup> Watkins's photographs and the Congressional Act now can be seen as representing the urban desire for untouched rural nature and for regulations that prevent rural inhabitants from practicing their traditional trades

(Cronon, 1995). Johnson's photographs both echo Watkins's scale and sublime beauty, as when he photographs a 600-year-old spruce, and play off against Watkins's works with irony, as when Johnson presents a pile of sawdust or captures sweeping landscapes where vast swatches of stumps, bushes, and scrap wood are all that remain from extensive clear-cutting—or when we see that the 600-year-old spruce is solitary, not part of a wild and extensive forest.

Brown also reports that Johnson considers the photographer Darius Kinsey as a “touchstone” for his work (Johnson, 2009, p. 6). Whereas many of Watkins's images were of untouched nature, Kinsey photographed loggers at work, rest, and play in the logging camps of the PNW from 1890 to 1940.<sup>11</sup> Both Watkins and Kinsey portrayed a time when nature was wilderness (to Anglo eyes), trees towered, and rivers rolled powerfully. In Kinsey's photographs, however, human beings work to transform that wild nature for human goals. Skillful men and women exerted themselves to the fullest, working together—using saws powered by muscle, primitive machines and trains, and donkeys—to cut down soaring trees whose trunk diameter could reach 25 feet.

In her essay, Gallagher describes her parents as similar to Kinsey's subjects: her parents worked as independent loggers, sharing one pair of work boots between them, felling, trimming, and pulling timber to market, employing her from age four onward and struggling arduously to “wrest a living” from the woods (Johnson, 2009, pp. 127-128). (Only when times were bad would Gallagher's father go to work in a lumber processing plant.) From her parents' labor and her experiences in the PNW Gallagher draws up “intangible images” in her mind of the time when the forests of her childhood stood tall, the fish ran, and the processing plant was active (p. 133). Those images allowed her, when she returned to the PNW after some time away, to regain a sense of place, a sense of how the specific interactions of nature and humans generated a set of PNW values. David Guterson's poem, “The Closed Mill,” harkens back to the time when the mill was open and, despite the conflicts and dangers, the narrator is nonetheless “remorseful” about the passing of “that running mill. / All those trees pushed loudly through the saw / In the era when I was king” (p. 9), king in the PNW's “Sawdust Empire” (Brier, 1958). For Kinsey, Gallagher's parents, and Guterson's narrator, human beings confront a powerful nature with only human muscle power and some mechanical tools (which, important to the loggers decades ago, seem primitive and balky today).

Although Johnson's photographs were taken in this century, some do refer to this earlier stage of a pristine, idyllic nature, teeming wilderness, and natural landscapes of grandeur and power remote from centers of population. Like many contemporary eco-critics, however, Johnson does not portray nature uninfluenced by human actions.<sup>12</sup> Even when his photographs refer to Native Americans, it is clear that they are acting on nature; the land the Anglos settled was by no means untouched by humans.

Johnson includes two photographs of Native American gill nets, reflecting their traditional fishing practices. In “Makah Tribal Gill Nets on the Sooes River Outside Neah Bay, Washington” (Johnson, 2009, pp. 108-109<sup>13</sup>) the Makah, his net, boat, and shelter are set against the vastness of the river and the forested hills, occupying only a small portion of the image and suggesting the ability of the Native Americans to live within the carrying capacity of the land. The gill net itself extends only a short ways into the river, and gill nets catch fish with discrimination—small fish slip through the netting, larger fish are arrested by the netting and when they try to back out are caught by their gills. “Quinalt Tribal Gill Nets, Queets River, Washington” (Johnson, 2009, p. 63<sup>14</sup>) is a close-up of gill nets left on the river's edge, with

river, driftwood, and greenery surrounding the nets. The nets look small, even wraith-like; they fit into their setting and do not transform the landscape or the ecology.

Johnson's photographs of nature frequently reflect a sense of irony or ambivalence, unlike Watkins more straightforward images of an untouched Yosemite. Remnants of the old, pre-Anglo wilderness are presented in a few images. For instance, "Missy, Beneath Her Six-Hundred-Year-Old Spruce, Hoh River, Washington" (Johnson, 2009, p. 67<sup>15</sup>) shows Missy, a handsome 87-year-old woman, standing in front of an immense old spruce. Her stance suggests that she is protecting the spruce against being cut, although exactly what she is protecting is unclear: the tree as soaring, impressive nature (but nonetheless vulnerable to logging and dependent upon a human protector)? The tree as a human heritage? The tree as a memory guide to the past? The spruce is alone; no other old-growth trees accompany it in the photograph. The old-growth forests have been mostly destroyed, and only a few lonely specimens remain.<sup>16</sup>

Johnson does refer to the heroism Kinsey captured, but obliquely. In "Old Photograph, Seaport Lumber, South Bend, Washington" (Johnson, 2009, p. 80<sup>17</sup>) he photographs an old photograph of a sailing ship, docks, and train tracks for salmon fishing, processing, and export; in a corner of the frame is inserted a photograph of a young man whose garb and muscles suggest that he hauled salmon around in the processing plant. The old photograph is mounted in a room on what looks like a cheap veneer wall—all the abundant salmon and the grueling human labor have not produced a comfortable livelihood for the worker's descendants.

Johnson makes an ironic reference to Kinsey's heroic loggers felling majestic trees in his photograph of "Juan Abalos, Salvaging Cedar Shingle Bolts, Lower Hoh River, Washington" (see Figure 2). Abalos is photographed in a heroic or mock-heroic pose: he is standing almost on the top of a triangular pile of bolts, the upper half of his body outlined



**Figure 2.** "Juan Abalos, Salvaging Cedar Shingle Bolts, Lower Hoh River, Washington" (Johnson, 2009, p. 75; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006518/full>).

against the sky, his axe in hand, his chain saw at the ready, “salvaging blocks of lumber from old cedar stumps in a swampy clearing logged long ago,” as Johnson reports in his “Notes on Select Photographs” (2009, p. 136). Like the heroic loggers of past generations, Abalos works hard for his living, but salvaging lumber is far from the heroic activity of felling centuries-old trees 25 feet in diameter with a crosscut saw.

The Native Americans fished amidst abundant salmon runs, spruce forests soared, fishermen worked hard, and heroic loggers reshaped the landscape: Johnson refers to all of these, central to the first stage of the Anglo settlement of the PNW and Jefferson, mostly by their absence today. The first stage of the narrative arc has passed. But confronting the salmon and forests served to develop the culture and identity of Jefferson, constituted by independent individuals, skilled, self-reliant, able to take care of themselves and perform the heavy labor their jobs required. These individuals knew their natural environment because they worked on it<sup>18</sup>—with their hands or, until recently, with machines that were extensions of their bodies. With the development of modern technologies that increased the efficient extraction of nature’s resources, however, the culture and identity of Jefferson started to change.

### **The Middle of the Narrative Arc: The Efficient Extraction of Nature’s Resources**

As the economic value of the region’s resources became clear, extractive industries thrived and more people moved to the region, establishing towns and a way of life tied to the lumber and fishing industries.<sup>19</sup> Technological changes over time improved efficiency and modified the roles played by those working in extractive industries. First salmon fishing and then logging were transformed by new technologies and tools so that the nature’s grandeur, power, and plentitude reached their limits and were drastically altered by human activity. This marked a central shift in the relationship between humans and nature, where humans themselves, using powerful machines and advanced technologies, were able to shape and transform nature, reducing its sublime capacity to inspire awe, fear, and incomprehensibility, and reconstructing it into objects to be manipulated with no apparent concern for the health of the ecosystem. Trees and salmon were there to be harvested as efficiently as possible; rivers existed to be dammed to convert falling water into electricity for cities. Whether those actions affected other aspects of nature seemed not to be an important issue to those who harvested or who dammed.

During this past century when logging and fishing provided the chief livelihood for its residents, the State of Jefferson was becoming less remote, as populated areas like Gardiner at the mouths of rivers became towns that served as ports, transporting the fish and logs onto ships exporting them to Pacific coastal cities and eventually overseas. Larger populations drove a need for food from farming, for electricity from dams, and for cultural activities like the Starlite Drive-In.

The culture and identity of Jefferson were built on the struggle with nature, the daily victory of surviving, and the constant emergence of new challenges to face and overcome. Jefferson’s culture based on direct engagement with nature contrasted with urban spaces defined by impersonal, institutional, or monetary relations. The growth of Portland and the California cities meant that Jefferson continued to lack political power in state government and could be ignored (or taken for granted) as the urban economies of the urban areas diversified and grew.

Many of Johnson’s photographs refer back to this transitional era when modern, large-scale human structures and advanced technologies made their mark on the landscape. Although the Elwha River is in the state of Washington, his image speaks to the transformation of nature



by the settlers (see Figure 3). Like the Elwha, the Rogue River in Jefferson was rich in salmon until a combination of overfishing and dam construction made commercial fishing fragile by the 1910s and untenable by the 1930s. The photograph is divided into background and foreground. The background, the top third of the image, presents water and land in a seemingly natural state—trees growing on the hillside adjoining the dam and trees covered with snow on a mountain behind the dam. In the foreground stands the dam. The straight lines and right angles of the dam and the power plant contrast with the natural irregularities of the trees, hills, and mountains. The water, which runs off on the left through rocks, the remnants perhaps of a natural falls, gushes over the spillway to the right, its power suggesting the electrical power that the dam generates. The dam's builders evaded and violated even the minimal rules of a century ago for maintaining the fish population (Crane, 2011). They ignored the magnificence of the salmon run and its economic value to the fishers. The dam was an impassable barrier that almost completely destroyed the Elwha River salmon by blocking their migration. Whereas the Native Americans set up gill nets as limited and permeable barriers for the fish, many dams, like the Elwha River dam, effectively prevented the salmon from returning to their natural spawning grounds.

Almost completely obliterating the magnificent old-growth forests has meant the transformation of logging and of its traditional occupations. The cover image of the book,



**Figure 3.** “Elwha River Dam, Washington” (Johnson, 2009, p. 59; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006534/full>).



**Figure 4.** “Freshly Felled Trees, Nemah, Washington” (Johnson, 2009, pp. 68-69; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006527/full>).

“Freshly Felled Trees, Nemah, Washington,” speaks to the advanced mechanization that can remove vast swathes of planted trees (see Figure 4). The field that is the right fore- and middle-ground of the image was logged the day Johnson took this photograph, the trees to the left are ready to be cut, and the trees in the right background look like they too are ready to be harvested. Except for a small patch of grey sky, nothing else is in sight: the stumps of freshly felled trees, trees to be cut today, and trees in the background ready to be cut. What is left will be the stumps and waste in the front right foreground.

To some extent, as loggers have moved from old-growth giants to contemporary planted “tree farms,” the cutting has been transformed technologically to be more mechanized and more efficient, with fewer workers—although some are needed to drive the trucks that take the logs to the sorting yards (or to send them down the river to the yards) and to operate the machinery in the mills. This new lumber is of a lower quality, commands a lower price on the market, and is not unique to the region—tree farms with similar practices and trees exist throughout the United States. So job prospects and wages in the industry are greatly reduced. The mechanization of the labor and the ease and speed with which humans can now harvest natural resources further alters the relationship between humans and nature. What was once a heroic and monumental task in a natural landscape that seemed inexhaustible is now a highly efficient task requiring sitting and guiding machines in a landscape where all the quality old-growth lumber is already exhausted.

But Johnson shows us some of the socially beneficial results of that work. “Hoquiam, Washington” displays a small blue house with human beings and trees in symbiotic relationship



(see Figure 5). The trees on the hillside provide some protection for the house as well as having once provided larger trees for logging. The family's logging truck, loaded, is ready to take freshly felled logs to their destination at a mill, sorting yard, or port, earning money for the driver. Milled and finished boards have been used to construct the house, which accommodates a family with what seems to be adequate comfort. Not only in Washington but also in Gardiner, Jefferson (Oregon), in an image titled "Gardiner, Oregon" (Johnson, 2009, p. 45<sup>20</sup>) does Johnson exhibit neat, tidy houses sheltering the families of a community. When resource extraction as an industry was flourishing, workers could lead comfortable if modest lives, even though the economic uncertainties and cycles of resource-extraction industries tended to be extreme.

The culture of logging and fishing, of working on the land and living off the land, carry with them further elements of culture and rural identity, as Johnson indicates in his images related to Missy. In one, already mentioned, she stands beneath a 600-year-old spruce, as though to protect it, a lone remnant of the era when logging began. Missy is tied directly to the first Anglo settlers—her grandfather was one of them—and Johnson provides other photographs of Missy that speak to the culture and identity of the region.

"Missy by Her Garden, Lower Hoh River, Washington" (Johnson, 2009, p. 34<sup>21</sup>) reveals that Missy herself works with her hands, as do workers in Jefferson: culture in Jefferson includes human labor and the knowledge of nature that comes from labor, from direct involvement with the soil and its fruits, with the processes of birth, growth, decay, and death. In



**Figure 5.** "Hoquiam, Washington" (Johnson, 2009, p. 99; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain/id/i5006491/full>).

fact, Missy studied botany and created a new species of potato that is particularly well suited to growing in the PNW (Johnson, 2009, p. 135). This demonstrates how interconnected the people and land have become in this region, as well as how established the region has become—the farms and creation of new plant varieties suited to the PNW shows a dedication to live in that specific place.

“Missy’s Studio, Lower Hoh River, Washington” gathers pictorial memories of the human past, portraits of men and women, pictures of them working, and still lives (see Figure 6). Missy’s pictures also speak to how long the Anglo settlers have been on the land and how they have imbued it with a sense of place. In the center is a painting by Missy of a man driving a tractor built decades ago; to the left, half out of the photograph, is a painting of a man on horseback amongst tall trees, harking back to a pre-automobile era. Missy’s pictures suggest that the residents have been here for a generation or two or three, and have really anchored themselves to the land. The studio also demonstrates the cultural production and leisure activities that have arisen in the area and are still connected to the land, nature, and a specific sense of place.<sup>22</sup>

This sense of place still appears to be tied closely with the land and traditional logging and fishing industries, and yet “Weyerhaeuser Sorting Yard along the Chehalis River, Cosmopolis, Washington,” depicts a timber sorting yard that appears to be operating 24 hours a



**Figure 6.** “Missy’s Studio, Lower Hoh River, Washington” (Johnson, 2009, p. 107; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006487/full>).





**Figure 7.** “Weyerhaeuser Sorting Yard along the Chehalis River, Cosmopolis, Washington” (Johnson, 2009, p. 11; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006594/full>).

day without a human in sight—though presumably there are some to operate machinery (see Figure 7). In the image, the lights are on, the sky is grey, and it is dusk, dawn, or perhaps a moonlit night. The lights at the sorting yard shine brightly, illuminating the area, filling the wilderness with man-made light, and demonstrating the triumph of human engineering over the dark, once unknown wilderness. While there are many logs on site, there are no human beings in the image (and certainly no early 20<sup>th</sup>-century draft animals), only large heavy machinery. Gone are the old docks where lumber was loaded onto ships bound for far ports; all that remain are some silent, rotting posts. The machinery is taller than any tree. There is no place visible for human beings and their labor, no lumberjack, no heroic figure of a logger, just electricity and machines and logs and water. Nothing is on the scale of the human body. The sorting yard appears massive, unmanageable, unimaginable, and indeed inoperable without the giant machines that dominate the landscape.

The new technologies make it easy to harvest lumber and catch fish, increase the human ability to extract (and over-extract) resources, and displace human beings from the landscape. In an earlier time nature’s old-growth forests and rich salmon had runs that provided a catalyst for the sublime—the human response of awe at the grandeur, power, and incomprehensibility of nature; by contrast the timber-sorting yard stands as a realization and symbol of the human control and transformation of the nature.

Human beings have replanted forests in order to harvest them, or clear-cut them to build housing developments; they have established hatcheries to replenish the fish in the rivers, with not much success. Nature, once sublime and fecund, has been rendered much less terrifying and even docile by human industry and technological growth; but now what is terrifying is the human ability to utterly and completely transform the environment, sometimes without realizing it. Now it is the constructions of human power that evoke the sublime: the awe inspired by the dams, the imposing ability of human mechanized progress to fell forests and transform them into open space, the conquest and transformation of nature evident in the timber sorting yard that transforms night into day and overtops the remaining forests.

But this sorting yard, as Johnson's notes indicate, may soon be closed (Johnson, 2009, p. 134). What will happen to nature and to human beings—and to the State of Jefferson—both when the remaining mills continue operation and then when, as in Guterson's poem, Gallagher's essay, and Johnson's photographs, many or most are closed? What happens to the human domination of nature when nature's raw material is exhausted? What happens to the human beings displaced by mechanization and then put out of work when the mills close?

### **The Denouement of the Narrative Arc: Jefferson's Plurality of Possible Futures**

Johnson's photographs suggest that the rural PNW generally and the SoJ in particular face an uncertain future. His photographs explore at least three possible futures, three alternatives that to some extent overlap each other. The first future course continues resource extraction, accounting for an altered environment, new ideas of sustainability, and shifting global demand. The second course involves the eventual suburbanization of Jefferson, which also includes seeking new job opportunities unrelated to resource extraction. The third potential future involves a relative retreat for Jefferson, leaving the area remote and allowing nature to regrow, with only small-scale resource extraction continuing to occur.

The first possible future, then, attempts to adapt the current industrialized, large-scale resource extraction to a changed environment and economy. The lumber and fishing companies have to maintain and plant the land they want to harvest to maintain production requirements, while also accounting for new demands locally and globally. Further consideration towards the kind of nature that exists in Jefferson has to take into account wildlife habitat and how much nature is maintained by human action.

A close look at "Freshly Felled Trees" can incite thoughts that other photographs make explicit: the environmental destruction that is possible with modern, mechanized, monoculture logging. In the field of stumps resulting from one day of logging, no trees or obvious wildlife remain. How much wildlife had lived there is also open to question: the forest planted is a monoculture—the same type of tree, all of the same age. Other photographs show, with poignancy or irony, equivalent transformations of forests and clear-cuts. For instance, in "Adolescent Bald Eagle, Queets, Washington" (Johnson, 2009, pp. 36-37<sup>23</sup>), a solitary young bald eagle is perched on a spindly tree, denuded of leaves, surrounded by a clear-cut tract, with a row of trees in the background and partially clear-cut mountains rising in the distance. Not appearing as a manifestation of American expansion, exceptionalism, or power, the eagle seems lonely and forlorn, with lowered chances of survival and reproduction. Ecological diversity at all levels—a rich plenitude of animals, insects, and flora—requires diversity in the ages and types of trees.

In other photographs, Johnson probes potential practices that could create a more sustainable extractive industry. "Topped Trees Reserved for Wildlife, Nemah, Washington"



**Figure 8.** “Topped Trees Reserved for Wildlife, Nemah, Washington” (Johnson, 2009, p. 83; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006510/full>).

shows a row of trees with their branches and tops cut off to meet state laws on wildlife preservation (see Figure 8). As Johnson writes, “These trees were most likely left by the logging crew as ‘snags’ for wildlife habitat... While leaving a small stand of topped trees along the edge of a clear-cut might meet the state’s requirements for snag preservation or creation, it is no replacement for a diverse and healthy ecosystem” (2009, p. 137).

The practice pictured may meet minimum state requirements, but if logging continues, whether and how to create a sustainable nature needs to be considered. Is nature to be completely planted, and then later harvested, for lumber and food, or are areas, species, or ecosystems to be maintained through extractive techniques that respect nature and its diversity?

Johnson captures some of the technologies and people engaged in sustaining extractive industries and/or natural ecosystems (see Figures 9 and 10, next page). Tree seedlings must be planted and fish eggs hatched. Johnson’s photographs indicate that both are highly mechanized and ordered: the pink fish eggs are in their rectangular trays under eerie unnatural lighting, and the larch seedlings, planted neatly in rows, are growing in a greenhouse whose glass is opaque—protecting the seedlings in a highly controlled environment.

Several of Johnson’s portraits show men involved in attempting to sustain or restore natural resources. Roger Moseley counts Coho spawn nests to see how well the salmon are doing. Carl places salmon carcasses near where the fish spawn to produce water rich in essential nutrients for the spawn. Rather than plant alders, cheap quick-growing lumber, Jose tries to restore proud trees, planting Douglas Fir by hand (“Roger Mosley Counting Coho



**Figures 9 and 10.** Left: “Western Larch Seedlings, Webster Forest Nursery, Tumwater, Washington” (Johnson, 2009, p. 115; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006481/full>). Right: “Sol Duc Hatchery, Washington” (Johnson, 2009, p. 56; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006536/full>).

Spawn Nests along the Upper Sol Duc River, Washington” (Johnson, 2009, p. 23<sup>24</sup>); “Carl Placing Hatchery Salmon Carcasses in Stream near Sappho, Washington” (Johnson, 2009, p. 113<sup>25</sup>); “José planting Douglas Fir Seedlings outside Rainier, Oregon” (Johnson, 2009, p. 116-117<sup>26</sup>)).

Juan Abalos and Juan Valencia log over already-logged areas, using hand-held machines (“Juan Valencia, Lower Hoh River, Washington” (Johnson, 2009, pp. 78, 81<sup>27</sup>). This demonstrates a reversal from the time when loggers wasted thousands of board feet by cutting trees 15 feet off the ground (so that they had to saw through slightly less wood). But Abalos and Valencia also show that through careful and complete harvesting it is still possible to make a living off the land, although certainly the task is not as heroic, and probably not as profitable, as logging once was.

How resource extraction will proceed is still uncertain, especially as large firms such as Weyerhaeuser modify their operating strategies and consider closing mills and lumberyards. The Weyerhaeuser sorting yard may remain, but—as Johnson (2009, p. 134) notes about the photograph—Weyerhaeuser is closing many of its sorting yards and mills in the PNW because of its expanded global operations and the changing economics of timber production. As those reorientations occur, sometimes the timber company does not replant its land for tree harvest, but subdivides into suburban building lots, as Johnson documents in “Willapa Sands Estates, South Bend, Washington” (Johnson, 2009, pp. 84-85<sup>28</sup>).

Subdivisions contribute to the second possible future for Jefferson, the growth of suburbia. Suburbanization would require new types of employment and a different relationship to nature and the landscape. A further question is how the new residents will further shift the demographics and culture of the region. What type of jobs will support this development is uncertain, and how much land will still be logged and fished is unclear.

Johnson includes a series of photographs showing diverse attempts at economic survival in a land whose traditional jobs have withered. He portrays a sweater store in a repurposed



Freemasons lodge running a sale, a trailer in a parking lot selling miscellaneous items from adult books to a used truck, and “Sucher and Sons” selling only Star Wars collectibles. These collectibles were presumably gathered over decades by the Suchers, exhibiting dedication to a particularly iconic movie and subculture. The store has been open since 1997 and represents one new, seemingly economically viable alternative to extractive industries. It is unclear how enriching the enterprise is; it could be a labor of love just as much or more than it is an economically sustainable store (“The Sweater Store, South Bend, Washington” (Johnson, 2009, p. 89<sup>29</sup>); “Adult Books, Firewood, and Truck for sale, Port Angeles, Washington” (Johnson, 2009, p. 41<sup>30</sup>); “Colin Sucher & Sons Star Wars Store, Aberdeen, Washington” (Johnson, 2009, p. 95<sup>31</sup>)).

Johnson also documents a “Just Sell It Now on eBay Consignment Store, South Bend, Washington” (Johnson, 2009, p. 93<sup>32</sup>) that displays furniture and household items in the main window. Reflected in the window are a hillside and construction equipment, contrasting the hardscrabble lifestyle of the region with its interior comforts. And yet the store’s task is to sell these items on eBay, to ship the items to whoever is the highest bidder regardless of their location. Thus the store does not necessarily rely on a local economy, but a global economy connected via the internet. The store could exist anywhere and, like Sucher and Sons, does not necessarily relate to the traditional cultures or identity of the region. These stores could exist in any town or city, in some ways disconnecting them from any regional identity—though certainly something unique like a Star Wars store could become a local attraction as well. They are symptomatic of a changing or disappearing local identity based on direct engagement with the land.

Suburbanization also lurks in the background of some images—present, but not presented. The Starlite Drive-In is near an I-5 interchange, where sprawl manifests itself, and the mobility of the I-5 invites more suburban sprawl as well as the growth of Jefferson’s urban areas. Open farmland also invites suburbanization, as does the logging companies’ sale (rather than replanting) of their clear-cut areas. These forms of suburban development also differ from Jefferson’s identity of working on the land.

The third possible future involves a relative population retreat from Jefferson. In “Brad Balderson on His Longliner, the *Fish Hog*, Neah Bay, Washington,” Balderson has a worried, uncertain face as he sits in his boat with the outdoors reflected in the glass (see Figure 11, next page). As Johnson notes, Brad fishes for many types of fish, but “in addition to shrinking quotas and cost licenses for each fishery, he pays increasingly more for fuel. Brad thought that he might soon sell his own boat and permits to the Federal Government as part of its buy-out program” (2009, p. 138). He is uncertain whether he will have any livelihood at all; it is unclear where he is going and what he is going to do. Of his four sons, three are going into fishing; but the fourth, Harold Balderson (“Harold Balderson, Neah Bay, Washington” (Johnson, 2009, p. 111<sup>33</sup>)), joined the army to see the world rather than staying in Neah Bay to fish (p. 138).

As the economic future for residents of the SoJ becomes uncertain or untenable, it is possible that many will move to find a livelihood elsewhere (especially the younger generation). Johnson depicts several abandoned homes and storefronts, such as “Arlington, Washington,” which shows an abandoned home in a dark green forest (not planted for harvest, though clearly second-growth), moss covering most of the roof, the wood rotted in places, and brush surrounding the side of the house (see Figure 12, next page). Working slowly over time, nature is transforming the structure, decaying its manufactured wood, overgrowing its roof, and eventually breaking down its windows and walls. Probably the house now hosts new flora and



**Figure 11.** “Brad Balderson on His Longliner, the *Fish Hog*, Neah Bay, Washington” (Johnson, 2009, p. 110; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006485/full>).



**Figure 12.** “Arlington, Washington” (Johnson, 2009, p. 19; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006579/full>).



fauna. Nature's processes of growth and decay can carry a sense of promise as nature reclaims and remolds human artifacts.

In other cases, humans are removing their own constructions; many dams, including some pictured in *Sawdust Mountain*, now no longer exist. The dams on the Elwha River, like the dams on the Rogue, have been torn down, eliminating local sources of electricity and symbols of the human domination of nature. One of the main goals of dam removal is to restore salmon spawning habitat (Johnson, 2009, p. 136); humans are attempting to reestablish natural patterns long ago altered by human action.

Thus we have nature reclaiming abandoned human habitations and humans restoring natural habitat as part of this future of population decline. The future for the residents who stay may still be uncertain, but in many ways the identity and culture of the region would continue to be tied to the land. The area would become remote again, the industrial extraction industries would have left, and the few remaining residents could still survive off the land on a much smaller scale, by for example catching salmon one at a time or using tribal methods that are sustainable.

With this possibility the relationship between humans and nature that forms the identity and culture of the region would change, and yet remain true to the region. In the SoJ, the time is long past when nature was inexhaustible and immense, or when "man was king" and ended up harvesting most of the old-growth forest in the region; in this possible future of re-remoting the region and lessening the scale of human activity, there lies a potential for a new symbiotic and sustainable relationship to emerge. The small, impermanent, and decentered recreational vehicle in the "Confluence of the Rogue and Illinois Rivers, Oregon" suggests one manifestation of that new relationship (see Figure 13).



**Figure 13.** "Confluence of the Rogue and Illinois Rivers, Oregon" (Johnson, 2009, p. 27; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006570/full>).

Similarly, “Scrapped Train, Arlington, Washington” (Johnson, 2009, p. 47<sup>34</sup>) shows abandoned rail cars, left to rust, rot, and decay in a swampy area. The scrapped train seems particularly relevant to the State of Jefferson; in any push to reestablish remoteness, some of a modern transportation web must be forgone and the human footprint rendered smaller.

Perhaps the best single summary photograph is the last one in the book, “Destruction Island” (see Figure 14), which reprises the narrative arc of “Starlite Drive-In.” Destruction Island’s name derived from the many shipwrecks on its rocks. So the settlers, to make seaborne trade viable, built a lighthouse on the island and installed a lighthouse keeper. The transformative human presence on the island decreased the danger presented by nature, giving the settlers the ability to harvest and transport natural resources, resulting in increased trade and wealth. But with the advent of modern technology, the manned lighthouse was replaced by an automatic light (just as the drive-ins screen has been replaced by electronic screens), and human beings abandoned the island (and the lighthouse keeper lost his job during this transformation). After the human beings left, nature returned—birds, nesting grounds, and possibly sea mammals on the rocks. Johnson’s notes on the photograph detail this history (2009, p. 139); in Johnson’s photograph, Destruction Island is distant and solitary, surrounded by a calm gray sea and a cloudy sky. The island is slightly off center to the left, and to the right the sun or the moon shines through the clouds, illuminating the water if not the island. The photograph evokes feelings of remoteness, the small automated light shows the limited size of human accomplishments against the extensive sea and infinite sky, a kind of natural sublime that reminds us to accomplish our purposes within the confines of nature, not as conquerors of it.



**Figure 14.** “Destruction Island, off the Coast of Washington” (Johnson, 2009, p. 124-125; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006475/full>).

Now that human beings have struck down the soaring power and exhausted the economic value of the original forests, these areas are once again being neglected in places. Homesteads are returning to wilderness. Jefferson is, in places, becoming remote once again. And this remoteness is now, more than anything, a marker of a sublime, for the remote can still provide a combination of pleasure, awe, and terror that is present in the sublime: the ability for nature to return, to turn the tables yet again on human beings, and to transform an abandoned house or island into a place teeming with life. In this remoteness, the human is decentered, so that human beings act with but do not dominate over nature, keeping their RVs on the edge, farming in ways conducive to nature's diversity, and setting a light on an island but not imposing a further presence (Johnson, 2009, p. 139).

Johnson's photographs and their narrative arc contribute to our understandings and allow us to experience visually the transformations in the State of Jefferson. His images complement the social science and environmental studies that document the changes and suggest possible futures that can grow out of the present. To experience the photographs is to have an additional narrative and vivid particulars to illustrate the past, present, and future of Jefferson.

### Endnotes

<sup>1</sup> We wrote this article together, in conversation and e-mail communication with each other. Peter G. Stillman taught a course on "Sawdust Mountain" at Vassar College, which supported a research trip to the PNW, for which he is grateful. Gordon Stillman, an MFA candidate and professional photographer, is responsible for most of the photographic interpretation, including the narrative arc. Eirik Johnson kindly gave us, along with the journal, permission to reprint his photographs (© Eirik Johnson). Johnson's photographs are cited to the page in Johnson (2009) and by URL to the reproductions on Johnson's website; the photographs' titles come from the book.

<sup>2</sup> This statement is from Johnson's website. Retrieved from <http://eirikjohnson.com/sawdustmountain/sawdustmountain>

<sup>3</sup> Mapping where the Starlite Drive-In was located, we discovered it closed in 1997 and is literally next to I-5 and a rest area/truck stop.

<sup>4</sup> In Douglas and Jackson counties, the drop has been more pronounced. From a high of 1,749,544 thousand board feet (MBF) in 1955, Douglas County's harvest stayed above 950,000 through 1989, and in 2004 stood at just under 500,000 MBF. From a high of more than 500,000 MBF in 1955, Jackson County's harvest dropped to 107,134 MBF in 2004. Of the seven Oregon counties that comprise the State of Jefferson, only Klamath County harvested about as much timber in the 1950s as in the decade from 1995 to 2004, but that apparent stability masks a notable burst—about a doubling—of timber production from 1971 to 1975 (Andrews & Kutara, 2005). From one perspective, Johnson's photographs are an interpretation of the meaning of these declines in timber production.

<sup>5</sup> According to Beleiciks and Krumenauer (2012), "The most challenging economic structural change faced by rural Oregon has been the reduction in logging jobs, and the shift away from wood product manufacturing jobs. In 1979, roughly two of every three manufacturing jobs in rural Oregon belonged in wood product manufacturing. By 2010, wood products accounted for one out of three rural manufacturing jobs. The mix of Oregon's manufacturing jobs shifted away from 'traditional' manufacturing jobs in non-metro areas to manufacturing jobs in the metro areas, many of which require workers with completely different sets of skills. In 1979, Oregon's metropolitan areas—including counties that would become MSAs in later years—accounted for about seven out of every 10 manufacturing jobs. Now, about nine out of every 10 jobs in manufacturing is in a metropolitan area."

<sup>6</sup> For good Oregon-wide historical data on wages as well as employment, timber harvest, and wood products as a percentage of Oregon GDP, see Lehner (2012).

<sup>7</sup> For excellent data that unfortunately have not been updated, see Gharrett and Hodges (1950). "Plummet" is not too strong a word, as the authors explain: "Total landings [of spring Chinook Salmon] have dropped from 900,000

pounds landed in 1923 to 5,000 pounds in 1947... By far the majority of these fish were taken from the Rogue and Umpqua Rivers” (p. 8) in Jefferson.

<sup>8</sup> Statements attributed to Johnson in this paragraph and the next come from his lecture at Vassar College on September 7, 2012 on the occasion of the opening of “Sawdust Mountain.”

<sup>9</sup> Brown is the chief curator of the Henry Art Gallery in Seattle, Washington. That the framing material is written by a curator, an essayist (and poet and short-story writer), and a poet indicates that understanding the transitions in the PNW is a multidisciplinary project, whose interpretations look to social science data on productions, jobs, and wages for a validating baseline.

<sup>10</sup> The Yosemite Act was approved June, 30, 1864 (13 Stat. 325); for its long-term significance, see Dilsaver (1994). Watkins’s photographs can be found at <http://www.carletonwatkins.org/index.php>

<sup>11</sup> Many of Kinsey’s photographs are available at the University of Washington Library and online at <http://content.lib.washington.edu/clarkkinseyweb/index.html>

<sup>12</sup> Johnson is not going back to the wilderness as an original nature; he recognizes that “nature” always includes the results of human action. See Cronon (1995).

<sup>13</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006486/full>

<sup>14</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006531/full>

<sup>15</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006529/full>

<sup>16</sup> Johnson’s sense of irony or a dry, bleak, or knowing humor appears in his only photograph of a substantial stand of large trees: a photograph of a picture that depicts a steep hillside populated with large evergreens; the picture is made from multicolored dryer lint (“Missy Barlow’s Dryer Lint Landscape, Lower Hoh River, Washington” (Johnson, 2009, p. 33; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain#/id/i5006562/full>). Few such extensive stands of trees exist except in reproductions. The presence of the trees in the lint hints at the absence of the trees in the forests.

<sup>17</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006513/full>

<sup>18</sup> Learning and knowing through work is a central theme of Richard White’s (1995) history of the Columbia River.

<sup>19</sup> As early as 1900, Oregon shifted “from a predominantly rural to a numerically urban society,” with the result that many dams were built for electricity on rivers that had had salmon runs (Taylor, 1999, pp. 173-174). By 1930, 51.3% of Oregon’s population lived in urban areas, including cities in the SoJ such as Medford, Grants Pass, and Roseburg, all on Highway 99/I-5 corridor. Since World War II, urbanization has continued (Taylor, 1999, p. 172).

<sup>20</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006548/full>

<sup>21</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006559/full>

<sup>22</sup> The “spatial turn” in geography and history, with its emphasis on place as the interaction between human beings and the particular natural and cultural features of the location they inhabit, runs parallel with Johnson’s intense concern with place and identity; see Withers (2009).

<sup>23</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006554/full>

<sup>24</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006574/full>

<sup>25</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006483/full>

- <sup>26</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006480/full
- <sup>27</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006511/full
- <sup>28</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006506/full
- <sup>29</sup> Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006504/full
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# Got Land? Thank an Indian: Settler Colonialism and the White Settler in the Karuk Ancestral Territory

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## Abstract

*From the time of European invasion of what now constitutes the United States, the settler colonial system has aimed to exterminate Indigenous Peoples and replace them with settlers on the land. While settler colonialism benefits the settler at the cost of the Indigenous, all life on Earth suffers from the continuation of this system. This research examines how white settlers living in the Karuk Ancestral Territory, located in Humboldt County, California, understand our role in the settler colonial system. The goal of this study is to begin a collective pursuit of a white settler ethic of accountability, which is a difficult task even in preliminary stages, as it requires the admission of being a beneficiary of and accomplice to the vicious system of settler colonialism. This could bring about the loss of an already fragile identity and an insecure settler future. Yet settler society has a responsibility to face our role in the settler colonial system.*

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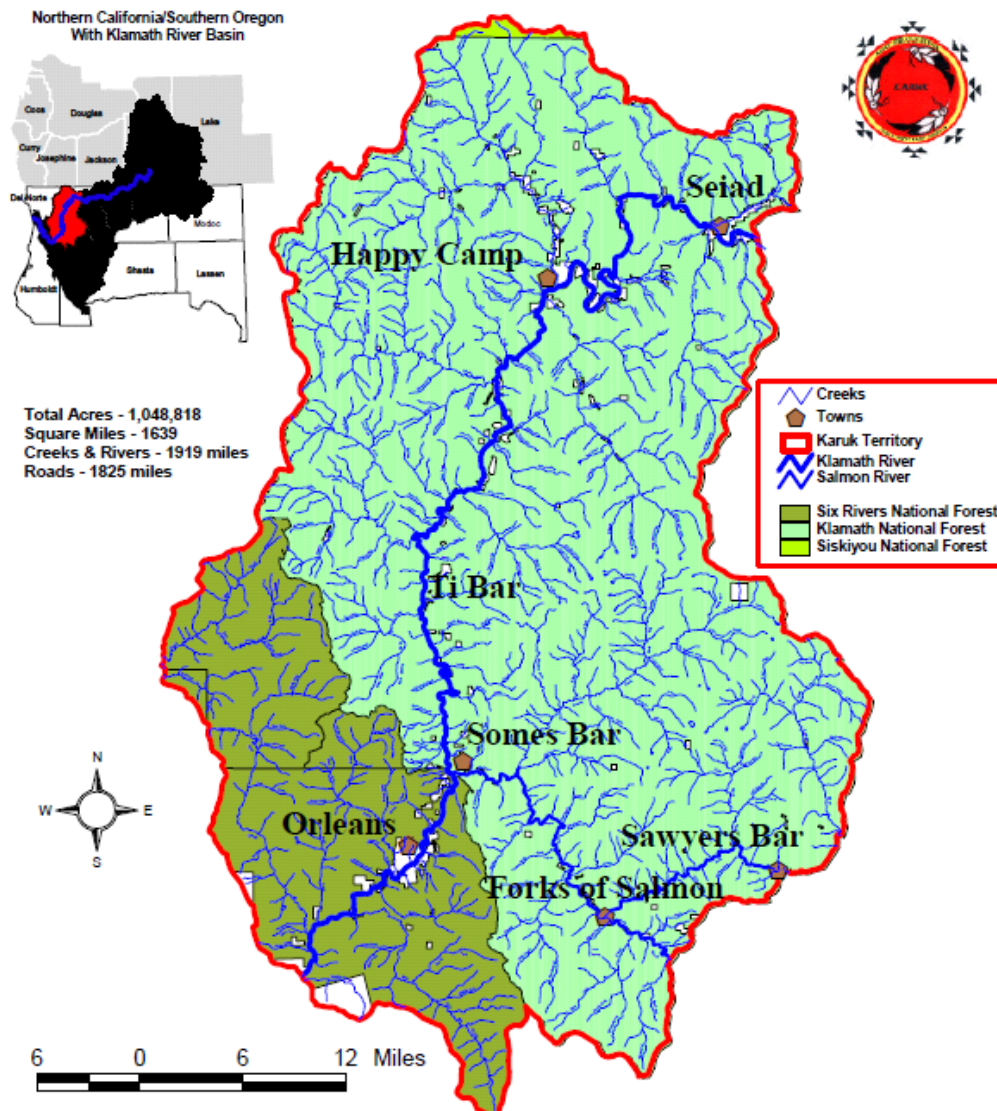
## Introduction

This article is written from the perspective of a white settler. For nearly two decades, I have lived in the Karuk Ancestral Territory, situated on the Klamath River in Humboldt County, California (see Figure 1, next page). Many of the people currently living in this place, both Indigenous and settler alike, are interested in living a sustainable lifestyle and surviving amongst the environmental, social, political, and economic uncertainty of the times. Here some bridges have been built between Indigenous and non-Indigenous residents and a somewhat cordial coexistence exists; nevertheless, tensions do stem from a settler colonial system that benefits one group of people at the expense of another. The acute awareness among members of the Karuk tribe of displacement from their ancestral territory can be read on the T-shirt of one Karuk elder: “Got Land? Thank an Indian!”

I came to live in the Karuk Ancestral Territory in search of a better life, one that was not destructive to, but rather more connected with land and life. I did not realize I was moving to a place where Indigenous Peoples had remained in their aboriginal territory and retained connection to their traditional way of life, in spite of European invasion. Neither had I considered that the neighborhood in which I grew up was also occupied Indigenous land. In

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**Figure 1.** Karuk Ancestral Territory (map by Scott Quinn).

fact, growing up, I largely thought about Native Americans as a “thing” of the past. I learned in school, on television, in movies, through the media, and from accepted social discourse that the original people of North America no longer existed. As a child, I had a thick cardboard book that depicted a ball, a book, and an “Indian” together on the “things” page. My indoctrination to view Indigenous Peoples as less than human began quite early. This is no accident, but rather part of the justification of the settler colonial system.

In the first section of this paper, I carry out a review of existing literature regarding settler colonialism, the settler, white privilege, and white supremacy. Next I discuss the methods used to conduct this research. Thirdly, I unpack white settler identity and how settlers comprehend their position within the settler colonial system, which manifests itself as a complicit settler subject in the Karuk Ancestral Territory. In the concluding segment, I outline some unsettling ideas and situate the white settler in the complicated conundrum within movements for decolonization.



This research seeks to find a starting place from which to collectively pursue a white settler ethic of accountability—a difficult task, even in preliminary stages, as it requires the admission of being a beneficiary of and an accomplice to the vicious system of settler colonialism, and could bring about the loss of an already fragile identity and an insecure settler future. Settler society has a responsibility to acknowledge our role in the settler colonial system.

### Methods

Because I am conducting research that seeks to create a more just world and believe that the knowledge necessary for societal transformation is best collectively produced, I have chosen what is called a “convivial” research approach. Convivial research understands that every community is best suited to analyze its own issues and to strategize direct action for positive change. When I was introduced to the idea of convivial research, a friend explained to me that “we are all researchers.” People on the Klamath River, as people everywhere, are the experts about their own lives. “Similar to participatory action or militant research, the convivial research approach presented here insists that a successful research project specifies an object of study, research agenda, direct action(s), and system of information and that these be the result of collective efforts to solve local problems and advance the shared interests of a community of struggle” (Mitotedigital, n.d.).

Of interviews conducted with 10 white settlers living on the Klamath River, five were women and five men. Their ages ranged from the late 20s to late 70s. One was born outside of the United States and two were born in the Klamath River region. Almost all of the subjects were chosen because of their engagement with settler colonialism and a desire for a better world. Two informants define themselves as anarchist activists. Seven of the participants moved to the Karuk Ancestral Territory because they were dissatisfied with living in mainstream America and most came to the mountains in search of a closer connection to the natural world. The settlers interviewed represent an elevated and unusual level of consciousness regarding these issues, and yet the archaic mentality of settler society is clearly evident in their testimonies.

Research was culminated with two “coyuntura” gatherings, each three hours in length. Coyuntura is a popular education tool designed to help communities engage in praxis around collectively named contradictions:

As a space of epistemological rupture, coyuntura refers to a gathering convened for the purpose of producing new knowledges by exposing the epistemological obstacles or the taken for granted views, attitudes, values, and concepts present in the group that undermine an agreed plan of action. (Mitotedigital, n.d.)

People attending the first coyuntura on the Klamath River were able to self-identify as settlers, shared lived experiences as non-Indigenous people living in a settler colonial state, and begin a process of collectivizing our understandings in order to create new knowledge. The second meeting was culminated with a commitment to continue to meet monthly as a group and engage in the coyuntural analysis process. One settler testifies to the value of having a vocabulary with which to dialogue about settler colonialism: “Finding the words for settler colonialism, calling myself a settler, all this process of finding language to express it, puts words to vague feelings and emotions that makes you better able to sort things out and get to somewhere with it.”

### Settler Colonialism

Although many people were brought, not necessarily of their own will, to settler colonial situations as slaves, indentured servants, or refugees, anyone not Indigenous living in a settler colonial state is a settler on stolen land. Race, class, gender, and ability affect the level of benefits received, but all settlers profit from the settler colonial system.

Patrick Wolfe (1999, p. 2) succinctly explains that “invasion is a structure and not an event.” This system of oppression is ongoing and is articulated clearly by the conditions present in both Indigenous and settler societies in the Karuk Ancestral Territory. Wolfe (1999, p. 1) writes that “settler colonies were not primarily established to extract surplus value from Indigenous labor. Rather, they are premised on displacing indigenes from (or replacing them on) the land.” In this area, as in other settler colonial situations around the world, non-Indigenous residents indisputably benefit from this system of land dispossession.

Historical violence against Indigenous people is well documented. Of the estimated 125 million Indigenous Peoples in North and South America before contact, 90% of the population was lost (Churchill, 1997, p. 1). To give one example from the Klamath River, an attack on an Indian village in 1855 left 26 men killed, 23 women taken “prisoner,” and children not mentioned, possibly sold as virtual slaves to whites as “servants” (Raphael & House, 2007, p. 159). As one witness described the event,

[the volunteers] called the Indians from their homes, shook hands with them, and immediately after-words, each white picking his man, numbers of Indians were shot. They then took away with them some squaws, “under the name of prisoners,” whom they “outrageously abused... This is the battle which has been described heretofore in the newspaper in such glowing colors.” (Captain Judah, quoted in Raphael & House, 2007, p. 159)

This is the foundation of settler society on the Klamath River today and the legacy of conquest inflicted on the relatives of Karuk people, not so long ago.

Also well documented is how settler colonialism continues to affect Karuk people today, negatively impacting health, economics, religion, and culture (Salter, 2003; Norgard, 2004; Stercho, 2005; Holmlund, Alkon, & Norgard, 2009; Norgaard, Reid, & Van Horn, 2011). Leaf Hillman, a Karuk ceremonial leader, explains:

In order to maintain a traditional Karuk Lifestyle today, you need to be an outlaw, a criminal, and you had better be a good one or you’ll likely end up spending a great portion of your life in prison. The fact of the matter is that it is a criminal act to practice a traditional lifestyle and to maintain traditional cultural practices necessary to manage important food resources or even practice our religion. If we as Karuk people obey the “laws of nature” and the mandates of our creator, we are necessarily in violation of the white man’s laws. It is a criminal act to be a Karuk Indian in the twenty first century. (quoted in Norgaard, 2004, p. 25)

The Karuk homeland was originally over a million acres, abundant with natural resources. Today only 0.0007 percent of this land remains in Karuk hands (Norgaard, Reed, &

Van Horn, 2011, p. 32).<sup>1</sup> Almost all of the “private land” in the Karuk Ancestral Territory is owned by settlers, as is currently the circumstance on a local perma-culture ranch whose abundant garden is built around a Karuk graveyard. This is a manifestation of settler colonial dispossession.

The purpose of this paper is to research the un-scrutinized settler who has thus far escaped the gaze of the academic microscope. Whereas an industry has been made upon the studies of Indigenous Peoples since colonization, filling the gap in knowledge on the role and responsibility of the settler is imperative to understanding settler colonialism on the Klamath River today. Patricia Limerick (1987, p. 36) states that “few white Americans went west intending to ruin the natives and despoil the continent, but the evidence of this outcome is hard to ignore.”

Wolfe (2011, p. 274) further explains that colonized peoples are racialized in different ways according to the needs of the colonizers. He distinguishes between race as a doctrine and “racialization as a variety of practices that have been applied to colonized populations under particular circumstances and to different (albeit coordinated) ends.” Requiring Indigenous Peoples to have a certain percentage of native blood to be deemed a tribal member forwards the goal of elimination of Indigenous Peoples. On the other hand, as more slaves meant more wealth for the slave owner, the “one drop rule” in the United States declared individuals black if they had a trace of African blood. These stark differences in blood requirements to racially define people are profitable to the colonizer and strategically implemented at the expense of African and Indigenous Peoples. Wolfe (2011, p. 275) argues that “racialization represents a response to the crisis occasioned when colonizers are threatened to share social space with the colonized.”

Karuk people are prohibited from having a healthy life expectancy and still settlers remain complicit to the continued holocaust that we/they witness everyday. My Indigenous neighbors and friends attend memorials, sometimes weekly, to honor their deceased. Karuk people are unjustly well versed in death and mourning. Driving along the Klamath River, flowers, bandanas, and memorials of death are strung along the roadside as a reminder of lives lost because of the genocidal systems that have created unlivable conditions for Indigenous Peoples. The death of native people is politically normalized. White settlers are not dying this way.<sup>2</sup> Considering colonialism in a global context elucidates the inequality of this racialized, disparate life expectancy.

What Achille Mbembe calls “necropolitics” (2013) offers a fresh and challenging discourse regarding the current state of world politics.<sup>3</sup> He questions a person’s ability to create his or her own truth within the context of colonialism and capitalism, thus challenging what he calls the “romance” of sovereignty. Are Indigenous nations truly sovereign under the empire of the United States? Mbembe looks at the occupation of the Palestinian people and refers to the example of the suicide bomber, the most desperate and extreme picture of human oppression in

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<sup>1</sup> The fact that almost all of the land in this region is “owned” by the US Forest Service is important to the issues inherent in settler colonialism, but is not the focus of this particular paper.

<sup>2</sup> I was explaining to a friend who is Indigenous how difficult it is to forward conversations with settlers about our role in settler colonialism because it makes them uncomfortable. She provided a crucial perspective that it makes her quite uncomfortable that her family and friends are frequently dying as a result of settler colonialism.

<sup>3</sup> I would like to thank Manolo Callahan for expanding my thinking about settler colonialism in the Karuk Ancestral Territory to a global context.

the world, and deems the state of the bomber that of the “walking dead.” These individuals are not sovereign over their own lives. Clearly, the severity of dehumanization that the suicide bomber illustrates exceeds that of the more subtle manifestations of death in the Karuk Ancestral Territory, but the condemnation of human life remains the same. John Mohawk (2008, p. 57) questions these imposing ways that are commonly understood as “rational thinking” when he asks if “clear thinking is prevailing in the world system that is at this very moment, deciding who gets to eat, who has a place to lay down and who does not have a place to lay down, whose children will survive, even their infancies, and whose will not.” The settler colonial system is justified through a white supremacist, hegemonic discourse that dehumanizes the “other” while systematically denying those with brown skin their right to live.

The ideas of “whiteness” and that white people are superior to other racialized groups represent another aspect of racial formation. The system of white supremacy justifies the denial of basic human rights, and many times life itself, upon people of color, while entitling white people to unearned privilege. White supremacy is also a way of thinking and “knowing” that assumes an inherent superiority upon whites. Despite that the history of invasion and genocide wrought by settlers and colonization is well known, images of white purity and superiority are engrained in settler consciousness. These beliefs have permeated and distorted reality so deeply that white people who benefit from these structures are permitted to elude their existence. I use the term “white settler” many times throughout this article, as almost all settlers on the Klamath River are white and the grouping of whiteness allows the preferential privileges that white supremacy creates to be actualized.<sup>4</sup> White supremacy is not just a manifestation of the Ku Klux Klan or racist skinheads, but is a pillar of capitalist and settler colonial systems and is inherent in everyday thinking.

Michael Yellowbird (2004, p. 40) deems cowboys and Indians “the master narrative,” and explains how the narrative “confirmed Indians were inferior to whites by way of a seemingly inexhaustible supply of western movies and TV programs that showed huge numbers of Indians could be easily defeated by a few cowboys with large, shiny, phallic-shaped pistols and an endless reserve of bullets.” Due to the hidden strain of white supremacy over Indigenous Peoples, toys depicting cowboys and Indians with weapons remain socially acceptable today.

White people also live with an unearned privilege. Peggy McIntosh (1988, p. 1), who produced the “white privilege knapsack exercise,” which is used in critical race studies classrooms around the nation, explains how “schooling gave me no training in seeing myself as an oppressor, as an unfairly advantaged person, or as a participant in a damaged culture. I was taught to see myself as an individual whose moral state depended on her individual moral will.” Macintosh explains how white people carry with them a “knapsack” of unearned privilege that allows for preferential treatment in a myriad of ways. She offers an articulate analysis of white privilege, but discourse that goes beyond the unpacking of the knapsack of privilege is sorely lacking. My research seeks to contribute to a gap in knowledge regarding the responsibility of white people given our/their position. Settler acknowledgement that we/they benefit from white privilege without actions for change are not enough. Andrea Smith (2013, p. 264) purports that “the undoing of privilege occurs not by individuals confessing their privileges or trying to think

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<sup>4</sup> My partner Shawn Bourque provoked me to consider the harm in using the words white and supremacy together, which forwarded my thinking to realize that it seems to reinforce that which it seeks to critique; it is better framed as an “ism.”

themselves into a new subject position, but through the creation of collective structures that dismantle the systems that enable these privileges.”

Current world systems leave life beholden to capital, for without it we do not have access to our basic human rights. Cole Harris (2004, p. 172) writes, as Marx and subsequently others have noted, that the

spatial energy of capitalism works to de-territorialize people (that is, to detach them from prior bonds between people and place) and to re-territorialize them in relation to the requirements of capital (that is, to land conceived as resources and freed from the constraints of custom and to labor detached from land).

Settler privilege is articulated through the unrelenting expansion of settlers on the Klamath River where continued expropriation of Indigenous land provides a degree of economic self-reliance for settlers. Harris (2004, p. 172) describes how

in settler colonies, as Marx knew, the availability of agricultural land could turn wage laborers back into independent producers who worked for themselves instead of for capital... As such, they were unavailable to capital, and resisted its incursions, the source, Marx thought, of the prosperity and vitality of colonial societies.

A capitalist economic system compounds the ill effects of settler colonialism. From the moment of colonization, “boom and bust” economies have profited largely the settler. The marijuana industry on the Klamath River today is a perfect example of this. Settlers, controlling almost all the private land, profit from the growing of marijuana while this economy remains less accessible to Indigenous Peoples, who make up roughly half the population in the Karuk Ancestral Territory.

Although many settlers on the Klamath are aware of the crimes that are committed against their Indigenous neighbors, they remain complicit because the current settler identity depends on a status of innocence and entitlement to the land. In the Karuk Ancestral Territory there is unwillingness on the part of many white settlers to acknowledge that they have an active role in settler colonialism, a system of unequal power, privilege, and oppression that is supported by ideologies of white supremacy. In order to deal with the complexities of the settler position in society, a collective settler subject must be created. Corey Snellgrove (2013) succinctly articulates that “there are no good settlers...there are no bad settlers...there are settlers.”

Albert Memmi (1967, p. 20) recognizes the extreme difficulty settlers have in acknowledging power and privilege when he wrote of the self-rejecting and the self-accepting colonizer. He deems that

it is not easy to escape mentally from a concrete situation, to refuse its ideology while continuing to live with its actual relationships. From now on the colonist lives his life as a contradiction, which looms every step, depriving him of all coherence and tranquility. What he is actually renouncing is part of himself, which he slowly becomes.

This contradiction is the impetus for my research, however difficult it may be to pursue this dialogue with settlers on the Klamath. The extreme discomfort for the settler in questioning our/their entitlement to the land pales in comparison to the ramifications of the settler colonial system upon Indigenous Peoples.

In Orleans, a town in the Karuk Ancestral Territory, there is a social space in the center of town where a group of teenage boys gather in the summer to play cards. Social discourse among white settlers on the Klamath refers to these youth as a “gang” and any wrong doings around town are attributed to them. Negative narratives about Indigenous Peoples justify the systematic condemnation of human rights. Non-native people on the Klamath River must begin to participate in attacking the real problem, the system, and not innocent youth who are negatively profiled simply for existing. Waziyatawin (2012, p. 126) addresses this dynamic in *For Indigenous Minds Only*, when she writes about “de-problematizing Indigenous youth.” She explains how settler society is the problem, not the young people themselves:

Colonizing society uses approaches that serve to blame the youth, parents, communities or Indigenous nations rather than identifying these issues as a direct consequence of the colonization of our people. We cannot solve these social circumstances while the root causes—all the systems and institutions of colonialism remain in place.

Some settlers yearn for reconciliation with Karuk people. The South African model of reconciliation, however, is problematic because the beneficiaries of apartheid walked away pardoned, without relinquishing anything. Snellgrove (2013) suggests that

disrupting settler society, and avoiding fatalism, requires a two-fold recognition: of settler colonialism and Indigenous resurgence. Destroying settler society, and allowing the rise of ethical relations, requires a two-fold active response: destroy the material and discursive foundations of settler colonialism and actively engage with Indigenous resurgence.

Many settlers on the Klamath do feel guilty because of the “way things are” for Indigenous Peoples and try their best to be “good people” and support Indigenous community members, but individual efforts towards healing will not suffice. The idea that the power to create change is a solitary process is a problem. Snellgrove (2013) describes settler society as a “beast” that survives off individualism and imagines starvation of this monster would open up possibilities for accord between Indigenous and settler communities.<sup>5</sup> Throughout my research process I have repeatedly come up against the accepted notion that it is unthinkable that white people would actively destroy systems that privilege them. My research challenges white settlers to set aside our individual selves and become accountable to our position in systems of oppression.

Nevertheless, discourse that deems the white settler pure and free of responsibility remains notorious on the Klamath River. Eve Tuck and Wayne Yang (2012, p. 10) describe

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<sup>5</sup> Snellgrove’s article “On Refusal” provides a metaphor that articulates my belief in the necessity of the formation of a collective settler subject, one that does not let the settler off the hook and seeks the possibility for a settler role in decolonization.

settler “moves to innocence...which are those strategies or positioning that attempt to relieve the settler of feelings of guilt or responsibility without giving up land or power or privilege, without having to change much at all.” Laura Hurwitz and Shawn Bourque (2014) recognize that there are as many moves to innocence as there are settlers and they manifest in a specific way on the Klamath River. Several moves to innocence will be outlined in detail in subsequent sections.

### **The Settler Situation**

There are many layers of colonization on the Klamath River. This is evident through the various settler groups still present, including descendants of original gold miners, missionaries, loggers, farmers, different waves of “back to the landers,” and now marijuana growers. Unfortunately, to the Karuk living on the Klamath River, the newest batch of settlers might look different than past invaders, but the implications of their presence are the same.

Both Indigenous and settler people are dehumanized by, and captive within, the webs of colonialism and capitalism. But we are affected and situated quite differently. As one informant describes,

Oftentimes when a piece of property comes up for sale there is tension or a certain vibe that this native family cannot afford to buy it and the kind of resentment that is there. There is tension about private land that is owned by white people, that has an oak stand or basket-picking place that native people want to use and have used in the past and don't have access to. Also the economic disparities where white people are rich and native people are poor and have nothing.

Settler society holds a place physically on the land that supports the persistence of the settler colonial system.

To move beyond the myth of innocence is to recognize that this collective tension is land-based. Settlers living in the Karuk Ancestral Territory know full well that the land they occupy is stolen, but they are pained to question their entitlement to it. An exceptional settler unpacks some anxieties:

The security of private property is an illusion. Insecurity is feeling like you need a title, or to own it or have it in an external way instead of knowing that you belong here. Our culture is a lot like that, grabby and real clingy to institutions that give a sense of security but ultimately betray a feeling of insecurity that are underlying and really deep.

Settler insecurity comes from a dread of acknowledgement that could bring about a loss of land, power, and privilege. Some settlers are willing to talk about this fear, but only in the context of other settlers than themselves. “What they fear is the loss of their ability to manage their land the way they want to—fear of both the possibility of losing property, and the ability to be sovereign,” one brave settler owns the terror. “I don't want to give up my ability to live here, it's the fear of that.” Another settler breaks it down further:



I think private property is kind of a security thing. Everybody feels more secure owning a place even if it is a more contrived sense of security. It is kind of manufactured. I might have a piece of paper that says I can live here and that this belongs to me, but the people who have lived here for thousands of years have agreements with the spirit people. And so the larger ramification of that might be more meaningful.

Compounding the quest for absolution is the settler's hurt in being a lost people. Generations of colonization, displacement, and genocide in European settler history prelude the colonization of North America and this has damaged settler humanity. As one settler explains, "All the loss, the loss of homeland and being secure and knowing that you belong in a place. We are all still struggling with that at this point it is so convoluted and weird it doesn't lend itself to frank discussion or dealing with it or anything." Some white settlers are pained to recognize their disconnection from their ancestors. One settler attests:

I did some calculations about the source of our name, our last name, and 17 generations ago my family name came into being. So 17 people who failed to tell 17 people could have passed on some story, given me some information. Somewhere along the way the communication broke down.

Being severed from a land-base as well as from ancestral relations is a long-standing trauma for settler society that remains largely unrecognized.

Settler identity is wounded and rife with contradiction. The settler in the Karuk Ancestral Territory feels a sense of guilt and yet this remorse remains sheltered in the safety of the subconscious. Settlers depend on trusted moves to innocence in order to live with themselves and this is articulated through interviews with settlers living on the Klamath. Subsequently, common discourse among the non-Indigenous associates settlers with the gold miners who came in the early 1850s, as the current settlers would prefer not to be linked with the wrongdoing of their ancestors. Asked what comes to mind when she thinks of a settler, one white interviewee said, "White people in 1850...moved inexorably westward with the cause of manifest destiny on their side." This informant analyzes the settler title:

Being a settler feels more like individual agency, how myself as an individual has interacted with my own life and my own thinking about what places are open to me. Where I could fit in, where I am free to go as a person. I was raised unlimited. I go where I want. Being called a settler is an acknowledgement of opportunity and being entitled to go wherever. It does call this into question because it ties it to a history of western expansion. The term settler calls into question some ethical issues.

When asked if he considered himself a settler, one informant said, "The settler term, at times it applies and at times it applies less. Not sure if it applies as much in my situation. But I could be just not wanting to deal with it." Another respondent explained: "It depends on how far back you want to go. The whole human race is a settler. It is kind of interesting to read about human mass migration." The "migration narrative" is a common response when settlers want to escape the mark of a settler identity. As one settler said, "It could be argued that at one

point that Karuk were not here anyhow, science says people migrated here, so how is it different than the modern migration?” Hurwitz and Bourque (2014, p. 8) explain how in this move to innocence settlers use a historical “out” describing how people have always migrated around the planet and how Indigenous Peoples themselves migrated here. What this fails to take into account—besides Indigenous accounts of their own origin—is the vast time that Indigenous Peoples have inhabited, managed, and coexisted with their homelands (not to mention the silencing of violence that has displaced Indigenous Peoples).

Attempts to make Indigenous Peoples invisible have been thorough. An interviewee who grew up in the Karuk Ancestral Territory remembers that

as a kid my favorite thing to do was to go out and collect arrowheads. It was my way of originally connecting. In that sense it perpetuated the myth that the Indians were here and were gone. The local families were not making arrowheads any more and so therefore something had happened, there was a disconnection in my mind between the culture that was of the people that were there originally and the people were there now. Early on my sense was of a loss that this incredibly robust and beautiful culture was gone.

On the Klamath River, Indigenous Peoples have remained in place and traditional ways are practiced to the full extent possible within a settler colonial system. Yet for settlers public discourse around Indigenous Peoples as a “thing” of the past still lends itself to a “color-blind” approach to innocence. This appeared as a pattern when talking with settlers on the Klamath. The eldest settler interviewed articulates this move: “When we came in the 1950s people were part Indian, there are very few pure whites and very few pure Indians. I love it, American stir fry.” Another settler describes how “there is the matter of who is white and who is Indian exactly. Most Indians have some European ancestry and most of the white people have someone native in their background.” In order to skirt the issue, a common adaptation asserts that “race is a construct.” A settler who moved to the Klamath River in 1954 admits to the colonial mentality that still exists today, saying “it would have been better to go [sic] ahead and integrate these people that really should have got integrated into society much earlier.”

Many non-Indigenous residents of the Klamath River region seek accord amongst people living in the Karuk Ancestral Territory. One back-to-the-land settler talks about “the idea of one love, one people. It’s the spiritual evolution that we need for the world to be a better place, for this shit to not happen again.” Sweeping claims of unity let the settler off the hook and fail to acknowledge the ramifications of systems of oppression (Hurwitz & Bourque, 2014).

One honest informant discusses settler identity: “I think the fear is about wanting to be on the ‘good team.’ Am I on the good team? When I talk about it, with whites I am a champion. When I am with Indians, I am not so sure.” When asked to define white supremacy, settlers had no trouble finding some words to explain, as witnessed in one subject’s response:

That feeling of entitlement is white supremacy. It’s the manifest destiny that I was taught in high school. To me personally manifest destiny wasn’t a bad thing, it was just the way it was. It was that we were god’s chosen people. To them US history was the history of dead white presidents whose pictures lined the walls all the way around the classroom. It was very clear in high school: white is right,

might is right. We are better because we can kill other people better than everyone else.

Another settler describes how

it has been in the fields of our society for so long, that idea that the white race is superior that we do all hold that a little bit to varying degrees. It is unconscious, we might not admit it. But being raised in America you are steeped in racism and white supremacy. We hold that as part of the collective unconsciousness.

White supremacy is poisonous, as it dictates that Indigenous Peoples create their own problems, not the system that blatantly seeks to destroy them. One informant unabashedly puts the burden on the Indigenous: “Jews had people mistreat them. The Chinese, the Japanese and the Irish did. All of them have had really bad things happen to them. But you know what? You can’t keep holding grudges. If you did you will make yourself miserable.”

A justification myth includes the implication that Indigenous Peoples are not “responsible” and therefore settlers are better stewards of the land. One interviewee states that “people who are from here and their place is filled with cars and dirt. These are things I have a problem with.” Another white person echoes this sentiment: “Plenty of Indigenous people don’t seem to have that much interest in caring for the land. Will that segment of Indian society become responsible citizens and stewards of the land if white people leave? I kind of doubt it.” These narratives are so cavernous that even when facts regarding settler violence and conquest are known, the settler comes out “clean” and the Indigenous “dirty.” “I have definitely heard white people mocking native ceremonies because they latch on to anything bad that happens,” one interviewee admits. The perpetuation of such myths directly relates to settlers’ insecurity with the unjust position they occupy on the land. As one informant reveals, “When you are secure in your own identity, you don’t have to say someone else is bad.”

The “beast” (Snellgrove, 2013) of individualism arrives when another settler asserts that “Indians can’t just blame the system, people got to be responsible for themselves.” The sentiment of one informant illustrates how this trope promotes settler complicity: “Going back to just trying to do your best, to be a good person as an individual to the other individuals around you, I don’t know what the hell else to do.”

The words of a settler who was born and raised on the Klamath River articulate some understanding about why lines are drawn between Indigenous and non-Indigenous people:

Growing up on the river, there were native families up there. I think what was really clear in hindsight is that they knew how to protect themselves from white people, even well-meaning white people, because so much had been taken. You can fish with a native family every day for a whole summer and there are stories they wouldn’t tell when white people were there. There was knowledge of how to do things that they had been taught and for good reason they wouldn’t share.

Still, the settler largely expects that Indigenous Peoples should “get over it” and walk with settlers into the future. As an individual who settled on the Klamath River in the 1950s bluntly stated, “You living now and me living now, we had nothing to do with all that goings-on, three

or four hundred years ago.”<sup>6</sup> His wife interjected: “We need to forget it and go on.” He countered: “Regardless of the past, that past should have been done away with. You know that’s something we can’t deal with anymore. It’s gone, It’s done. Not to say that they didn’t get mistreated.”

This settler explains the difficulty she faces in acknowledgement:

I am also reminded of the violence that was done towards these people [Karuk] that hold something so special, just the crime of what has happened, that is something that is really hard to hold and hard to think about and to feel. I definitely compartmentalize it. It is painful to feel, so I don’t really stay there or hold that very much. Each individual person is kind of a reflection of the system that we are in right now, and so here I am this one person who knows what has happened has awareness, has felt into it, but it is too painful. I am not far enough along in my process to grieve and hold that in the way that it needs to in order to move through it.

Another settler describes how

it is not a question that has an easy answer. Things get weird if you think about it too hard. Sometimes my philosophy is I just need to think about it less, do my best to be a decent person as an individual and not get so caught up in the larger system. Some people can change the world, but I don’t really see myself that way. You can only onyx about it for so long before it becomes a hamster wheel of navel gazing inside your brain.

Indigenous Peoples do not have the option to abstain from their position in the settler colonial system. White settlers have the privilege to choose at what level, and whether to engage at all, with issues surrounding settler colonialism.

Carrying the burden of my role in settler colonialism with me at all times is agonizing and maddening. I am currently building an ecologically sound, sustainable home, with walls made of woodchips and clay that will be standing for generations to come. Simultaneously, my partner and I pursue dialogue and action that deny our right to be here. It is agonizing to live such a blatant contradiction, again the impetus for this research.

## Conclusion

In the Karuk Ancestral Territory two social structures compete. One has existed since time immemorial and the other has been forced upon the original.<sup>7</sup> Each relies on starkly different value systems. Settler society and capitalism are founded upon values that reward self-interest and promote individual rights. These value systems largely dictate the quality of life on the Klamath River. The values honored by settler colonial society are unhealthy for all creatures and the natural world on which we depend.

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<sup>6</sup>This informant wrote a column for an early settler newspaper and considers himself a historian; it is interesting that in this context colonization occurred “three or four hundred years ago,” not 164 years ago.

<sup>7</sup>I would like to express my appreciation to Manolo Callahan for this way of looking at the settler colonial situation on the Klamath.

The book *Original Instructions* offers a glimpse into Indigenous value systems. Rebecca Adamson (2008, p. 33) explains that

what made traditional economies so radically different and dangerous to western economies were the traditional principals of prosperity of creation versus scarcity of resources, of sharing and distribution versus accumulation and greed. Of kinship usage rights versus exclusive individual ownership rights and of sustainability versus growth.

Although colonization has negatively affected all life on the Klamath River and Karuk social infrastructure has been tampered with by settler colonialism and a capitalist economic system, Indigenous value systems still persist. Core principles requiring interdependence and reciprocity that kept Karuk communities sustainable for time immemorial are embedded in the culture and this no genocide can kill, only systems of oppression make healthy living inaccessible. In order to survive we must return to Indigenous ways of knowing about our role as human beings.

How might we proceed to change the values we rely on in a colonized world? Andrea Smith (2013, pp. 264-265) explains that we cannot think ourselves into a new subject position; we have to change the systems in order to transform ourselves: “Essentially the current social structure conditions us to exercise what privileges we may have. If we want to undermine those privileges, we must change the structures within which we live so that we can become different people in the process.” An “unsettled” informant echoes Smith’s analysis: “You can fight against privilege, you can reject it as an idea, but you will still have it until things are dismantled.” Smith (2013, p. 272) also describes how creating new value systems means asking how we understand ourselves as people in relationship to the land and to all that lives: “If we understand ourselves as beings fundamentally constituted through our relations with other beings and the land, then the nations that emerge will also be inclusive and interconnected with each other.”

This discussion must clearly delineate between an appeal for Indigenous ideology and the desire to appropriate Indigenous culture and ceremonial ways on the part of non-Indigenous peoples. Settler society has no right to Indigenous spirituality, although the pain and loss of being disconnected finds many settlers longing for it.

An in-depth inquiry into settler colonialism begins with the challenge of disrupting accepted narratives and creating discursive openings that allow for visions of decolonization to become illuminated. Yet the lens of decolonization is blurred with decades of fantasy narratives that legitimize settler society. An end to these myths would demand fundamental societal change. There is not a blueprint for decolonization, and decolonization means various things for different people. Derrick Jensen (2009, p. 9) suggests decolonization is

the process of breaking your identity with and loyalty to this culture—capitalism, and more broadly civilization—and remembering your identification with and loyalty to the real physical world, including the land where you live. It means reexamining premises and stories the dominant culture handed down to you. It means seeing the harm the dominant culture does to other cultures, and to the planet. If you are a member of settler society, it means recognizing that you are

living on stolen land and it means working to return that land to the humans whose blood has forever mixed with the soil.

Tuck and Yang (2012, p. 3) assert that decolonization ultimately and literally means the complete repatriation of Indigenous land and life. In the current sense of “wealth,” white settlers have the most to lose from a decolonized world because we/they “own” the most. A woman respondent ponders the possibility that “other [white] people might have to pay some price and there is still injustice, that can be made more just, but it means you lose some of what you have gained from unjust means.” Repatriation of land means the abolishment of private property, not the transfer of “ownership” from settler to Indigenous hands. Technologies towards sustainable living have been developed over thousands of years, and Indigenous Peoples are best suited to provide leadership as to how we might proceed as human beings to begin to repair and restore the damage that has been wrought on our world by colonization and capitalism.

Tuck and Yang (2012, p. 1) explain that “what is unsettling about decolonization [is]... what is unsettling and what should be unsettling.” They argue that “decolonization is not accountable to settlers, or settler futurity. Decolonization is accountable to Indigenous sovereignty and futurity” (p. 26).<sup>8</sup> Many settlers on the Klamath River push back against being decentered from conversation regarding the future. However, white people’s uneasiness is a small price to pay knowing that the holocaust against Indigenous Peoples continues.

“Keep trying, keep an open mind, and hopefully the answers to hard questions as to how we can live in this place as settlers or fifth-wave colonialists will come. How can we be here in a good way and earn our keep?” This white settler poses a question that does not have a clear answer. Settlers cannot help but dream about being pardoned from the ills they know exist, as articulated by another interviewee: “There is a time of reconciliation that is coming. We’re going to see positive change.” As a non-Indigenous person tormented by acceptance of the part she plays in a genocidal system, this researcher recognizes the temptation to hope for resolution. One white settler questioned if “it would be helpful to have some kind of reckoning, some kind of symbolic acknowledgement from the white community that we acknowledge what is happening today?” Tuck and Yang (2012, p. 26) refute such an idea: “Reconciliation is about rescuing settler normalcy, about rescuing a settler future. Reconciliation is concerned with questions of what will decolonization look like? What will happen after abolition? What will be the consequences of decolonization for the settler?” A representative gesture will not change any of the structures that continue to oppress Indigenous Peoples.

I do not challenge settler colonialism solely to forward Indigenous liberation—I do so also, admittedly, to aid in my own survival. An activist settler speaks to self-interest in this struggle:

Once I figured out where I was and what was going on, that there were native people here that are still here and their food source was being destroyed and this was happening now. It was from a white liberal thing of wanting to help people,

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<sup>8</sup>Reading “Decolonization is Not a Metaphor” was truly unsettling and paramount to my continued understanding of my role as a settler. My participation in an Indigenous Peoples course with Michael Yellow Bird brought together many aspects of the way I grasp the current settler colonial situation and the value systems that are necessary for a better world.

that's how I got involved. I wanted to help. You can call it solidarity and anarchism. Settlers are so in the wind and not grounded in place. Now I want to do activism to help myself and survive not selfishly, but I see my own stake in it more now. It has been a process of understanding.

The systems that bind us to this brutal existence do not serve us, but collectively harm us. We must redefine wealth and success. When probed to talk about colonial value systems on the Klamath, this settler revealed some important knowledge:

A capitalist thinks that everyone needs to be on the rise and upwardly mobile in a capitalist sense, but I think we can change white culture and what is acceptable and how we do things and maybe our own values and self-examining on our parts. It's a hard discussion to have. People who aren't open to understanding, and even people who think that they are open to other value systems, often aren't, so it is hard.

In seeking to create new structures for a healthy existence in the Karuk Ancestral Territory, it is necessary to examine our schools, our government agencies, and our non-profits to see how they assume white superiority and perpetuate oppression. Settler society can work to educate and organize ourselves to dismantle our current identity, built upon entitlement and unearned privilege, and recreate ourselves as people who refuse to remain complicit. We can be willing to step up to the frontlines of struggle, as white people are looked upon more favorably by the legal system and commonly have more financial resources at our disposal. Ultimately, settler society must be willing to give up land, power, and privilege. This is the rightful responsibility of human beings who find themselves in the position of benefitting upon the lives of people of color. I am not arguing that settlers should leave the Karuk Ancestral Territory. I am asserting that we do not have a "right" to stay. Bluntly stated, in a decolonized world I might ask to remain in the Karuk Ancestral Territory and the answer would be in the hands of Indigenous Peoples.

Frantz Fanon (1963, p. 36) asserts that "decolonization, as we know, is a historical process: that is to say that it cannot be understood, it cannot become intelligible nor clear to itself except in the exact measure that we can discern the movements which give it historical form and content." It is into an unknown future that settlers fear to step. Tim Wise (2011, p. 270) recognizes that

of course there is redemption in struggle, and victory is only one reason for fighting, only seems to be a surprise, or rather a source of discomfort to white folks. Invariably it seems that we in the white community who obsess over our own efficacy and fail to recognize the value of commitment irrespective of outcome.

As it stands today, white people cannot be considered relatives in the family of human beings. Decolonization for the white settler means a chance to return to humanity and contribute to the survival of life on earth.



Some settlers on the Klamath River have begun to engage in honest discourse that acknowledges the non-Indigenous role in settler colonialism. The time for these acknowledgements and actions is long overdue. This study aims not to bolster an Indigenous/settler dichotomy, but rather to suggest a starting place towards unity. As we come to understand settler colonialism in its current manifestations, and the settler role in this debacle, it should become clear that even if settlers are not to blame, we must become accountable to the situation.

To the Karuk, as Wolfe (2007, p. 387) writes, “land is life—or, at least, land is necessary for life. Thus contests for land can be—indeed, often are—contests for life.” Leaf Hillman (2012) explains his understandings about landholding and place:

There are things I call natural truths. Man can pass laws, man can have his policy, he can have his institutions. Ultimately if those laws or policies or institutions are doing things that conflict with the natural law then those things will fail and along with those failures, will come the failure of everything, humans included.

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# The Politics of Fire and the Social Impacts of Fire Exclusion on the Klamath<sup>1</sup>

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## Abstract

*The exceptional biological diversity of the mid-Klamath River region of northern California has emerged in conjunction with sophisticated Karuk land management practices, including the regulation of the forest and fisheries through ceremony and the use of fire. Over three quarters of Karuk traditional food and cultural use species are enhanced by fire. Fire is also central to cultural and spiritual practices. Land management techniques since the early 1900s have emphasized fire suppression and the “exclusion” of wildfire from the landscape. This paper uses data from interviews, surveys and other documents to describe the social impacts of fire exclusion for Karuk tribal members. The exclusion of fire from the ecosystem has a host of interrelated ecological and social impacts including impacts to cultural practice, political sovereignty, social relations, subsistence activities, and the mental and physical health of individual tribal members. In addition, Karuk tribal members are negatively impacted by the effects of catastrophic fires and intensive firefighting activities that in turn result from fire exclusion. Whereas existing literature has addressed ecological and social impacts of changing ecosystems as separate categories, the social, ecological and economic impacts of fire exclusion are here understood to be intrinsically linked.*

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*Fire burn up old acorn that fall on ground. Old acorn on ground have lots worm; no burn old acorn, no burn old bark, old leaves, bugs and worms come more every year. Fire make new sprout for deer and elk to eat and kill lots brush so always have plenty open grass land for grass. No fire brush grow quick and after while choke out all grass and make too much shade, then grass get sour, no good for eat. No fire then too much leaf stay on ground. No grass can grow up. Too much dead leaf, ground get sour. Indian burn every year just same, so keep all ground clean, no bark, no dead leaf, no old wood on ground, no old wood on brush, so no bug can stay to eat leaf and no worm can stay to eat berry and acorn. Not much on ground to make hot fire so never hurt big trees, where fire*

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*burn. Now White Man never burn; he pass law to stop all fire in forest and wild pasture... (Klamath River Jack, 1916<sup>2</sup>)*

## Introduction

The exceptional biological diversity of the mid-Klamath River region of northern California has emerged in conjunction with sophisticated Karuk land management practices, including the regulation of the forest and fisheries through ceremony and the use of fire (Kimmerer & Lake, 2001; Lake, Tripp & Reed, 2010; Salter, 2003; Anderson, 2005; Anderson, 2006). Indeed, the species abundance and diversity of this region cannot be understood outside the broader tribal management activities that produced them (Agee & Skinner, 2005; Lake, 2013; Anderson, 2002; Lewis, 1993; Martin & Sapsis, 1992). Particular places in the landscape such as fishing sites, gathering sites and ceremonial grounds hold profound and unique importance for Karuk people. Karuk tribal members have responsibilities to tend to and care for the food and cultural use species they consider as relations. Amongst the activities that Karuk people are supposed to do as their part of the pact is to burn the forest. As Karuk Eco-Cultural Restoration Specialist and spiritual leader Bill Tripp describes,

They used to roll logs off the top of Offield Mountain as part of the World Renewal Ceremony in September, right in the height of fire season so that whole mountain was in a condition to where it wouldn't burn hot. It would burn around to some rocky areas and go out. It would burn slow. Creep down the hill over a matter of days until it just finally went out. When it rained it would go out and that's what we wanted it to do.

Over three quarters of Karuk traditional food and cultural use species are enhanced by fire (Tripp, 2013; intergenerational traditional ecological knowledge; Norgaard, 2013). The practice of burning is also central to cultural, social and spiritual practices. In contrast, a central tenet of the US Forest Service land management techniques that have transformed the landscape since the 1920s has been the suppression and "exclusion" of wildfire. The exclusion of fire has led to radical ecological changes including high fuel loads, decreased habitat for large game such as elk and deer, reduction in the quantity and quality of acorns, and alteration of growth patterns of basketry materials such as hazel and willow, to name but a few examples. From a Karuk perspective, the exclusion of fire from the landscape creates a situation of denied access to traditional foods and spiritual practices, puts cultural identity at risk and infringes upon political sovereignty. On a more individual level, the altered forest conditions create social strain for the individuals who hold the responsibilities to tend to specific places and to provide food to the community for subsistence as well as ceremonial purposes.

Whereas existing literature has addressed ecological and social impacts of changing ecosystems as separate categories, the ecological, social, political, psychological and economic impacts of fire exclusion for the Karuk community are here understood to be fundamentally interconnected. As Karuk Cultural Biologist, dipnet fisherman and spiritual leader Ron Reed explains,

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<sup>2</sup> 1916 letter to the California Fish and Game Commission by Klamath River Jack, Published 1916 in a Requa, California newspaper as "An Indian's View of Burning and a Reply."

Without fire the landscape changes dramatically. And in that process the traditional foods that we need for a sustainable lifestyle become unavailable after a certain point. So what that does to the tribal community, the reason we are going back to that landscape is no longer there. So the spiritual connection to the landscape is altered significantly. When there is no food, when there is no food for regalia species, that we depend upon for food and fiber, when they aren't around because there is no food for them, then there is no reason to go there. When we don't go back to places that we are used to, accustomed to, part of our lifestyle is curtailed dramatically. So you have health consequences. Your mental aspect of life is severed from the spiritual relationship with the earth, with the Great Creator. So we're not getting the nutrition that we need, we're not getting the exercise that we need, and we're not replenishing the spiritual balance that creates harmony and diversity throughout the landscape.

This paper uses data from interviews, surveys and other documents to describe the social impacts of fire exclusion for Karuk tribal members. In addition, Karuk tribal members are negatively impacted by the effects of both catastrophic fire and the intensive firefighting activities that in turn result from fire exclusion. These impacts are also described.

### **Social Impacts of Environmental Disasters**

Recent ecological literature has begun to address the impacts of fire exclusion on forest ecosystems in the American West (Keane et al., 2002; Collins et al., 2011). However, while there are many studies of the social impacts of wildfire on human communities, there are virtually no studies of the social impact of wildfire exclusion. There is an overlap in these issues in that fire exclusion leads to larger catastrophic wildfires over time.

Negative social impacts of wildfires include threats to human health (Fowler, 2003; Rittmaster et al., 2006) and important cultural or archaeological sites (Spennemann, 1999; Morton et al., 2003), emotional and psychological stress, and multiple community-level impacts to social resilience and community trust (e.g. Carroll et al., 2006; Kumagai, Carroll, & Cohn, 2004; Morton et al., 2003). In addition to the community impacts of acute wildfire, Carroll and coauthors describe negative impacts of firefighting activities on local communities, including loss of local control:

Because disasters generally constitute disruptions that few local communities can deal with in the absence of outside help, they usually entail extra local assistance. Although this assistance is welcome and needed, outside entities can also be disruptive and contribute to conflict... The community now has two sources of disruption: The disaster event and the intrusion of outside entities into day-to-day life. (2006, p. 262)

Amongst other sources of conflict, Carroll and coauthors describe how the fact that fires are managed by rationalized bureaucratic agencies that “disembled or remove social relations from local contexts of interaction” (2006, p. 264). In other words, when these expert systems are created in remote times and places relative to the site of the fire, community knowledge, needs and values are easily overridden by a hierarchal decision-making structure based on outside expertise.

There is also a growing body of literature on the psychological impacts of disasters. Environmental disasters from oil spills or other contamination have led to higher rates of depression, post-traumatic stress disorder (PTSD) and other indications of mental impact (Picou & Hudson, 2010; Picou, Gill, & Cohen, 1997; Picou, 1998; Couch & Kroll-Smith, 1985). For instance, Michael Edelstein's 1988 study *Contaminated Communities: The Social and Psychological Effects of Residential Toxic Exposure* describes how residential toxic exposure negatively impacts multiple aspects of not only individual psychological experience, but also family, social and community relations. Fewer studies of disaster impacts address the unique issues for Native communities. Important work by Steven Picou and others on the impacts of the Exxon Valdez oil spill represents an important exception (e.g. Picou, Gill, & Cohen, 1997; Palinkas et al., 1993). The authors note that the spill precipitated "a mixture of emotions, including denial, outrage, sadness, numbness, hurt, confusion and grief" (Picou, Gill, & Cohen, 1997, p. 171). These authors describe how in addition to economic and subsistence impacts, the spill "shook the cultural foundation of Native life." Research has only begun to translate work on the psychological dimensions of disasters to wildfire events. For example, in their review of the social impacts of 10 recent wildfires, Morton et al. note that emotional impacts from property destruction and environmental damages from fires "are likely quite high" but understudied (2003, p. 38).

The notion that environmental degradation may have implications for tribal sovereignty has become an especially important theme within emerging scholarship on climate change (Abate & Kronk, 2013; Tsosie, 2013; Whyte, 2013). As culturally important species move or disappear with landscape change, tribal claims and jurisdictions over access to those species may be affected. Climate change is also rapidly reshaping the legal landscape, as new problems require new judicial rulings. And because there are still very few comprehensive federal laws applying to either the adaptation or mitigation of climate change, emerging regional, state and local efforts have emerged ad hoc. In the absence of an overarching legal framework Tribes face potential loss of acknowledgement of their jurisdiction if they are excluded from or cannot keep up with the multiple and rapidly changing dynamics between federal and local actors (Cordalis & Suagee, 2008).

The politics of fire exclusion have gained momentum in the context of climate change more generally. Climate change both increases the prevalence of catastrophic fires (and all their associated social and ecological impacts) and has brought these issues to the table with a new sense of immediacy. In the face of changing climate, many foresters Native and non-Native alike have turned to indigenous practices with renewed interest and optimism in the hope that they may provide a much needed path towards adaptation (Wildcat, 2009; Whyte, 2013; Lynn et al., 2013; Vinyeta & Lynn, 2013). This paper contributes to that literature by highlighting the immediate tribal benefits of such directions.

### **The Politics of Fire**

Over the past several decades a combination of factors that likely include accumulation of biomass and fuels as a result of fire suppression, decreasing fire intervals, increasing scale and cost of fires (Miller et al., 2012), Native cultural resurgence (Nagel, 1997) and the presence of modern Indian nations as active players in natural resource management (Wilkinson, 2005), and the increased fire intensity resulting from climate change have converged to create contentious politics concerning fire management. Conflict over fire policy has produced significant media attention, generated textbooks, conferences and entire college-level courses.

If Karuk people feel strongly about fire exclusion, it is no wonder. At the same time that the “politics of fire” began on the Klamath, the Karuk population went from about 2,700 people to about 800 people largely due to state-sponsored Indian extermination (McEvoy, 1986, p. 53; see also Norton, 1979; 2013). Karuk culture and lifeways have been under attack, first explicitly from state policies of genocide and overt forced assimilation and then implicitly through natural resource policies, coercive educational systems and ecological destruction itself. Over this time outright genocide, the lack of recognition of land occupancy and title, and the process of forced assimilation each facilitated changes in the use of fire and other land management practices and structure the present political and economic situation for Karuk people.

Explicit forced assimilation of Native people into the dominant culture occurred through boarding schools and other institutional processes. Like youth from tribes throughout Canada and the United States, Karuk children were separated from families at young ages and taken to Bureau of Indian Affairs boarding schools in Oregon and California for the specific purpose of assimilation. Karuk people were prevented from speaking their native language or practicing their native customs, and forced to eat a diet of “Western” foods. Karuk people still struggle today to recover economically, socially, politically and mentally from the devastation of these policies.

From a Karuk perspective ongoing forced assimilation continues today via ecological degradation and the criminalization of traditional cultural activities, amongst them traditional burning practices. While there is no overt policy designed to change how Karuk people view and use the land parallel to the ways that boarding schools explicitly enforced non-Native “white” behaviors onto Indian people, forced assimilation occurs because significant or “keystone” Karuk cultural practices such as the use of fire are illegal. Forced assimilation also happens when people fear retaliation and when Karuk food sources are so depleted that tribal people must buy store bought foods or eat government commodity foods instead. Here the assimilation in question is assimilation to non-Indian understandings, values and uses of the natural world.

Underlying the social impacts of fire exclusion described here is the fact that the practices and policies of the United States Forest Service (and other state and federal agencies) do not consider humans as part of the natural world, but instead are premised on humans as outside entities, managing nature. Therefore, as Karuk Director of the Department of Natural Resources Leaf Hillman describes,

Every project plan, every regulation, rule of policy that the USFS adopts and implements is an overt act of hostility against the Karuk people and represents a continuation of the genocidal practices and policies of the US Government directed at the Karuk for the past 150 years. This is because every one of their acts, either by design or otherwise, has the effect of creating barriers between Karuks and their land.

In contrast to this notion of humans as separate from nature, Hillman references the Karuk Creation Story:

At the beginning of time, only the spirit people roamed the earth. At the time of the great transformation, some of these spirit people were transformed into trees, birds, animals, fishes, rocks, fire and air—the sun, the moon, the stars... And



some of these spirit people were transformed into human beings. From that day forward, Karuk People have continually recognized all of these spirit people as our relatives, our close relations. From this flows our responsibility to care for, cherish and honor this bond, and to always remember that this relationship is a reciprocal one: it is a sacred covenant. Our religion, our management practices and our day-to-day subsistence activities are inseparable. They are interrelated and a part of us. We, Karuk, cannot be separated from this place, from the natural world or nature... We are a part of nature and nature is a part of us. We are closely related.

Today the politics of wildland fire play out on the Klamath in three domains: (1) the desire of Native American tribes and other non-Native actors to use fire as a tool of landscape management; (2) concern over the impacts of catastrophic fire; and (3) community and ecological impacts from activities that take place at the time of firefighting (e.g. back burning, the creation of fire lines and the use of chemicals and fire retardants).

### **Data and Methods**

The information presented here is compiled from three main sources: in-depth interviews with Karuk tribal members, responses from open-ended questions on the 2005 Karuk Health and Fish Consumption Survey, and archival material. Data from this project were collected in two phases. The original research was conducted from 2004 to 2006 in studies commissioned in connection with the relicensing of five dams on the Klamath River (see Norgaard, 2005). The purpose of the original research was to assess impacts of the dams and declining salmon populations on the health, culture and subsistence economy of the Karuk Tribe. At this time 18 in-depth interviews were used to gather detailed information from tribal members regarding health, diet, food access and consumption, and economic conditions, and the 2005 Karuk Health and Fish Consumption Survey was distributed to adult tribal members living in the Aboriginal Territory. The survey contained 61 questions designed to evaluate the range of economic, health and cultural impacts for tribal members resulting from changes in the ecosystem. Open- and closed-ended questions on physical health and the consumption and harvesting of traditional foods were developed in response to interview data. The survey had a response rate of 38%, a total of 90 individuals.

Emphasis in the first phase of the study was on the changing conditions in the Klamath River, yet information concerning impacts from changing “upslope” or forest conditions was frequently included in interview responses, and several questions on the survey were specific to upslope conditions. In the second phase, from 2008 to 2013, an additional 20 interviews were conducted with Karuk tribal members living in the Aboriginal Territory focusing specifically on the social, cultural and health impacts of changing forest conditions. In both phases interviewees were selected via purposive sampling of key informants to identify a wide range of relevant concerns and experiences across Karuk Aboriginal Territory.

### **Social Impacts of Fire Exclusion**

The ecology of the mid-Klamath region, including the distribution and abundance of species, has been fundamentally shaped by Karuk cultural practices, especially the use of fire. Skinner et al. (2006) write that “Native people of the Klamath Mountains used fire in many ways: (1) to promote production of plants for food (e.g., acorns, berries, roots) and fiber (e.g., basket

materials); (2) for ceremonial purposes; and (3) to improve hunting conditions” (p. 176). The Karuk Draft Management Plan notes that “[f]ire caused by natural and human ignitions affects the distribution, abundance, composition, structure and morphology of trees, shrubs, forbs, and grasses” (2010, p. 4). People burned to facilitate forest quality for food species like elk, deer, acorns, mushrooms and lilies. They burned for basketry materials such as hazel and willow, and also to keep open travel routes. Karuk people managed for their own foods and uses, but their activities created abundance that benefited other species on their own terms. Dr. Frank Lake, Karuk Descendant and USDA Forest Service research ecologist, describes what he was taught and learned of Karuk culture: “As a human, you have a caretaking responsibility. And so you managed areas to share acorns, to share mushrooms, to share berries to share grass seeds. Prairies, are you know, Indian potato root grounds.”

Although the impacts of fire on the ecology of forest species are most immediately apparent, burning also affects inputs to riparian systems. The Karuk Draft Eco-Cultural Management Plan outlines how “[c]ertain trees and shrubs utilize water more than others, fire affects this relationship” (Fites et al., 2006). The distribution of forests, shrubs and grasslands affects the process of infiltration from precipitation and resultant levels of evaporation with how those plants utilized water (DeBano et al., 1998). The balance of water in and water out, leading to the amount of moisture in the soil and the quantity and quality of springs is influenced by fire (Biswell, 1999). Karuk fisheries biologist and spiritual leader Kenneth Brink describes this relationship:

We did our fire management, which enabled to put more water into the tribs [tributaries], say like in a drought year, you take all your understory out, like all these blackberries and stuff would never be here. These alders would not be all big. There might be one or two big ones making a shade instead on all these little suckers. I mean, you didn’t see the alder, and didn’t see willow trees, you saw willow brush. I mean a lot of this foliage takes up a lot of water.

The exclusion of fire began as official policy in the early 1900s with the establishment of the US Forest Service as the official land manager of the region, and increased in intensity during the period following World War II. Studies of the Klamath mountain region note “two periods with distinctly different fire regimes: (1) the Native American period, which usually includes both the pre-historic and European settlement period, and (2) the fire suppression period” (Skinner et al., 2006, p. 176). As the authors also note,

Over the 400 years prior to effective fire suppression, there are no comparable fire-free periods when large landscapes experienced decades without fires simultaneously across the bioregion (Agee 1991; Wills and Stuart 1994; Taylor and Skinner 1998, 2003; Stuart and Salazar 2000; Skinner 2003a, 2003b). Along with these changes in the fire regimes are changes in landscape vegetation patterns. Before fire suppression, fires of higher spatial complexity created openings of variable size within a matrix of forest that was generally more open than today (Taylor and Skinner 1998). This heterogeneous pattern has been replaced by a more homogenous pattern of smaller openings in a matrix of denser forests (Skinner 1995a). Thus, spatial complexity has been reduced. (2006, p. 178-179)

Across the western United States a similar pattern occurs. As noted in the 2012 Final Report of Phase II of the Wildland Fire Cohesive Management Strategy,

Practices such as pruning, burning and coppicing at regular intervals once contributed significantly to historic landscape resiliency and community livelihood. Access to abundant and quality hunting, fishing, and gathering areas as well as other traditional, ceremonial, or religious fire use factors have experienced significant decline following fire exclusion. (USDA, 2012, p. 30)

The Wildland Fire Cohesive Management Strategy affirms that in the face of continued fire exclusion, Native American cultural identity and traditional ecological knowledge are both at risk (2012, p. 30). Indeed Karuk culture, economy, spirituality and social relations have in turn been fundamentally impacted by the altered ecosystems on the Klamath. Take for example one ecological change such as the reduction of foraging habitat for elk as described in the passage above. This encroachment of brush means fewer opportunities for successful hunting, which in turn affects diet, food supply, the ability to engage in barter and trade, fewer social activities associated with hunting, the ability to properly conduct ceremonies and overall cultural identity. Individuals who are unable to provide for their families and communities experience role stress and threats to their identity as Karuk people, or as men when they are unable to fulfill prescribed roles as hunters and providers with fewer elk to hunt. On a larger scale the Karuk Tribe faces political challenges concerning the potential erosion of tribal sovereignty in the face of continued lack of recognition of land title and taking of resources by federal and state agencies. The following section will address each component of these fundamentally interconnected impacts.

### **Spiritual and Cultural Practice**

The exclusion of fire from the landscape impacts an intricate series of Karuk cultural and spiritual practices. Important ceremonial fires are lit during the World Renewal ceremonies, and a burning log is rolled from Offield Mountain. Anthropological records from as early as 1949 describe burning on Offield Mountain and other sites. The description also includes a note indicating, “They have not functioned recently, because of the United States Forest Service prohibition against setting fires” (Kroeber et al., 1949, p. 8). Even now, as Bill Tripp notes, “The Forest Service wants us to get permits to build our sacred fires. I don’t see how that’s right in any sense of the word.” In addition to the prohibition of specific spiritual practices at the time of ceremonies, the exclusion of fire from the landscape affects the abundance of foods such as acorns and deer that are to be consumed during ceremonies.

Some sociologists have described Native people’s deeply embedded relationship with the natural world as a “subsistence” lifestyle. But spiritual relationships occur not just during ceremonies. As Ron Reed describes in the earlier quote, spiritual practice is embedded in activities of forest management. Thus, while subsistence is important, it is merely the end result of a cosmological equation that involves intricate practices of tending to and caring for the natural world that are the very expression of both spirituality and culture. These activities of “traditional management” inscribe responsibilities to both the human and ecological community.

As Ron Reed explains, consuming traditional foods and participating in management activities are at the heart of Karuk culture and “being Indian”:

You can give me all the acorns in the world, you can get me all the fish in the world, you can get me everything for me to be an Indian, but it will not be the same unless I’m going out and processing, going out and harvesting, gathering myself. I think that really needs to be put out in mainstream society, that it’s not just a matter of what you eat. It’s about the intricate values that are involved in harvesting these resources, how we manage for these resources and when.

Hunting, gathering, storing and preparing food are also an integral part of daily life. Traditional food holds a great deal of social meaning for the Karuk people. Activities associated with traditional foods serve as an important social “glue” by bringing people together to work, socialize and pass down values and information from one generation to the next. Food is central to some of the most serious social obligations for Karuk people—hospitality and caring for elders.

Not only foods, but numerous cultural use species are enhanced by burning. Northern California is home to the largest number of Native basketweavers in the state. Burning is directly necessary to produce the correct kinds of shoots for weaving, as well as to keep materials in adequate condition. Reed describes the holistic system of burning:

You have deer meat, elk and a lot of times associated with those acorn groves are riparian plants such as hazel, mock orange or other foods and fibers, materials in there that prefer fire. The use of those materials is dependent upon those prescribed burns. So when you don’t have those prescribed burns it affects all that in a reciprocal manner. It’s a holistic process where one impact has a rippling effect throughout the landscape. We can only have that for a certain amount of time before the place becomes a desert without cultural burns, because the plants are no longer soft and the shoots are no longer food, instead they become these intermediate stages where they are just taking up light and water and tinder for catastrophic fire. So it has an impact not only on the species we are talking about, but how you harvest and manage and hunt those species as well.

Cultural practices such as weaving are impacted when materials are not available due to lack of burning. As Karuk basketweaver Marge Houston describes,

The materials aren’t available. Hazel has to be burned two years prior to picking. And there is no way. I know there was a lady in Weitchpec, that they burned their property every year, or every so many years. And it was just covered in hazel. And they would invite grandma and mom down, when they got done picking, you can come down and glean the patch.

As described above, the Karuk cultural and spiritual practices that are now being eroded by the exclusion of fire from the landscape have been under direct attack since at least the 1850s. Karuk people experience denied access to these cultural activities on this continuum of forced assimilation and genocide.

### **Fire Suppression and Political Sovereignty**

Denied access to cultural practices of burning is an issue of political sovereignty. While the US Forest Service and other agencies claim the authority to make natural resource regulations, the Karuk people themselves do not recognize their jurisdiction due to the fact that lands were never ceded by treaty or otherwise, and therefore remain under the sovereign authority and jurisdiction of the Tribe. This jurisdiction is based upon the fact that Karuk people have performed the practices of traditional management including fishing, hunting, tending, gathering, burning and more on their Aboriginal Territory since time immemorial. Karuk people never ceded title to this Aboriginal Territory. Treaties signed in 1851 and 1852 were never ratified by the US Congress; instead Karuk people have maintained a continued presence on the land conducting cultural and land management activities (Heizer, 1972; Norton, 2013). As Karuk Tribe Director of Natural Resources Leaf Hillman notes,

The very foundation underpinning the United States' claim to sovereign authority and jurisdiction over the Karuk lands and resources is premised on a legal fiction. This legal fiction has its origins in Manifest Destiny and the doctrine of discovery, whereby Karuk sovereign authority was necessarily diminished when the first European "discoverers" laid eyes on the continent.

In contrast, the Karuk Tribe claims jurisdiction over their membership, lands and territory as specified in the Karuk Constitution. However, the US Forest Service, California Department of Fish and Wildlife, Cal-Fire and other state and federal land management agencies do not recognize Karuk territorial jurisdiction, or do so only partially. The continued interference of the Forest Service and other agencies in Karuk traditional management including the activities of burning, tending, hunting and gathering described above threaten political sovereignty for Karuk people because they interfere with the Tribe's ability to continue the cultural practices necessary to maintain this legal standing. Continued fire suppression damages the ecological functions and diminishes the availability of and access to cultural use species. Similarly, because fire suppression as well as firefighting activities interfere with the ability of members of the Karuk Tribe to perform their cultural practices, these activities hold the potential to erode the Karuk Tribe's sovereignty over tribal lands and cultural resources. As Hillman states,

These so-called land or resource management agencies, be they federal or state, refuse to acknowledge or respect the legitimate territorial boundaries of the Karuk Tribe. Agencies are simply an extension or arm of the governments they serve—in this instance, the United States of America and the State of California. As such, to acknowledge or recognize the territorial boundaries of the Karuk Tribe would be tantamount to an explicit admission that the continued occupation and rule by the United States is illegal and illegitimate.

He goes on to say the following:

Make no mistake, the ugly reality that we, the Karuk People, face every day is that we live in the Occupied Territory of the Karuk Tribe—and that occupation is brutally repressive by nature. Every expression or assertion of Karuk Sovereignty

over their Territory necessarily represents a diminishment of both federal and state sovereignty—and vice versa.

### **Social Relations and Subsistence Economy**

Early anthropological accounts described Karuk people as amongst the wealthiest in the state. Today Karuk people are amongst the hungriest and poorest people in the state. The percentage of families living in poverty in Karuk Aboriginal Territory is nearly three times greater than that of the United States as a whole. This dramatic reversal in economic circumstances is the direct result of the systematic state-sponsored disruptions of Karuk culture, including the longstanding traditional Karuk land management practices of enhancing the forest with fire.

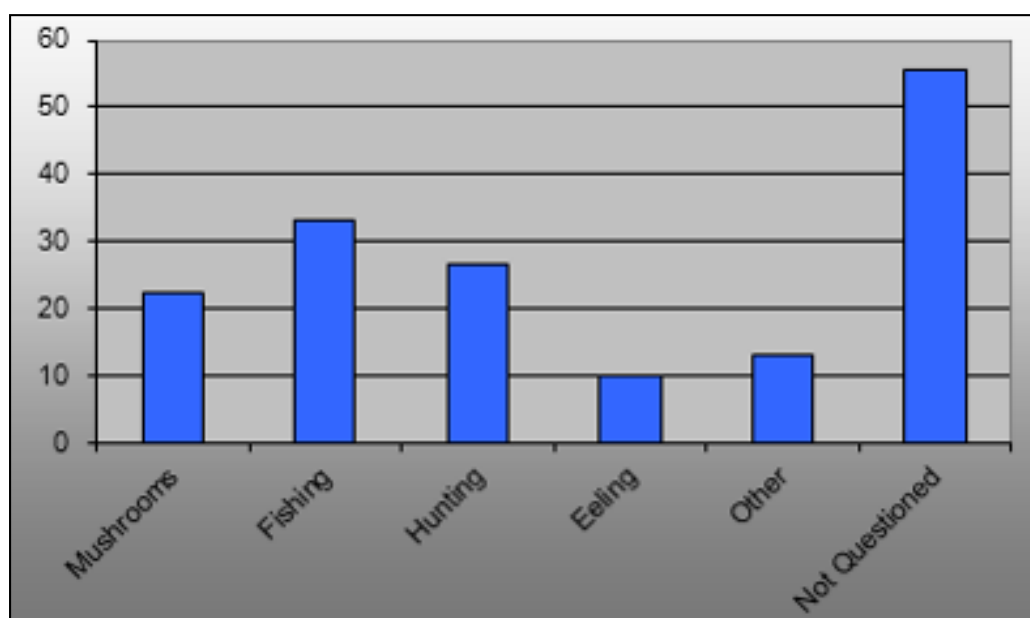
The non-Indian “Western” capitalist economy that has emerged around the world classifies wealth in terms of dollars. Fire exclusion was implemented on the Klamath along the same time that this monetary economy achieved dominance. It is difficult therefore to know exactly what (if any) Karuk monetary economic uses of the forest would have been occurring today had the landscape not been modified by fire exclusion. Instead, this section will first note that fire suppression has profoundly disrupted the existing Karuk economic system, and second, that the extraction of monetary wealth from the region by non-Native people has occurred via the same management practices that have transformed the landscape. Native management practices that were oriented around species complexity and long-term sustainability were forcibly replaced by extractive management activities that were geared towards the withdrawal of commodities (gold, conifer trees, fish). These commodities became the basis of monetary wealth for non-Native people. Laws were implemented by the state of California and the federal government specifically to achieve this transfer of wealth to non-Native settlers in the region. Thus, while we know that Karuk people were wealthy prior to European invasion, that poverty in the Karuk community is now very high and that the land management policies enforced upon Karuk ancestral territory were the mechanism for a transfer of wealth, we cannot describe specific dollar impacts to the Karuk Tribe to the changing forest landscape. Karuk poverty is not inevitable, rather it has been the result of a series of events through which traditional Karuk management practices have been interrupted, wealth from the land has been transferred to non-Indian hands and the environment has been degraded. And the exclusion of fire from the landscape continues to be instrumental to this economic reorganization. While this change in economic systems complicates discussions of economic impacts from the exclusion of fire for members of the Karuk Tribe in dollar figures, such impacts would surely be large if they could be measured.

We can however examine the impacts of fire exclusion to the Karuk subsistence economy. Karuk use of fire in the ecosystem has been a critical activity underpinning this subsistence economy, which in turn gave individuals and families food, social capital, access to trade networks, and enhanced social networks and forming a type of social “glue” for relationships between families, elders and youth across the Karuk community. Much of this subsistence economic activity, including gathering acorns, mushrooms, berries and basketry materials, as well as burning, is now either impacted by the exclusion of fire, outright illegal, or regulated by the Forest Service and other agencies in ways that limit or prohibit Karuk access.

The forces of altered ecological conditions, responsibilities to tribal law, economic necessities, cultural practice and contested political status all come together in a vicious convergence for individuals. As spiritual leader and Director of the Karuk Tribe Department of Natural Resources Leaf Hillman puts it,

In order to maintain a traditional Karuk lifestyle today, you need to be an outlaw, a criminal, and you had better be a good one or you'll likely end up spending a great portion of your life in prison. The fact of the matter is that it is a criminal act to practice a traditional lifestyle and to maintain traditional cultural practices necessary to manage important food resources or even to practice our religion. If we as Karuk people obey the "laws of nature" and the mandates of our Creator, we are necessarily in violation of the white man's laws. It is a criminal act to be a Karuk Indian in the 21st century.

In the 2005 Karuk Health and Fish Consumption Survey tribal members were asked whether members of their household had been questioned or harassed by agency game wardens while gathering a variety of other cultural and subsistence items. Twelve percent reported such contacts while gathering basketry materials, and over 40% indicated harassment while gathering firewood (see Figure 1).



**Figure 1.** Percentage of households questioned/harassed by game wardens while gathering for subsistence or ceremonial purposes (Karuk Tribe, 2005).

Karuk Tribal member and spiritual leader Achviivich describes an example of the significant use of force that can be applied for minor infractions:

Here was a tribal member, two tribal members right up there and they had them sprawled on the ground with a gun on their, on the back of their head because they didn't cut their mushrooms in half.

To be fined or have a family member imprisoned imposes a significant economic burden on families. This is a risk that many are unwilling or unable to take. Twenty percent of survey respondents reported that they had decreased their subsistence or ceremonial activities as a result of such contacts. Achviivich explains how in the face of degraded forest conditions due to



fire exclusion and possible harassment by law enforcement many people give up hunting and buy store bought foods instead:

How much are society's laws preventing me from gathering? Well, 80%, 90%... Do I want to go out there and be hassled about it? Why? I go down to the damn store and buy that stuff a lot, you know. It is going to cost you more to go hunt, to go out into the woods and get it. It is not like it is readily available no more. It is not like you have a gathering spot like we used to have a gathering spot. You know, you used to have a gathering spot to gather something and you would go there and gather. Now you don't. Now you can't burn there. You can't burn there every year and every other year or however often you need to burn it in order to make your crop come up good. You can't do that. You can't burn. And you have to have a permit to get everything. Everything. You have to get a permit to get rocks off the goddamn river bar out here. Did you know that?

These descriptions from actions, ranging from changed ecological conditions in the face of fire exclusion to the outright illegality of Karuk practices, make clear the range of ways the reorganization of the Karuk subsistence economy has been both forcible and an extension of the process of forced assimilation described earlier. Forced assimilation happens as the above actions of the state deny Karuk people access to the land and food resources needed to sustain culture and livelihood. Forced assimilation happens even more overtly when, for example, game wardens arrest tribal members for fishing according to tribal custom rather than state regulation.

Forced assimilation reaches perhaps its most insidious form when the food species Karuk people would like to gather, hunt or fish for are simply not there. Without salmon and tan oak acorns, Karuk people are currently denied access to foods that represented upwards of 50% of their traditional diet. The absence of food and cultural use species in this overgrown forest undermines the subsistence economy. Food insecurity within the Karuk Tribe is evidenced by the fact that 42% of respondents living in the Klamath River area received some kind of food assistance, and one in five respondents use food from food assistance programs on a daily basis (Norgaard, 2005; 2007). With the decline in access to once abundant food sources such as deer, acorns, elk, salmon and mushrooms, a significant percentage of tribal members rely on commodity or store bought foods. As Karuk Tribal member Jesse Coon Goodwin explains,

We can fish at the falls. Dipnet and that, you know, that's the only place we can fish really. But we're not able to go out and go hunting anymore, without getting in trouble for it or something, you know, so now we have to go to the store to buy our food and get different kind of foods that aren't sustainable for our bodies, like food that was made here for our people, you know? So a lot of it has changed that way...

The inability to access traditional food impacts the Karuk tribal members not only due to decreased nutritional content of specific foods, but results in an overall absence of food, leaving Karuk people with basic issues of food security. Recent USDA studies show that while roughly 85% of the US population is food secure, only 77% of Native Americans in the United States are food secure (Gordon & Oddo, 2012). Self-reported data from the Karuk Health and Fish

Consumption Survey indicate that 20% of Karuk people consume commodity foods and another 18% of those responding indicated that they would like to receive food assistance but do not qualify. Hunger and poor nutrition are bad for your health. As will be described in the next section, difficulty in meeting basic needs results in overwhelming physical and psychological stress.

### Healthy Foods and Physical Health

If fire exclusion profoundly affects the availability of Karuk traditional foods, Karuk people in turn face significant health consequences as a result of denied access to many of these traditional foods (Norgaard, 2005). Health benefits of traditional foods include better nutrient density, the availability of key essential nutrients, physical activity during harvesting, lower food costs, the prevention of chronic disease by consumption of more nutritious food, and “multiple socio-cultural values and traditions that contribute to mental health and cultural morale” (Kuhnlein & Chan, 2000, p. 615; Cantrell, 2001). The loss of traditional food sources is now recognized as being directly responsible for a host of diet-related illnesses among Native Americans including diabetes, obesity, heart disease, tuberculosis, hypertension, kidney troubles and strokes (Joe & Young, 1994). Around the world when Native people move to a “Western” diet, rates of these diseases skyrocket. Traditional foods are higher in protein, iron, zinc, omega-3 fatty acids and other minerals and lower in saturated fats and sugar. While salmon and other riverine foods have been an important focus of study in terms of Karuk diet and health, there are at least 25 species of plants, animals and fungi that form part of the traditional Karuk diet to which Karuk people are currently denied or have only limited access. Figure 2 shows a few of the many important forest foods that are enhanced by frequent low-intensity fire.

Black Tail Deer	púufich	<i>Odocoileus hemionus</i>
Roosevelt Elk	íshyuux	<i>Cervus occidentalis</i>
Squirrel (Western Grey)	áxrúuh	<i>Sciurus griseus</i>
Tan Oak	xunyêep	<i>Lithocarups densiflorus</i>
Dwarf Tan Oak	xunyêep	<i>L. densiflora</i>
Hazel	athithxuntápan	<i>Corylus cornuta</i>
White Oak	axvêep	<i>Quercus garryanna</i>
Canyon Oak	xanpútip	<i>Q. chrysolepis</i>
Black Oak	xánthiip	<i>Q. kelloggii</i>
Evergreen huckleberry	púrith	<i>V. ovatum</i>
Tan Oak Mushroom	xayviish	<i>Tricholoma magnivelare</i>

**Figure 2.** Some important Karuk forest foods that are enhanced by fire.

Furthermore, foods that were most central in the Karuk diet, providing the bulk of energy and protein—salmon and tan oak acorns—are amongst the missing elements. Identified health consequences of altered diet for the Karuk people include rates of Type II diabetes that are four times the US average. Rates of heart disease and hypertension also significantly exceed national averages. The estimated diabetes rate for the Karuk Tribe is 21%, nearly four times the US average. The estimated rate of heart disease for the Karuk Tribe is 39.6%, three times the US average (Norgaard, 2005; 2007). A traditional diet, along with the exercise entailed in procuring it, is widely recognized as both the best prevention and the best treatments for such conditions.

Not only did a traditional diet prevent the onset of conditions such as obesity, diabetes, heart disease, kidney trouble and hypertension, the tasks of acquiring traditional food provided exercise that kept people in good physical condition. There are other relationships between physical health and access in the altered forest structure. As ecologist and Karuk Descendant Frank Lake describes, a brushy understory creates significant dust:

There is a related health issues there, and I had to explain this to the firefighters just recently [summer 2008]. When there is a big clear understory and a big acorn tree with the firs and madrones mixed around. Before, you didn't have that underbrush, that younger growth of the tan oak has this kind of dust on it. And it is particularly more so on the new sprouts, the new shoots and the new leaves. So as you are going through that tan oak understory, that thick brush, you are getting that dust in your nasal cavities and your eyes and your throat. So it is actually causing additional problems. Whereas if they could just clear the understory brush out, cut it down and pile burn or even broadcast, burn the understory, it would actually reduce that part of that tan oak dust being an irritant and a potential health problem that is associated with trying to go out there and collect.

### **Fire Exclusion and Mental Health**

Just as physical health is embedded in both ecosystem health and cultural activities for Karuk people, so too is mental health. There are multiple important ways that present social and ecological conditions, including the inability for Karuk people to participate in traditional management negatively affects the mental health of individuals. Decades of research from sociology and psychology indicate that vital components to mental health and psychological well-being include positive sense of self-worth and self-efficacy, coherent meaning systems, contact with an intact natural environment, and sense of personal and cultural identity (Mirowsky & Ross, 1989; Thoits, 2010; Downey & Van Willigan, 2005). As Karuk tribal member Lisa Hillman remembers,

When we were little, we spent a lot of time with my mom and my aunts gathering—say huckleberries. It was tough work, but we learned a lot and it was a time of family bonding. Those feelings were reiterated at mealtimes when we ate whatever it was that we gathered. Nowadays it is difficult to repeat those activities with my own children. That bond with family and with the landscape remains a fond memory, and it also makes me angry that those memories won't be a part of my own children's experience.

Mental health is negatively affected by physical health challenges, as well as social sources of stress caused by the absence of any of the above.

The reduced ability of Karuk people to participate in traditional management negatively affects both the mental health of individuals and generates a level of chronic community stress. Chronic community stress occurs when long-lasting psychological stressors are present across a community of people (Gill & Picou, 1998). Such community stress is more than the sum of individual parts, as the disruption of many people's lives simultaneously affects community social structure and the maintenance of day-to-day activities that may create an overall sense of normlessness (Mirkowsky & Ross, 1986; 1989; Gill & Picou, 1998; Erikson, 1994). Karuk people experience chronic community stress in relation to the experiences of both fire suppression and exposure to frequent catastrophic fire events as will be described in the next section.

As described earlier, participation in fishing, burning, gathering and other aspects of traditional management holds immense personal and spiritual significance and is central to Karuk identity. When people are unable to carry out these practices it can create a powerful threat to an individual's sense of self. The loss of control in relation to cultural activities has a clear association with genocide, as described here by Karuk Tribal member and spiritual leader Achviivich:

Our way of lives has been taken away from us. We can no longer gather the food that we gathered. We have pretty much lost the ability to gather those foods and to manage the land the way our ancestors managed the land.

Such experiences are not unlike what Downey and Van Willigen (2005) found in their work on how proximity to environmental contamination can generate a sense of personal powerlessness.

The exclusion of fire from the ecosystem can also be linked to accounts of role stress and role strain for Karuk people. As Mirowsky and Ross define, "role stress is a disjunction or inconsistency in the system of roles, so that normal obligations cannot be met... Role stress produces role strain, which is the frustrating sense of not being able to understand or meet the normal expectations of one's roles" (1989, p. 15). In addition to the more individualized threats to identity and sense of control mentioned above, Karuk people describe role strain due to the inability to fulfill responsibilities to the Creator, to particular species in the ecosystem, and to the human community. In the words of traditional dipnet fisherman and spiritual leader Kenneth Brink,

Now we are being stripped of a lot of our duties as a Karuk person, as a traditional male, and that's just because of regulations... The new regulations they have, rules and regulations, keep us actually from living our traditional way of life... Our ceremonies have been, you know, stripping down because of regulations... Now we're only allowed to do certain things in our ceremonies, not allowed to do our traditional burns or nothing no more.

Traditional management refers to care for the environment, but managers have specific social and cultural responsibilities to their families, elders and the Karuk community as well. With the altered ecological condition of the forest, role strain also comes from the inability to fulfill obligations to the human community such as the ability to provide deer, acorns or other

traditional foods for ceremonies, to provide elders in the community and to feed one's own family. Here again Kenneth Brink describes the angst in relation to not being able to carry out these responsibilities:

A Karuk male if he was a traditional male, he'd be feeling like he was stripped of his tradition, you know, stripped of his way of life because he is no longer allowed to go out and get a deer to provide for his family or to go out and get more than two fish or something to provide for his family, or any of that picture there you know. And if you don't burn, if you don't get Morel mushrooms...and in that sense, we are being stripped of a lot of our duties as a Karuk person, and as a traditional male.

Note that this experience is tied in with the sense of oppression from the outside non-Indian agencies. This role strain has negative consequences for identity, personal pride and general mental wellbeing, as described here by Karuk traditional dipnet fisherman and spiritual leader Ron Reed:

When you're not able to go upslope and go manage, you're not able to go up and reap the harvest of that management and when you're not able to go produce for your children and give things for each other for the wellbeing of life, then all of a sudden, that puts you in this little down feeling. You're down-casting yourself. I think that's where a lot of the people in Karuk Tribe are because of our inability to get to these resources that have been given to us by the Creator. We understand very much that we're a proud people. We're here for a reason, but a lot of us struggle with modern society, trying to figure out how do we integrate into modern society?

Thus at the individual level, Karuk people are observed to experience chronic stressors from threats to meaning systems, identity, role strain and powerlessness, each of which is directly related to the exclusion of fire from the landscape. At the collective level, the struggle to maintain culture in the face of adversity and an ongoing sense of genocide are chronic stressors on the community.

### **Social Impacts of Catastrophic Fire and Firefighting Activities**

While smaller frequent burning of the landscape is essential for Karuk food and cultural use species, Reed describes how the ecological or social results of large very hot fires that have come as a result of fire suppression are mixed at best:

It's not just one thing, but the whole range of landscape activities that were created by cultural burns. Without cultural burns, we will at some point cease to exist. When they don't have fire they go dormant. A lot of our fibers, a lot of the stuff we relied upon heavily back in the day are no longer available in a sustainable way. But in our cultural world it is just the opposite. The landscape is clean, there is food, there is water and there are prominent ways to the high country without all the overgrowth.

The exclusion of fire as a management tool allows high fuel loads to build up in the forest and near people's homes, in turn making the threat and reality of catastrophic fire significant. Catastrophic wildfires are in and of themselves disturbing events in which people may lose or fear the loss of their homes and important sites in the landscape, and normal home and work routines are disrupted (Amacher et al., 2005; Weisshaupt et al., 2007). Large fires may on occasion have ecological benefits for Karuk foods and cultural use species. For example, in August 2013 large fires in the Karuk Aboriginal Territory were correlated with a drop in river temperatures and presumably were beneficial to adult and juvenile salmon because lowering water temperatures decreases risk of a disease outbreak. However, in the years since fire suppression has occurred in Karuk Aboriginal Territory, catastrophic fires have increased (Miller et al., 2012). Fear of catastrophic fires and the ecological impacts of resource damage when they occur are further negative effects of the exclusion of fire from the landscape.

When large fires occur, there are significant social impacts at the time of firefighting itself including additional damage to the important gathering sites due to firefighting tactics, physical health impacts of smoke, impacts to cultural and subsistence activities and an enormous mental strain from an awareness that an outside agency is exerting control over decision-making. If fire suppression produces an ongoing chronic source of negative impacts to Karuk lifeways, the activities that take place at the time of a fire produce acute social impacts. Noise and intrusion from the use of helicopters when ceremonies are underway and the use of "federal closures" that denies people access to public lands are a de facto form of martial law, especially when armed officers enforce closures by arresting people for trespassing on their own public lands.

Just as the general forest management policy of fire suppression emerged from a European sense of how the forest is valued, activities to fight fire also reflect the economic, political and cultural values of the dominant non-Native world. Decisions about what is to be protected and how to protect it including the use of back burning, the creation of fire lines and the use of chemicals and fire retardants have all created profound damage for the ecology of the region and for culturally important food species and gathering areas. One Karuk elder, Marge Houston, described how the Forest Service dropped fire retardant onto her prime acorn and mushroom gathering area, a site that was just 100-200 feet from her home:

This summer there was a less than an acre fire here on the Indian allotment and what happened was the Forest Service came in after it was under control, they come in and did a Borate drop, or some fire retardant. They wanted to come down and do another one 'til we had to get out there and start screaming at them. And basically they said, "Well, we'll only do two drops." But you know there's some big issues there. Because first of all it was under control. Second, it was less than an acre of fire. And now we have a contaminated subsistence harvest area along with other culturally sensitive areas... They cut down my acorn trees. And they missed the fire to begin with... Sprayed it everywhere but on the fire. I couldn't even breathe for three days. All the oyster mushrooms that I got up here on this [fire] I cannot eat. 'Cause they come up and they're pink. Just like the chemical that they sprayed. I can't eat that. I'm not going to be able to eat a mushroom off that tree again. Damn.

Damage to the ecosystem, as well as to particular plants and animals can be particularly disturbing to Karuk people. As Brave Heart and DeBruyn note, “For American Indians, land, plants, and animal are considered sacred relatives, far beyond a concept of property. Their loss becomes a source of grief” (1998, p. 62). During the 2008 fires, Marge Houston was visibly upset due to the impacts on both people and animals of the larger fires:

You know, it’s [fire suppression] doing detrimental damage to each and every person who is breathing all this smoke. Whereas instead of a short time in the fall, now it is damn near all summer. And that’s got to have some effect on people, it’s got to have the shortage of game, some effect on that. Because you, these people, the fire is over here, they are back burning all around. What about those animals that are in the middle. Where do they go? No place but into the fire. They either die of the smoke inhalation or they eventually burn.

This awareness of ecosystem decline is another chronic stress for Karuk people. Both the existence of the fires and the experience of the fire response are events that signify and inscribe power relations of domination by an outside non-Native presence. As illustrated in the words of Marge Houston, Karuk people often have a keen understanding of relationship between fire suppression policy and catastrophic fire. In this case however there is an increased stress due to the awareness that the ecosystem is declining because it is being regulated by outside agencies, and because the failure to allow Karuk participation in management is an aspect of cultural genocide. As Mirowsky and Ross describe, “People need to feel that they are effective forces in control of their own lives. The sense of control bolsters the will to think about problems and do something about the problem” (1989, p. 13). In contrast, Karuk people vividly described feelings of powerlessness in the face of institutional forces that are working against ecological health while simultaneously eroding people’s control of their immediate social environment. Karuk Eco-Cultural Restoration Specialist and traditional practitioner Bill Tripp describes the devastating emotional impacts of trying to communicate Karuk perspective on fire and protect cultural resources in the face of Forest Service presence fighting the large fires of 2008:

In my situation I find myself quite a few times just to the point of asking why am I even here trying to do this? I should just go and be happy somewhere. On these fires, every two weeks you are dealing with new people, and you’re going over the same things, and you are trying to re-justify every decision that was made where you were barely able to hold onto protection of one little piece of something. And then you’re losing a piece of that cause new people came 14 days later. And then you’re losing another piece of that and another. And you spend your whole time going over everything that you just went over again, and again, and again. And losing a little bit every time. And it causes some serious mental anguish. At the end of 2008 I quit the fire probably three or four weeks before I should have. Because it was like, “I am done, I can’t do it anymore.” I went home and I sat in my chair and I didn’t do much of anything but sit and stare at the wall and eat and sleep for about a month. Before I could even get myself to come back to work.



Finally, there is an added dimension to all of the above because the loss of control in relation to cultural activities has a clear association with genocide for many people. Witnessing the denial of Karuk efforts to enact cultural management, the destruction of catastrophic fire, the actions of non-Native fire crews back burning through stands of acorn trees that have been culturally important for generations, or the disruption of Karuk ceremonies with helicopter noise are associated with genocide in several ways. On the one hand, experiences of fire and timber policy that are set according to non-Native values and philosophy are more generally associated with a long-felt awareness of Karuk culture and life under attack. As researchers note,

American Indian people are faced with daily reminders of loss: reservation living, encroachment of Europeans on even their reservation lands, loss of language, loss and confusion regarding traditional religious practices, loss of traditional family systems, and loss of traditional healing practices. We believe that these daily reminders of ethnic cleansing coupled with persistent discrimination are the keys to understanding historical trauma among American Indian people. (Whitbeck et al., 2004, p. 121)

On the other hand, because denied access to management makes impossible the social and cultural practices described above, such actions are quite literally the present face of cultural genocide and forced assimilation. As Leaf Hillman describes,

Every project plan, every regulation, rule or policy that the United States Forest Service adopts and implements is an overt act of hostility against the Karuk People and represents a continuation of the genocidal practices and policies of the US government directed at the Karuk for the past 150 years. This is because every one of their acts—either by design or otherwise—has the effect of creating barriers between Karuks and their land.

## Conclusion

The exclusion of fire from the ecosystem has a host of interrelated ecological and social impacts for Karuk people including impacts to cultural and spiritual practice, political sovereignty, social relations, subsistence economic activities, and the mental and physical health of individuals. The notion that American Indian people would inevitably disappear was implicit in the discourse of Manifest Destiny that legitimated genocide during the 1800s. Still today the narrative that Native people are gone remains a pervasive and insidious force legitimating natural resource policies that profoundly damage Karuk life ways. The present discussion of the social impacts of fire exclusion is a case in point. Yet nothing could be further from the truth. In contrast, as they have recovered significant political and economic standing, Native American tribes across the United States including the Karuk have become increasingly involved in natural resource management. Tribes remain disadvantaged in these settings however due to insufficient understanding of their unique political status and cultural perspectives, the lack of acknowledgment of the violent history perpetuated against them through both genocide and forced assimilation, and a profound misunderstanding of how present day natural resource policies such as fire exclusion and multiple forms of denied access to traditional management continue the processes of genocide and forced assimilation today.

Acknowledgement of the social impacts faced by the Karuk Tribe in relation to fire exclusion, the ongoing threat of catastrophic fires, and the activities of firefighting themselves as described here is essential. This acknowledgement must occur formally in the National Environmental Policy Act (NEPA) process prior to forest management as required by law, through acknowledgement of Karuk jurisdiction as land managers at federal and state levels and in the development of wildfire plans and on the ground fire management.

Furthermore, in the face of increasing costs of firefighting, fire severity and decreasing fire intervals more effort has been paid in involving local communities as resources in fighting fires (Danks, 2001; Everett & Fuller, 2010). Local communities can play key roles in fire prevention and response. Local community involvement can also mitigate negative social impacts of fires by increasing community capacity. With their longstanding and sophisticated cultural practices, ties to the land, traditional ecological knowledge, political standing and increasing political and economic capacity, it is imperative that Karuk expertise and leadership in forest management be acknowledged not only as an issue of legal rights or social justice, but for the health and wellbeing of ecosystems and non-Native human communities alike, especially in the face of climate change.

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# Who Will Own the Mazama? Tribal Power and Forest Ownership in the Klamath Basin

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## Abstract

*Through the case study of a 90,000-acre section of forest called the Mazama Tree Farm (Mazama), this manuscript explores several dynamics within the State of Jefferson, notably (1) the changing power of Native American tribes relative to other landowners and (2) the transition in rural land uses from productivism toward post-productivism. The Mazama was part of the Klamath Reservation until tribal termination in 1954, when it was purchased by an industrial landowner. The loss of the reservation coincided with the nadir of tribal power within the State of Jefferson, but more recent developments may return the Mazama to tribal ownership as a result of renewed tribal power and the diminishing role of industrial forestry in the region.*

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## Introduction

This paper presents the history and the social dynamics surrounding land use and forestry on the former Klamath Reservation, and in particular a 90,000-acre section of forest, the Mazama Tree Farm (Mazama). It considers ownership and management of the Mazama from the Klamath Tribes<sup>1</sup> (Tribes) to forest industry to possible reacquisition by the Tribes, and in so doing offers a window into several dynamics at work in the State of Jefferson. These are (1) the changing power of Native American tribes relative to other landowners and (2) the transition in rural land uses from productivism toward post-productivism as it is occurring in the American West.

This case study research focuses on forests in the Klamath Basin, a region stretching from south-central Oregon into northern California. Most of these forests were historically dominated by large ponderosa pine with frequent, low-intensity fire regimes that “cleaned out” the understory (Youngblood et al., 2004). In contrast, the predominant tree species of the Mazama today is lodgepole pine, an economically less-valuable species than ponderosa pine

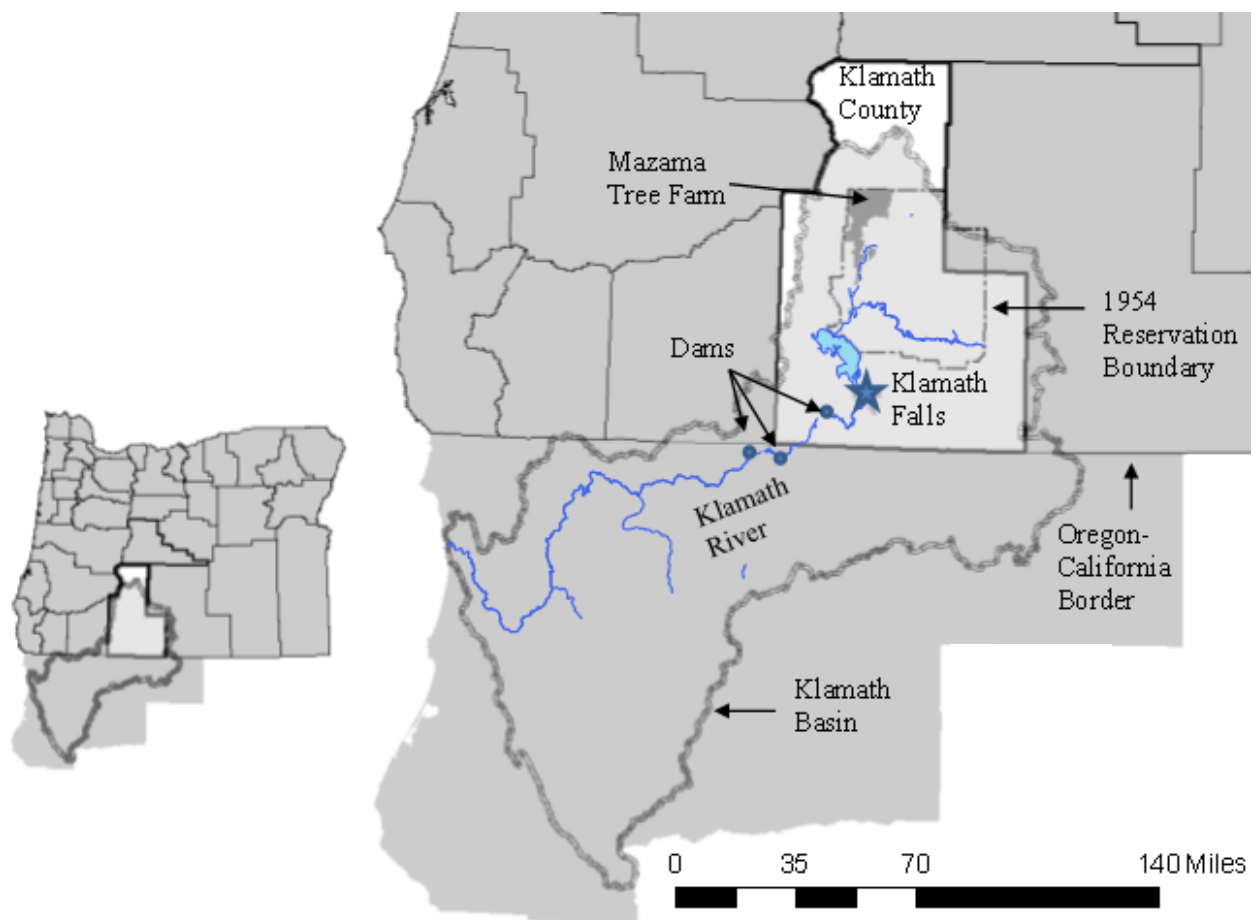
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<sup>1</sup> Though often referred to as the Klamath Tribe, they are three tribes, hence the modern name the Klamath Tribes. Another term, the Klamaths, is frequently used in tribal documents. For this research, we have chosen to refer to the tribes as the Klamath Tribes.



that occurs in topographic depressions, or as subordinate species under ponderosa pine stands (ODF, 2009a). Geographically, the Mazama lies at the northwestern edge of the former Klamath Reservation, which was at the northern edge of the Klamath Basin (see Figure 1).

This paper does not seek to represent the experiences of all tribes in the State of Jefferson, or to tell the complete story of the Klamath Tribes. Rather, it relates a piece of tribal history in the State of Jefferson and links tribal sovereignty and power with control over a land base. It begins with a literature review of (1) tribal power and (2) rural land uses, focusing on forestry, and then outlines the history of the Tribes and their land base, from the arrival of Euro-American settlers. It provides a brief overview of recent disputes that may lead to tribal reacquisition of the Mazama as a result of complex negotiations surrounding water allocation, dam removal, and endangered species protection. It also considers the links between tribal power and land ownership, as well as the possibilities for further tribal land acquisitions across the US.



**Figure 1.** Map of the Klamath Reservation, with its 1954 boundaries, the Mazama Tree Farm, and the Klamath Basin. The reservation was located within Klamath County, one of several counties in Oregon and California in the Klamath River Basin (boundary data from the Klamath Tribes; map by Erin Kelly).

### **The Arc of Tribal Power**

The relationship between Indian tribes and the federal government is grounded in the federal trust responsibility toward tribes, which includes the protection of tribal lands and resources (Wood, 1995). The trust responsibility was established through treaties in which tribes ceded lands in return for federal protection and retention of tribal rights over remaining lands (Chambers, 1975).

But the federal government largely violated its trust responsibility for decades, often through breaching treaty rights but also through the creation of laws that deprived tribes of land or resources. One example is the Allotment (Dawes) Act of 1887, which divided commonly held reservation lands into individual, privately-owned 160-acre parcels. The policy was reminiscent of the 1862 Homestead Act in its attempt to create a landscape of small-scale agrarian farmers, but its effect was to break apart Indian lands and thus break up Indian tribes. In the words of the Commissioner of Indian Affairs at the time,

It has become the settled policy of the Government to break up reservations, destroy tribal relations, settle Indians upon their own homesteads, incorporate them into national life, and deal with them not as nations or tribes or bands, but as individual citizens. (Morgan, 1890)

The Allotment Act resulted in the loss of 90 million acres from tribal ownership across the country (US Congress, 2000).

Another example was provided by the termination policies of the 1940s and 1950s, which completely dissolved the federal trust relationship and the land base of terminated tribes. Federal legislators established policies to terminate recognition of Indian tribes in order to end federal supervision and assimilate Indians into mainstream culture (Getches et al., 2005). In 1970, President Richard Nixon acknowledged that termination policies were a failure; in 1975 the Indian Self-Determination Act ended termination policies, and the era of “self-determination” was established, replacing the assimilationist policies that had proven detrimental to tribes and signaling a shift in government policy toward respecting tribal rights (Wood, 1995; Rasmussen et al., 2007). Tribes since that time have successfully asserted claims over trust resources and land by drawing on powers granted to them through treaties, judicial decisions, and agreements (Wilkinson, 2005). The Indian Land Consolidation Act of 1983 (PL 97-459) and its amendments addressed the fractionation of Indian lands as land ownership passed through inheritance to large numbers of heirs, in order to “consolidate fractional interests [in land] in a manner that enhances tribal sovereignty...and reverse the effects of the allotment policy” (25 USC 2201 §102).

Tribal power thus has long been linked with land ownership and US government policies that have eroded tribal land ownership have also eroded tribal power. Power here is viewed as the ability of actors to influence political and economic outcomes—not only to identify problems and propose solutions, but also to set the “rules of the game” (Takeda & Ropke, 2010). The tribal land base for tribes is tied to the economic vitality and capacity of the tribes, along with the health of tribal government and culture:

The land base provides a place of habitation for present and future generations of a tribe, marks the jurisdiction within which tribal government operates, supplies

the reservation economy, and provides a sacred place for time-honored cultural traditions. (Wood, 1995, p. 740)

While growing tribal power has invigorated tribal claims to traditional lands, funding mechanisms have also grown to enable tribes to purchase lands. In 2001, the Indian Tribal Land Acquisition Program, created under the Farm Bill, began to provide loans to tribes for land acquisition. In the Pacific Northwest, one of the largest and most important sources of funding has been the Bonneville Power Administration (BPA). The BPA dammed the Columbia and Snake rivers in the Pacific Northwest, severely degrading tribal trust resources, in particular the salmon runs on those rivers. In the 1990s, the Confederated Tribes of the Umatilla Indian Reservation received mitigation funds from the BPA to purchase two parcels along the Columbia River totaling over 2,500 acres, and the Wallowa Band of the Nez Perce received funds to purchase 10,000 acres.

In other cases, tribes have established land purchase programs that are self-funded, such as the Yakama Nation Land Enterprise, established in 1950, which has purchased parcels within its 2.4 million-acre reservation to consolidate ownership (Harvard Project, 2002). Should their project succeed, the majority of funding for the purchase of the Mazama would come from the federal government as a result of the Klamath Basin Restoration Agreement.

#### **The Disintegration of Industrial Forestry and the “Post-Productive” Landscape**

The trajectory of industrial forest land ownership—and its availability on the market—is a key component of this story. For many years, industrial private timberland owners acquired lands to supply their sawmills and other wood processing facilities. The industry was thus integrated, with timberlands that supplied material to the mills held by forest industry (Yin et al., 1998). But through the 1980s and 1990s, industrial forest companies accumulated debt as they consolidated both timberland and mill ownership through mergers and acquisitions (Roberts et al., 2004). To relieve the debt and improve returns to shareholders, many companies divested their lands to new types of purchasers generally referred to as “timberland investors” (Block & Sample, 2001; Fernholtz et al., 2007; Hagan et al., 2005; Clutter et al., 2005).

The formerly industrial timberlands were primarily sold to a new category of timberland owners, generally referred to as “timberland investors.” The transition was swift—the 10 largest private timberland owners in the US in 1994 were all industrial owners (Yin et al., 1998), but by 2006, eight of the 10 largest private timberland owners were timberland investors (Clutter, 2007). This change occurred as industry owners sold lands to reduce debt and as investors “discovered” the value of timberlands for portfolio diversification. Multiple timberland investment vehicles were created in order to distribute timberland profits, the most prominent being Timberland Investment Management Organizations, Real Estate Investment Trusts, and Master Limited Partnerships—all tax-advantaged, non-mill-owning entities that required profits to be distributed to investors.

Timberland investors proved willing to sell the lands they purchased, particularly as the lands were disintegrated from the mills. Timberland investors took hold of “undervalued” timberlands and broke them up for higher and better use sales, often real estate or recreation development (Wear & Newman, 2004), as rural areas shifted from commodity production to recreation, real estate development, and the service industry. Timberland investors also sold to other ownerships, including tribal ownerships and conservation ownerships such as land trusts. In 2001, the Yakama Nation Land Enterprise purchased 28,000 acres from International Paper,

an industrial forest company that was divesting its timberlands. Within the State of Jefferson, the Yurok Tribe in northern California has acquired over 30,000 acres of land from Green Diamond, an industrial forest company, with plans to purchase additional acres.

This disintegration and breakup of the forest industry estate can be considered through the lens of post-productivism, a concept that originated in the United Kingdom. Productivist rural land uses are characterized by intensive and standardized land management focused on maximizing commodity production, corporate or centralized control, and consolidation of ownership (Wilson, 2007). In contrast, as a result of in-migration of urban residents, along with changing rural economies and environmental policies, many rural areas are now characterized by post-productive land uses (Marsden et al., 1993; Wilson, 2007). Post-productivism in forestry includes the breakup of many forest lands by “amenity buyers” who purchase lands for viewshed or recreation purposes (Gosnell & Abrams, 2009), and a shift in management from maximizing timber production to a broader suite of goals, including restoration of ecosystem processes, habitat creation, and recreation, along with wood production (Milbourne et al., 2008). The breakup of the industrial forest estate is an expression of the post-productive transition, especially as forest investors unlock land values through real estate and conservation sales.

Productivist policies in the Klamath Basin favored commodity production of wood and agricultural products, but these policies have been replaced through environmental legislation and multiple lawsuits, contributing to more post-productive rural land uses, including the diverse economic and social values of the Klamath Tribes.

### Methods

This research utilized a case study approach, which examines phenomena within their real-life context (Yin, 2003). We conducted in-depth interviews with 14 people affiliated with the purchase of the Mazama or its management, and 10 additional interviews with local ranchers. We also accessed documents pertaining to the history of the tribes and the management of the Mazama from US Forest Service offices and libraries in the region.

### The Klamath Reservation

Though the history of the tribes in the Klamath Basin extends thousands of years, this story begins with the arrival of Euro-American settlers and the establishment of the Klamath Tribes under the 1864 Treaty, which bound three tribes—the Klamath, Modoc, and Yahooskin band of the Snake (Paiute)—to the Klamath Reservation. The Tribes forfeited approximately 20 million acres of their homelands for a reservation of 2 million acres, but subsequent federal and state policies cumulatively undermined tribal power and the reservation was fragmented through a series of legal and procedural decisions. Fragmentation initially occurred through the 1887 Allotment Act, when about 25% of the initial reservation was allotted to individual members and about half of these lands were then sold to nontribal members (Tonsfeldt, 1980). The reservation was further eroded through errors in two separate federal surveys, in 1871 and 1888, which excluded 600,000 acres from the reservation. In 1906, 85,000 acres were carved from the reservation and sold to industrial forest interests (Doremus & Tarlock, 2008).

As the reservation and tribal power diminished, policies and projects favoring Euro-American settlement set the stage for the ecological and economic transformation of the surrounding Klamath Basin. In 1906, the Bureau of Reclamation (BOR) began its enormous Klamath Irrigation Project, building dams and canals to convert the Klamath Basin into a landscape suitable for irrigated agriculture. This also established the productivist agricultural

model within the Klamath Basin. Forestry and agriculture formed the backbone of the productivist transformation of the Basin, characterized by harvest of the largest ponderosa pine, fire exclusion, extensive wetland fill, water diversion for agricultural purposes, and dam construction.

### **Forestry in Klamath County**

Settlers and industrial forest companies established a thriving forest industry in Klamath County after the arrival of the Southern Pacific Railroad in 1909 (Stern, 1965). The Klamath Reservation provided a great deal of timber for the industry—from 1909-1929, the majority of Klamath County timber was cut from either public national forests or Indian lands (Bowden, 2002), and even after the arrival of several large industrial timberland owners, tribal harvests remained central to the industry.

Few Klamath tribal members were employed in the forest industry, but all tribal members received a per-capita disbursement from timber sales. The per-capita timber payment, \$800 by the 1950s, put tribal incomes on par with nontribal Klamath County residents (Hood, 1972; Trulove & Bunting, 1971). While tribal members received timber payments, forest management was controlled by the Bureau of Indian Affairs (BIA), in a paternalistic relationship against which many tribal members struggled while traditional livelihoods were displaced. Forest managers selectively harvested the largest ponderosa pine out of the forests, changing the structure of the forests significantly, and they discontinued traditional fire management that had been used to clear undergrowth and had facilitated hunting and the propagation of culturally significant plant species. According to one tribal member,

When the European comes and cleans these canopies and all this undergrowth is growing, and the tribes are trying to burn, they say wait a minute, what are you doing? Fire is bad...we're never consulted on anything. Well, now we are, but during the time that it meant something—because you're never going to see this old growth timber back...the tribes, [went] from a strong nation—first singular management, then forest co-management, then no management by a conquering race and to be made to sit back and watch it happen, to be victims of it happening. (Interview, tribal member)

Management was predicated on maximizing timber for the mills of the county, which were located off the reservation. The Klamath Reservation was therefore a fiber farm for the forest industry of the region, and the Klamath Tribes had little control over the management of their forest resources.

### **Termination**

In 1954, the Klamath Tribes were among the first tribes in the US to be recommended for termination, which ended federal supervision and entitlements and dissolved tribal ownership of reservation lands, ostensibly to help integrate tribal members into the mainstream US economy. The Klamath Tribes were recommended for termination because of their financial and material success, paradoxically based on the forest resources of their reservation (Hood, 1972). Klamath tribal members received \$43,000 each<sup>2</sup> in 1961 as a result of the sale of their

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<sup>2</sup> Klamath tribal members could not vote on termination—only whether to withdraw from the tribe in exchange for a cash payment, or become “remaining members” with a collective interest in a privately-administered parcel of land which was dissolved in 1973. In the vote, 1,659 members withdrew and 473 remained. Withdrawing members received payment in 1961 while remaining members received payment in 1973.

reservation, but as of 1965, 80% had less than half their money left, and 40% had nothing left (Trulove & Bunting, 1971). Termination resulted in poverty and a disconnection between tribal members and their land, as on tribal member attests:

By us not feeling a connection to that land, which we felt for thousands and thousands of years, it had a negative impact on us...it left us a fractured, lost, disconnected people. (Interview, tribal member)

While Indian wellbeing was used to justify termination, most Congressional hearings about Klamath termination centered on the 890,000-acre Klamath Reservation and the reallocation of its timber resources (Hood, 1972). At the time of termination, the reservation contained 24% of remaining large timber in the Klamath Basin and the timber industry represented 40% of the Basin's economic activity (Wilcox, 1956). About 4.6 billion board feet of virgin timber had been harvested from the reservation, with 4.2 billion board feet remaining (Neuberger, 1959). Forest management followed sustained yield policies established by progressive-era forest managers, which ensured a steady flow of timber for local mills (Tonsfeldt, 1980), and legislators were largely concerned with fears of "abandonment of sustained yield management practices presently enforced by the Federal Government" (quote from the Secretary of the Interior, in Wilcox, 1956, p. 3). The private sale of reservation timberland would have resulted in a surge of timber supply and an accompanying boom in sawmill infrastructure (Wilcox, 1956), and US Senator Richard Neuberger of Oregon responded to concerns of Klamath Falls sawmill owner L. L. Shaw that "surely no one wants to see a boom community followed by the blight that would settle over the entire community once the timber resources were gone" (Neuberger, 1955, p. 1).

Because of these concerns over (nontribal) community and industry stability, the bulk of the former reservation was purchased by the US government for the national forest system. Several timbered pieces of the reservation were offered for sale in large (>5,000-acre) blocks to industrial forest operators with sustained-yield management requirements (Neuberger, 1959). Sustained-yield management was defined as a "forest well-balanced by diameter or age classes and capable of continuously producing [timber]" (USFS, 1959, p. 2), and prospective buyers were required to create 10-year management plans and inventories ensuring sustained-yield practices, to be monitored by the US Forest Service. Only one unit sold—the Mazama—which was purchased by Crown Zellerbach, an industrial forest company.

Forest resources on the Mazama had somewhat limited economic utility—much of the forest was dominated by small-diameter lodgepole suitable only for pulpwood, with little ponderosa pine. Other units offered for sale had far more valuable timber resources than the Mazama, but timberland buyers may have balked at the monitoring and sustained yield requirements when ponderosa pine was still available on publicly-owned national forest lands, which now included the remainder of the former reservation.

The 10-year management plans and inventories, and yearly USFS visits to the Mazama, provide insight into private timberland management on the property.<sup>3</sup> They reveal that forestry on the Mazama was driven by immediate economic considerations of its owners, despite sustained yield requirements and stated objectives of "improv[ing] the health and growing capacity of both ponderosa and lodgepole stands" (Crown Zellerbach, 1980, p. 6).

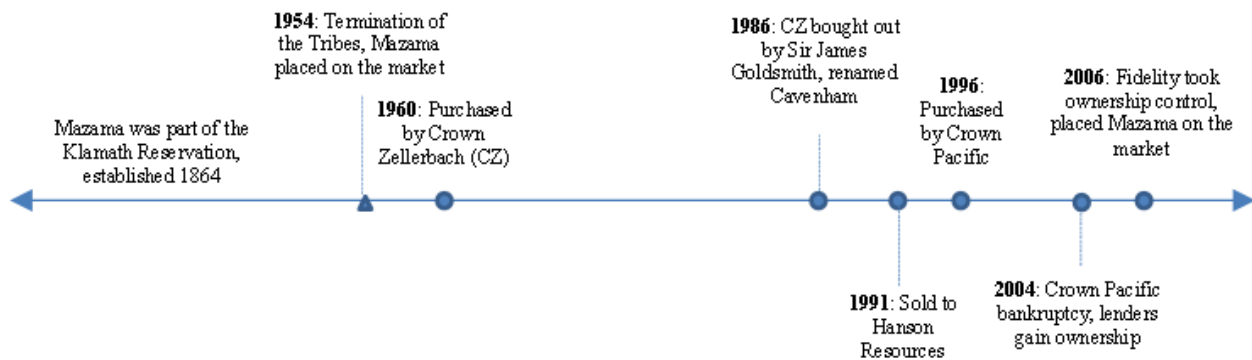
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<sup>3</sup> All records from the Mazama were accessed at the Lakeview Ranger District in Lakeview, Oregon.

The Mazama was officially to be managed for “rotations which recognize both value and volume production” (Crown Zellerbach, 1970, p. 6), but merchantable ponderosa pine were disproportionately targeted for harvest—over one third of the total ponderosa pine was cut in the first 10-year cutting cycle, while only 19% of the predicted lodgepole pine harvest occurred (Semmens, 1976). While total volumes were sustained, tree diameters declined as large ponderosa pine were cut, resulting in crowded conditions and disease problems, a problem noted by the US Forest Service during one of its inspections: “on-the-ground practice is to remove the biggest and best quality trees. This can encourage infection and intensification of mistletoe in the stands” (USFS, 1970, p. 2). Almost 9,000 acres of ponderosa pine stands converted to lodgepole pine as the ponderosa were cut out and replaced by the lodgepole understory (Crown Zellerbach, 1980).

Every 10-year plan stated that lodgepole pine markets would become available, which would encourage lodgepole harvests, but these markets did not materialize. Lodgepole proliferated in dense thickets, contributing to elevated wildfire risks. Crown Zellerbach recognized that the Mazama was becoming degraded, but it was economically unviable to better manage the small-diameter, low-value lodgepole pine.

The Mazama passed through a series of owners after Crown Zellerbach (see Figure 2), though it always retained the sustained-yield and reporting requirements, as well as Forest Service oversight. The first timberland investor in the region, Sir James Goldsmith, took control of Crown Zellerbach in 1986 and renamed it Cavenham Forest Industries. He sold the property to Hanson Natural Resources in 1991, in exchange for shares in a gold mine. In 1996, the Mazama was purchased by Crown Pacific, an aggressive Portland-based private timber investment vehicle that had been recently created and was expanding rapidly.



**Figure 2.** The ownership history of the Mazama Tree Farm from establishment in 1864 as part of the Klamath Tribes Reservation through industrial ownership and timberland investor ownership.

Crown Pacific’s revenue grew steadily through 2000, largely from sales of shares that were used to purchase more land. Its debt grew apace with revenue, from \$326 million in 1995 to a peak of \$689 million in 2000, and the company declared bankruptcy in 2004.

After filing for bankruptcy, Crown Pacific’s timberlands came under the control of its creditors, renamed Cascade Timberlands LLC. In 2006, one of the creditors (Fidelity National Financial) purchased majority interest in Cascade Timberlands and immediately placed the Mazama on the market. Cascade Timberlands subsequently agreed to work with the Klamath Tribes on reacquisition:

When we first bought Cascade is when I came across the Klamath Tribes...it was always a priority of mine to find a way to get [the Tribes] the Mazama Tract. (Interview, Fidelity executive)

The Fidelity executive explained that the land had little real estate or timber production value, and the tribes were “the logical buyer.” This was at least in part because the forest industry of the region was collapsing. National forest lands that neighbored the Mazama had shifted to ecosystem management in the early 1990s in response to environmental litigation and began to base management on sustaining ecosystem processes and biodiversity. This contributed to an 89% decline in harvest levels in the county, from a high of over 600 million board feet harvested in 1971 to 67 million board feet in 2008 (ODF, 2009b). As harvest levels declined, mills closed and the timber industry contracted to levels barely sufficient to maintain infrastructure, and forest industry employment fell about 70% from 1976 to 2008 (Oregon Employment Department, 2009). Fidelity, which had no experience as a forest landowner, had little interest in holding low-value timberland with sustained yield requirements located in a region with uncertain timber demand.

### **Conflict and Leverage: The Mazama Enters the Water Wars**

The Klamath Tribes had their tribal status restored in 1986, but no land was returned. In the late 20<sup>th</sup> century, a complex and bitter water conflict in the Klamath River Basin created the conditions for possible tribal land reacquisition. For most of the 20<sup>th</sup> century, water levels in the Klamath River were dictated by irrigation needs or downstream river flows for hydroelectric dams (Marbut, 2002). This arrangement was interrupted by shifting legal, political, and ecological circumstances, described briefly below and also in Braunworth et al. (2002), Doremus and Tarlock (2008), and Gosnell and Kelly (2010). Through a series of lawsuits, the tribes of the Klamath Basin—the Klamath Tribes and also the tribes of northern California—were recognized as holders of the oldest water rights in the basin (Doremus & Tarlock, 2008). This gave them seniority over the irrigators and some power within the water adjudication process. In 1988, two fish species, the Short-nosed sucker and Lost River sucker, both treaty species for the Klamath Tribes, were listed as endangered under the Endangered Species Act. The suckers’ primary habitat was the Upper Klamath Lake and its reservoirs, “the same waters BOR uses to control water flow to the irrigators of the Klamath Project” (McHenry, 2003, p. 1026).

Biological opinions for the sucker species (along with threatened Coho salmon) were released in 2001, which recommended reducing Basin water allocations, and in April 2001 a US District Court ruled that the Klamath Project was in violation of the Endangered Species Act, halting irrigation flows altogether. Irrigators in the basin responded angrily, with thousands participating in a symbolic “bucket brigade” that ended with the installation of a 10-foot bucket in front of the Klamath Government Center. The US Secretary of the Interior flew to Klamath Falls in 2002 to open the irrigation headgates in a show of solidarity with irrigators, but a massive fish die-off followed reinstatement of irrigation flows (Lynch & Risley, 2003), highlighting the results of disastrous water misallocation in the Basin.

As water conflicts persisted, the Klamath Tribes put together concrete plans for “the return of the Tribes’ land base as an essential element of their restoration as a people” (Klamath Tribes, 2008). From 2002, the Klamath Tribes developed plans for the reacquisition of the 700,000 acres of national forest lands that were former reservation lands. The Tribes contracted three prominent forest scientists to write a forest management plan, titled *A Plan for the*



*Klamath Tribes' Management of the Klamath Reservation Forest* (Johnson et al., 2008). The Johnson Plan, though written by nontribal members, was intended to give the Tribes control over their former reservation lands, in part by outlining ways that the Tribes would manage their forest resources.

The proposals for tribal reacquisition of the national forest lands were met with very strong opposition from irrigators, and this first attempt at land return did not succeed. But soon two conditions converged to give the Klamath Tribes an important opportunity at land reacquisition: collaborative negotiations centered on the water conflict and the placement of the Mazama on the market.

In 2004, when PacifiCorp, which owned the hydroelectric dams, filed for license renewal, a series of formal monthly meetings were established under a collaborative framework. This was an opportunity for a large number of groups, including tribal, environmental, farming, fishing, and governmental, to discuss dam relicensing. From these initial meetings, which focused narrowly on dam relicensing, grew the Klamath Settlement Group, which had a more formidable task—to find an overarching agreement to resolve the myriad water and natural resource problems in the Klamath Basin.

Within the Klamath Settlement Group negotiations, the reacquisition of the Mazama became a primary goal of the Klamath Tribes. In January 2008, the Klamath Settlement Group released the draft Klamath Basin Restoration Agreement (KBRA), a multifaceted water-allocation agreement that included funding for the purchase of the Mazama for the Klamath Tribes.

The KBRA had vocal dissent from some irrigators who felt that they did not have a seat at the table. Power had shifted in the Basin to favor some of the Tribes' interests, even at the expense of some irrigators (Gosnell & Kelly, 2010). Many irrigators explained their position as a moral issue:

It seems that we have to litigate to defend what should be ours, like if you've been using it for 120 years and nobody's been complaining, maybe it's a little too late to complain now. So we think it's unjust. (Interview, rancher and irrigator)

Despite significant opposition, the KBRA has remained the sole agreement to resolving water issues in the Klamath Basin and the best chance for the Klamath Tribes' reacquisition of the Mazama. The Mazama would be purchased with funds from the Department of the Interior, supplemented by funds raised by Trust for Public Land (TPL), a national non-profit assisting the tribes with the land purchase.

Though the Johnson Plan (Johnson et al., 2008) was initially created for the national forest lands of the former reservation, management on the Mazama would still be informed by the Johnson Plan because it "covers the whole range of habitat types and conditions" (Interview, tribal member). In lodgepole forests such as the Mazama, the plan calls for "much lower densities and...stand mosaics of different ages and densities, rather than extensive areas of dense, contiguous forests" (Johnson et al., 2008, p. 6). Specific prescriptions include an acceleration of pre-commercial thinning, wherein small trees are removed in a young stand to expedite the growth of remaining trees. The plan also prescribes rejuvenation of bitterbrush understory for mule deer. This approach differs from industrial ownership:

They [industry] go in, they harvest about 10 million board feet a year—they do absolutely nothing else... That's what's been done on that property for 50 years. So ours would be more intense management, with the idea of improving forest health. (Interview, tribal member)

Reacquisition of the Mazama would also enable tribal access to management decisions on neighboring national forest lands—which constitute most of the former reservation—through tools like the Tribal Forest Protection Act (TFPA, PL 108-278) of 2004. Under the TFPA, tribes submit management proposals to the Secretary of Agriculture for federal lands, and approval is based on a number of criteria, including tribal ownership of neighboring land and a relationship between the federal land and “circumstance[s] unique to that Indian tribe,” such as treaty rights and biological or historical circumstances (PL 108-278 §2(c)(4)). The TFPA is meant to allow Tribes to propose projects “that would protect their rights, lands, and resources by reducing threats from wildfire, insects, and disease” (Intertribal Timber Council, 2013, p. 1).

### **Conclusion**

The case of the Mazama provides insight into tribal power and its relationship to land ownership, the role of tribes in post-productive landscapes of the US, and changing forest management that incorporates multiple objectives, including tribal.

#### **Tribal Power and Land Reacquisition**

The history of the Klamath Tribes exposes the links between loss of power and loss of land, as the Tribes were displaced and consolidated onto a reservation that was subsequently dismantled through allotment and finally termination. Steps taken by the Tribes to reacquire traditional lands like the Mazama reflect the recovery of tribal power in the era of self-determination and concrete plans to grow the tribal economy and culture around their land base.

The possible reacquisition of the Mazama under the KBRA demonstrates that tribal treaty rights can be leveraged in circumstances such as the water disputes of the Klamath Basin. In this case, Tribes earned a powerful negotiating position and an important seat at the table with other actors in a complex deal; they also demonstrated the ability to raise funds and the capacity to establish themselves as able managers of a large land base. This case outlines one example of tribal involvement in natural resource negotiations, a process that has been repeated across the US and Canada as tribes have become active participants in negotiated agreements on their traditional lands (e.g., O'Faircheallaigh & Corbett, 2005; Desbiens, 2004; Waage, 2001). Tribes in the US have been particularly successful at asserting their right to participate in natural resource management as they draw on powers reserved through the federal-tribal trust relationship (Doremus & Tarlock, 2008; Wilkinson, 2005).

#### **Post-Productivism in the US: The Role of Tribal Lands**

This powerful position of many tribes, and their willingness and ability to manage traditional lands, has contributed to the American expression of post-productivism in rural areas. Similar to Australia, where the creation of new forms of aboriginal title has resulted in land transfers, particularly on marginal lands (Holmes, 2010), the American multifunctional transition includes tribal ownership on a large scale. The European vision of post-productivism includes many small-scale land holders (e.g. Wilson, 2007), but in the American West, post-productivism may include very extensive landholdings, and even consolidation of land, as under tribal land reacquisition. But post-productivism in the US is characterized by a trend

toward multiple and diverse uses of land and a shift away from commodity production. This includes changed federal land policies in the wake of Endangered Species Act decisions and the implementation of ecosystem-based management.

Post-productivism in the American West includes the renewal of tribal ownership and tribal input into public land management, as under the TFPA. It also may include the introduction of tribal knowledge, often termed Traditional Ecological Knowledge (TEK) into management on lands that have long excluded tribal views. Whereas the Klamath Tribes had a reservation for many years, they were restricted by the BIA in their ability to directly manage their own natural resources, including forest resources. The reacquisition of the Mazama would not only restore a part of the former reservation, it would provide the Tribes with more land management input than was granted in the early 20<sup>th</sup> century, when forest management was transformed from supporting tribal uses to supporting a growing timber industry in the region.

Land management on the Mazama could include a diverse array of uses reflecting the multiple values of post-productivism: conservation objectives, often informed by western science, cultural objectives informed by TEK, and economic objectives including timber harvesting. While the claims of the tribes are linked to historical treaty rights, the future of the Mazama is grounded not only in a return to some historical state of ownership and management, but also in restoration and future economic opportunities.

#### **Changing Forest Management: Resilience and the Role of TEK**

The incorporation of western scientific and traditional knowledge is demonstrated through the Johnson Plan, which shifted primary management goals from maximizing timber revenue to emphases on habitat creation and heterogeneous forest structure. The Johnson Plan also advocated the reintegration of natural disturbances, especially fire, in recognition of the important role of fire in historical tribal land management. The integration of traditional and scientific knowledge is a kind of “participatory science” that arises with demands from indigenous people to participate in decision-making (Berkes et al., 2001).

The Mazama may help demonstrate the compatibility of western scientific and traditional ecological knowledge. This is not only because of the elevation of TEK as a recognized and legitimate form of knowledge, but also as a result of changing views among researchers regarding forest management based on principles of resilience and “ecosystem-based management,” including the reintroduction of disturbance processes such as fire through management (Grumbine, 1994; Puettman et al., 2008). Tribes, as owners, can turn to mainstream forest science to inform their management, and in turn some managers and researchers have begun to access and utilize indigenous knowledge (Pierotti & Wildcat, 2000). The Menominee Tribe in Wisconsin, for example, has worked to combine scientific forest management with a cultural land ethic (Pecore, 1992, p. 15; Berkes, 1999). Both western scientific and TEK are empirical and may be viewed as complementary: western science emphasizes generalized knowledge, and indigenous knowledge, or TEK, offers a “depth of experience in a local context” (Becker & Ghimire, 2003; Kimmerer, 2002).

#### **Land Availability in the Wake of Forest Industry Disintegration**

The Tribes utilized their powerful position to help set the terms of the KBRA, but they also acted opportunistically when the Mazama became available as a result of industrial disintegration and the shrinking forest industry.

The opportunity for tribal reacquisition of forest lands may continue to expand as timberland investors look for the highest value of the land, in some cases generated through sales to tribes. Non-profit organizations, such as the California-based Native American Land

Conservancy, established in 1998, and the nationwide Indian Land Tenure Foundation, established in 2001, are providing grants for small-scale land acquisition. The Trust for Public Land, which worked with the Klamath Tribes, has recognized the opportunity for large-scale land reacquisition, as stated by an employee of TPL who said that “[forest industry restructuring] is the best opportunity in a long time for tribes to get land back” (Interview, TPL employee).

While the reacquisition of the Mazama is unusual because of its scale, more land purchase opportunities are on the horizon as new forest investors seek returns from multiple sources, including land sales to alternative ownerships such as tribes (Bliss et al., 2010). Tribes may particularly benefit from this breakup of the industrial forest tenure, as they have a commitment to purchase lands grounded in legal, moral, economic, cultural, and identity-based claims (Hibbard & Lane, 2004). Particularly in the case of degraded timberlands, and in regions with disappearing forest industry infrastructure, tribes may have an unprecedented opportunity to purchase historical lands.

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# Estimating the Quasi-Underground: Oregon's Informal Marijuana Economy

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## Abstract

*This study estimates the size of Oregon's informal marijuana economy, drawing upon Respondent-Driven Sampling (RDS) procedures and survey methods to investigate this quasi-underground activity. The results suggest that average marijuana users consume approximately 4.5 ounces per year and pay approximately \$177 per ounce. Most users purchase the drug from friends and nearly one third of respondents indicate that they sell marijuana in small quantities. Growers tend to sell inauspicious quantities to friends and relatives, and rarely earn more than \$10,000 annually from their sales. The composition of distribution networks suggests that the informal marijuana economy is a "robust network," particularly in states that allow personal medical production. This finding also suggests that legalization will likely produce a net increase in economic inequality, particularly affecting parts of Oregon associated with the State of Jefferson, by shutting out smaller producers. Several taxation schemes are presented to offer estimates of revenue if the drug were legalized; these findings suggest that marijuana could contribute modestly to the state's total revenue, but the most economically beneficial aspect of legalization could be from criminal justice savings.*

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## Introduction

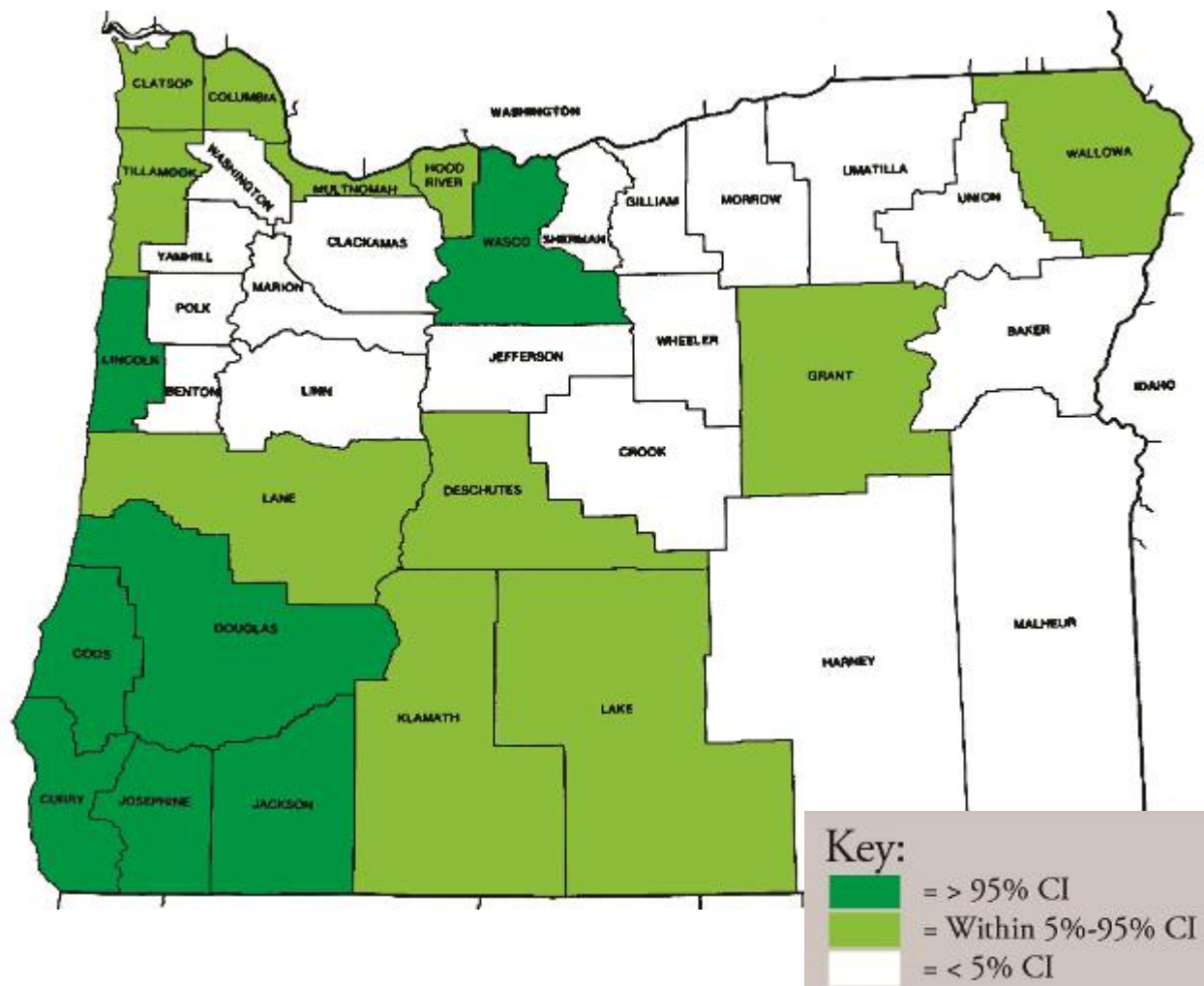
How much marijuana is produced, consumed, and sold in Oregon? How do users obtain their drug? How much does marijuana contribute to Oregon's economy? If legalized and taxed, how much revenue could the state reasonably expect to earn from the sale of marijuana? How might marijuana legalization impact current participants in this informal sector? This study estimates the size of Oregon's informal marijuana economy, drawing upon Respondent-Driven Sampling (RDS) procedures and survey methods to investigate this quasi-underground activity. By examining users and producers of marijuana, this analysis offers a unique contribution to our understanding of both informal economic participation and marijuana market structure in a key marijuana producing state. The results suggest that marijuana legalization is likely to increase economic inequality within Oregon's portion of the State of Jefferson.

Oregon has one of the highest rates of marijuana use in the US, with the most recent estimate indicating that 14.09% of individuals over 12 years old have used marijuana in the last year, with the average US rate standing at 10.2% (SAMHSA, 2009). Oregon is also home to



one of the oldest medical marijuana programs in the US, established in 1998, just two years after the first was created in California, and publishes county-level counts of medical users dating back to 2005. The counties traditionally associated with the State of Jefferson have the highest per capita rates of participation in Oregon's medical marijuana program (see Figure 1) and are likely more economically sensitive to marijuana regulation than other areas of the state (Crawford, 2013). Oregon consistently ranks in the top 10 states for plants seized by the Drug Enforcement Administration, with estimates of production valued at \$473 million in 2005, making it the state's largest agricultural commodity (Gettman, 2006). Even with a firmly entrenched federal prohibition on marijuana, there is a strong possibility that Oregon's quasi-legalization (through its medical program) makes the likelihood of more candid responses from respondents possible; additionally, the lack of an established legal means of selling medical marijuana in Oregon suggests that traditional models of distribution may still be in effect—therefore, the results should be extrapolatable to non-medical states.

With two states fully legalizing recreational marijuana use in 2012 and repeated calls from anti-prohibitionists to tax and regulate marijuana production, distribution, and



**Figure 1.** Oregon medical marijuana patients per 1,000 residents, by county, 2012 (data from the Oregon Health Authority).

consumption, it is very important to have a more thorough understanding of marijuana market dynamics—particularly the roles that various actors play within marijuana distribution networks. This study describes the literature surrounding informal economies and methods of measuring them, generates a sample of Oregon marijuana users and producers using RDS methods, and surveys the resulting sample to examine the size and composition of Oregon’s informal marijuana economy.

### Literature Review

The term “informal economy,” first introduced by Hart (1973), defines the set of economic transactions outside of state regulation. Much of the same activity would be part of the formal economy if its actors registered their business, sales, or services and paid state licensing fees, insurance costs, and taxes. Informal economic activity—alternately referred to as the shadow or underground economy—consists of a wide range of types, such as unpaid or off-the-books labor, bartering, manufacturing, and distribution of drugs, weapons, counterfeit goods, and information, as well as a multitude of illegal services (sex, financial arrangements, waste disposal, security, etc.). Informal economies are widely viewed as the dominant mode of production in developing nations, but viewed as a place of last resort for those marginalized within developed countries—although reality is much more complicated than a simple dichotomy. Recent studies have demonstrated that shadow economies are growing in size in many nations, though for a multitude of reasons specific to individual countries (Schneider & Enste, 2000). With their existence derived from, and shaped by, the formal economy, shadow economies offer interesting opportunities to understand the dynamics of labor markets and the rationales of individuals participating in them.

The primary theoretical explanations for actor behavior or market dynamics in informal economies include dual market theory and bureaucratization theories, though both are underpinned by an assumption of rationality on the part of actors.

Dual market theory, elaborated by Reich et al. (1973), posits a bifurcation of the economy into primary and secondary labor markets. The primary market is characterized by more stable, higher-paying jobs, often with the possibility of promotion. Within the primary market, desirable occupations are further segregated by race and gender, with white male workers inhabiting the most desirable jobs. The secondary market encompasses a broad swath of the remaining workforce (but primarily consists of women, minorities, and youths), including in its ranks low-skilled white collar, blue collar, and service industry jobs, as well as all other informal occupations (legal or otherwise). Constructing the theory as an historical explanation of US labor market structure, Reich et al. contend that this segmentation was not accidental, but was a component of the trajectory of monopoly capitalism (see also Baran & Sweezy, 1966). Labor force homogenization and growing union politicization collided with new manufacturing technology and a necessity for oligopolistic capitalists to maintain monopolistic control over commodity and labor markets. Large firms were able to divide their workforce through specialization, union busting, and promotion opportunities to well-paying jobs (instilling an appreciation for bureaucracy). Lesser firms and sectors—those on the “industrial periphery”—were more unstable and tended to employ less stable employees (Reich et al., 1973).

Bales (1984) expands this notion into the criminal economy, positing that another dichotomy exists within this subsector of the secondary economy. Bales assumes that the tendency of criminologists to focus on arrested individuals as representative actors of the criminal economy is problematic due to selection bias. Instead, Bales suggests that a similar

opportunity structure to the primary sector exists within the world of crime, with lower-level criminals prone to high turnover and unstable working conditions, and higher-level criminals enjoying more stable employment and prospects for advancement (1984, p. 147). A key explanatory variable in this approach is the availability of investment capital; achieving stability in the underground economy is highly dependent upon owning the (illegal or quasi-legal) means of production.

In both cases, individuals within the secondary labor market come to view the informal economy as a supplement to unsteady conditions in the formal economy and rationally choose to participate in the former. While helpful in understanding the historical conditions behind divergent labor markets in the US, this theoretical tradition does not offer a nuanced description of specific causal forces driving informal market participation.

Bureaucratization theories primarily focus on political and economic structural forces that influence the size and composition of informal markets. Tax and social security burdens, intensity of regulation, social welfare transfers, regulation and cost of labor, and quality of public sector services are primary influences on the size of a nation's informal economy (Schneider & Enste, 2000). As tax burdens, public assistance, and public services increase in a nation's formal economy, shadow economies are said to increase in size and complexity. Firms respond to these particular forces by cutting their labor costs (reduction of hours and benefits, layoffs, and consolidation), and individuals (again) rationally augment their lost income by entering the informal economy in various manners. The extent of participation in the informal sector is difficult to assess and left unaddressed by this theoretical tradition; bartering, working under the table, and manufacturing illegal goods are not qualitatively equivalent in their intensity. Despite significant shortcomings, the approach offers several innovative methods for calculating the relative size of informal markets within a country.

#### **Methods of Calculating Underground Economy Size**

Arriving at an accurate estimate of total activity for any economic sector is problematic. The difficulty is obviously greater with informal activity, illegal or otherwise. A number of studies have attempted to estimate the size of underground economies; the approaches vary, but are—due to data availability—generally applied to national economies and include direct micro-level surveys (Pahl, 1984; Barthe, 1985; Leonard, 1994; Lin, 1995; Phizacklea & Wolkowitz, 1995), indirect monetary measures (Henry, 1976; Feige, 1979; Tanzi, 1980; Meadows & Pihera, 1981; Matthews, 1982; Cocco & Santos, 1984; Matthews & Rastogi, 1985; Weck-Hanneman & Frey, 1985), and indirect non-monetary measures (Lizzeri, 1979; Alden, 1982; Del Boca & Forte, 1982; Denison, 1982; Portes & Sassen-Koob, 1987; Castells & Portes, 1989; Kaufmann & Kaliberda, 1996; Portes, 1996; Johnson, Kaufmann, & Shleifer, 1997; Lackó, 1998; Lackó, 2000; Schneider & Enst, 2000).

I use a direct micro-level approach in this study. Critics of this approach question the willingness of respondents to provide potentially incriminating information about their activities, leading to a downward biasing of results. Counter to this criticism, Pahl (1984) found that interviews with both suppliers and consumers of underground goods resulted in equivalent levels of informal participation, and others (Leonard, 1994; MacDonald, 1994; Evason & Woods, 1995; Fortin et al., 1996) noted an inherent willingness of respondents to discuss their participation (as both producers and consumers of informal goods and services). The most glaring difficulties of direct surveys is meaningfully extrapolating the results of a narrow sample to a larger geographic area and locating willing respondents (especially in the context of

illegal activities). Details on why this approach is selected over competing methodologies (particularly those outlined above) are more fully explicated in Crawford (2013).

Accessing hidden populations—a status to which marijuana users, producers, and sellers are primarily relegated in the United States—poses two unique challenges to investigators; as Heckathorn notes,

First, no sampling frame exists, so the size and boundaries of the population are unknown; and second, there exist strong privacy concerns, because membership involves stigmatized or illegal behavior, leading individuals to refuse to cooperate, or give unreliable answers to protect their privacy. (1997, p. 174)

To address these concerns, researchers have traditionally relied on snowball sampling, key informant sampling, and targeted sampling to investigate hidden populations. The shortcomings of each approach are detailed elsewhere (Heckathorn, 1997), but the primary concern is derived from the lack of independence between observations, which is an unassailable artifact of snowball and targeted sampling. Heckathorn's (1997; 2002; 2007; Volz & Heckathorn, 2008) Respondent-Driven Sampling (RDS) offers an elegant addendum to chain referral procedures by limiting the number of potential recruits that each respondent can bring into a research program and incorporating both primary and secondary incentive structures into the recruitment process. Respondents are rewarded for participating in the study (i.e. completing a survey or interview), but also receive rewards for referring others to the research program.

When combined with controls to verify that a prospective respondent is a member of the targeted population, the collection of successive waves of respondents leads to “an equilibrium mix of recruits...that is independent of the characteristics of the subject or set of subjects from which recruitment began,” allowing for the calculation of unbiased population estimates (Heckathorn, 1997, p. 183; see also Salganik & Heckathorn, 2004; Wejnert & Heckathorn, 2008; Wejnert, 2009). RDS operates under four assumptions: (1) respondents accurately describe the size of their personal network within the sample population; (2) recruitment of additional respondents involves random selection by recruiters from their personal networks; (3) friendship ties are reciprocal; and (4) recruitment operates as a Markov process in that the transition probabilities of the last individual recruited converges towards an equilibrium (achieved when that individual's probability of selection is proportional to their personal network size) (Volz & Heckathorn, 2008, pp. 82-84). In the process of achieving equilibrium, key variables of interest (race, gender, or other theoretically specified statuses) are monitored throughout the recruitment process. This approach is successfully implemented in the study of intravenous drug users (Heckthorn, 1997; Heckathorn et al., 2002), AIDS patients (Heckathorn et al., 1999), men who have sex with men (Ramirez-Valles et al., 2005), sex workers (Johnston et al., 2008), Canadian marijuana users (Hathaway et al., 2010), and studies of jazz musicians (Heckathorn & Jeffri, 2001).

Previous studies relying on RDS required interviewers, a physical location from which to operate, printed recruitment coupons, and a coupon tracking system; while the face-to-face interaction helps explain why referral rates are so high in these studies, significant limitations arose when assembling samples. Researchers, regardless of their constitution and efficiency, can only interview so many people in a single day, interview locations are not available at all times, and respondents' schedules do not always correspond with researchers'. Web-based RDS

(webRDS) eliminates many of the logistical problems (though introducing new and complicated replacements), and tends to increase the speed of sample gathering (Wejnert & Heckathorn, 2008; Bengtsson et al., 2012; Bauermeister et al., 2012).

Though unaddressed by Wejnert and Heckathorn (2008) due to the nature of their study, webRDS poses an additional complicating feature with hidden populations, particularly those who are security conscientious—that of providing anonymous financial incentives. Limiting or completely eliminating monetary incentives to participants is one method of maintaining anonymity; however, no one has attempted an RDS study of this nature. This study, in addition to investigating marijuana users in Oregon, attempts the first non-monetary primary incentive RDS implementation.

## Methods

To answer the research questions posed in this study, I developed a webRDS protocol and web-based survey to examine a sample of marijuana users in Oregon. To investigate the role of different secondary incentive types in the success of RDS studies and to protect respondents' anonymity, I chose to forego all monetary payments. Instead, multiple non-monetary secondary incentives were implemented: (1) prospective respondents were appealed to based on the potential political and economic importance of examining their population; (2) live updates and total network referral counts for each respondent were posted on a website to encourage competition among participants to recruit others; and (3) respondents were granted access to near-live aggregate data and summary statistics as the project developed.

Respondents were eligible to participate if they were Oregon residents, over the age of 18, used marijuana in the last year, and received a unique study ID from a previous participant in the study. The web-based survey instrument included a question that tracked study IDs; any previously used IDs were barred from reuse. After completing the survey, respondents were redirected to another web page with instructions about the referral process, as well as links to five additional recruitment letters (in PDF format) that could be downloaded and shared with prospective recruits by email, Facebook, or instant message.

I identified a single “super seed” with a very large number of friends who are users, producers, and sellers of marijuana in several counties identified as “areas of interest” within Oregon (Benton, Josephine, and Multnomah counties). The super seed was fully briefed on the project, the referral process, and the importance of collecting chain referrals by following up with prospective respondents. The seed successfully recruited 26 respondents in the second wave from 10 Oregon counties. However, the lack of monetary incentives and the format of the recruitment letters appear to have quickly affected recruitment rates compared to previous RDS studies (web-based and traditional), as the referral process died out with only 72 respondents (five waves). The implications of this finding are discussed later in this study and more fully detailed in Crawford (2014).

## Survey Instrument

The survey instrument collected self-reported information on (1) individual characteristics, such as gender, age, height, weight, frequency of exercise, county of residence, ethnicity, political party membership, education level, employment status, relationship status, occupational category, health insurance coverage, number of close friends, and income; (2) marijuana-related questions, including frequency of use, reasons for use, medical license status and roles, number of close friends who use, reasons for growing, number of plants growing,

method of growing, source and reimbursement rate for obtained marijuana, amount consumed, and the perceived acceptance of marijuana use by immediate social circle and local community; and (3) a detailed political orientation index (using a replication of the 2011 Pew Political Research political typology questionnaire). Ordinary least squares (OLS) regression is used to identify variables associated with marijuana use amount. These results are then used to predict Oregon's total marijuana demand, estimate the economic value of Oregon's marijuana market, and provide several tax revenue projections if the drug were to be legalized. The full survey instrument is available in Crawford (2013).

## Results

This section addresses how marijuana is obtained in Oregon, who sells and produces the drug (including their rationales for doing so), and provides an evaluation of illegal marijuana sales' impact on Oregon's economy. The lack of monetary incentives severely hampers the recruitment process, as the final sample consisted of 72 respondents and took approximately two months to gather from the initial referral. This finding represents an important addition to the growing RDS literature on its own. The small sample size approached, but did not fully reach, equilibrium; this impinges on the generalizability of the findings collected in this study (Heckathorn, 1997; Crawford, 2014). Even with these limitations, the results offer some important insight into the population of Oregon marijuana users, particularly relating to the structure of small-scale marijuana distribution networks.

### Obtaining Marijuana: Sources, Use Amount, and Costs

Where do users obtain the drug? Respondents were asked to identify all of the sources where they received or purchased marijuana in the last year; this information is presented in Table 1, divided along Oregon Medical Marijuana Program (OMMP) participation status. Friends, the black market, and medical growers are the most widely cited sources of marijuana in Oregon. Licensed medical users, as a group, appear to be the most self-sufficient, though they still rely on other medical growers or friends. Most non-licensed users obtain the drug from friends, the black market, and medical growers.

**Table 1.** Sources of marijuana for users and OMMP status.

OMMP Participant	Self	Black Market Dispensary	Medical Growers	Friends	Other
No	4	25	1	14	3
Yes	12	3	5	7	0
Total	16	28	6	21	3

The majority of respondents use less than 20 grams per month, though a handful of outliers consume 2-3 ounces over the same period. Men, at first glance, appear to use significantly more than women (19.6 grams vs. 11.1 grams); however, all of the extremely heavy users are men. If the major outliers (n=4) are dropped, men average 11.8 grams per month—or roughly the same as women—though it is important to note that all of these heavy-using outliers are men (note: all subsequent calculations in this study do not exclude these outliers). Assuming a per month average use rate of 15.94 grams (the mean in this sample), each marijuana-using adult in Oregon will consume approximately 6.75 ounces per year; with an estimated 550,000 users in Oregon, this suggests that the state requires over 231,935 pounds

of processed marijuana to meet the market's demand. Determinants of monthly marijuana consumption are presented in Table 2.

**Table 2.** OLS regression models estimating marijuana use amounts.

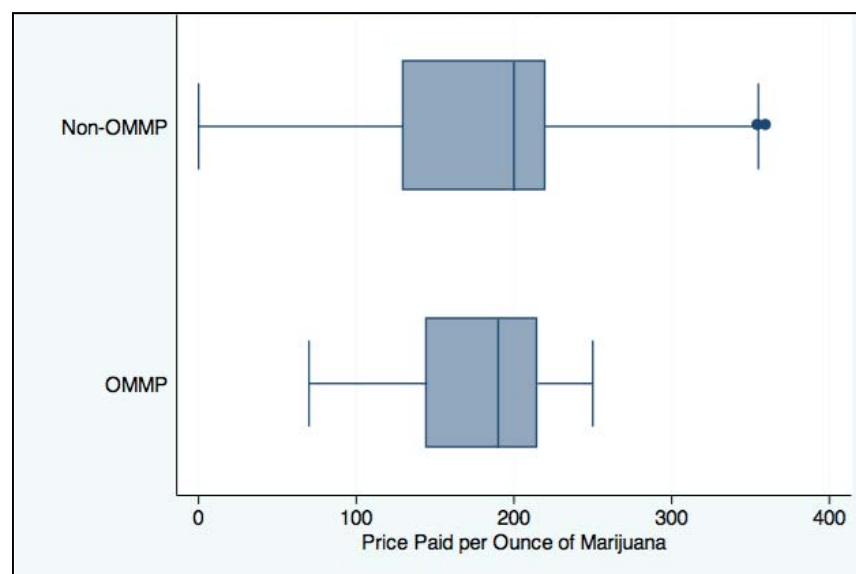
Variable	Model			
	1	2	3	4
OMMP Cardholder (0=no, 1=yes)	17.99*** (4.72)	16.30*** (4.55)	5.40 (4.98)	---
Gender (0=male, 1=female)	---	-8.49* (4.35)	-9.67* (3.93)	-10.24** (3.87)
Age (18-100)	---	-.19 (.24)	.04 (.26)	---
Education (1-5; 1=some high school, 5=master's or above)	---	-4.75* (2.02)	-5.34* (1.99)	-5.45** (1.92)
Income (0-8)	---	---	-.12 <sup>e-3</sup> (.81 <sup>e-4</sup> )	-.13 <sup>e-3</sup> (.69 <sup>e-4</sup> )
Children in home (0=no, 1=yes)	---	---	11.21* (4.62)	12.26** (4.48)
Age at First Use (0-100)	---	---	-2.45** (.75)	-2.82*** (.64)
Constant	11.18 (2.43)	38.12 (9.85)	78.50 (15.57)	87.10 (13.20)
<i>n</i> = (Adj. R <sup>2</sup> )	68 (.16)	68 (.25)	62 (.35)	62 (.37)

\*  $p > .05$ , \*\*  $p > .01$ , \*\*\*  $p > .001$

Holding a medical license is associated with much higher usage—about 17 grams more per month—before controlling for age at first use. Age at first use is negatively related to monthly consumption; in this context, each additional year of waiting before trying marijuana for the first time leads to a reduction of 2.4-2.8 grams in total monthly consumption for those who continue using the drug. Higher levels of education are associated with a monthly reduction of 5 grams per category of education completed (1=some high school, 2=high school graduate, 3=some college, 4=college graduate, 5=master's or above). Having children in the home is positively related with monthly use amounts; in the final model (4), this variable has the greatest overall effect on use amounts (12 grams). Women, on average, consume 9-10 grams less marijuana per month than men; however, as mentioned above, this finding is highly sensitive to the inclusion of profligate users (who are all male). Age and income do not appear to be related to total monthly marijuana use, although more data is necessary to strengthen the robustness of these findings.

The average price paid per ounce of marijuana is \$177 (std. dev.: \$91;  $n=57$ ). Interestingly—and contrary to the claims of many law enforcement officers and policy

makers—there is not a statistically significant relationship between the per capita rate of OMMP cardholders and marijuana prices in Oregon counties (see Figure 1), though the coefficient is negative and small ( $-2.37$ ;  $p = .072$ ; Adj.  $R^2: .04$ ) in univariate regression tests. It would be logical to assume that individuals paying less than \$50 per ounce are members of the OMMP and receive the drug at-cost from licensed growers (as specified in the Oregon medical marijuana law); however, data indicate that all eight of these people are illegal users, obtain the drug from “friends,” and use the sample’s average amount of marijuana per month (15 grams). This finding—which is further supported by anecdotal statements from those involved in marijuana production—suggests that there is a bifurcation in this particular market between medium and small buyers/sellers. Additionally, the price paid per ounce could also be a function of social proximity; close friends and family may receive steep discounts or free marijuana, while others pay market price. While there is little difference in the mean price reported by OMMP participants and illegal users (\$0.11), the variation in prices are significantly greater for non-medical users (std. dev.: \$103 vs. \$53) (see Figure 2).



**Figure 2.** Marijuana prices by OMMP status.

Illegal users have a greater chance of both paying more for their drug than licensed medical users and receiving steep discounts. This is likely a function of the amount of marijuana consumed by medical patients and their access to quasi-legitimate sources of the drug. Illegal users who consume small amounts report paying little to nothing for their supply, but more regular users pay much more.

#### **Who Sells and How Much?**

More than half (52%) of respondents ( $n=38$ ) have sold marijuana at some point in their life. Those who have sold are disproportionately male (76%), educated (76% hold a bachelor's degree or above), and are much more likely to have a criminal record than other respondents. In fact, of the 16 respondents who have been arrested, 15 have sold marijuana and eight have been arrested on marijuana-related charges. Those who begin using the drug at an early age are slightly more likely to have sold during their lifetimes. Current use amounts are also positively related to lifetime selling events, though the effect is small. There is no relationship between



having sold marijuana and an individual's political ideology, size of close friends network, ethnicity, income, or relationship status.

One third ( $n=24$ ) of respondents have sold marijuana in the past year. Three fourths of recent sellers are male, 66% hold a bachelor's degree or above, and 91% are employed. The relationship between the number of ounces sold and an individual's income are not statistically significant, though the coefficient is negative; this suggests that sellers of marijuana are either not making a profit, under-reporting their actual income, using sales to offset their own use, or attempting to use marijuana sales to buttress lower-than-average incomes. The mean annual income of recent sellers is lower than those who have not sold (\$28,937 vs. \$34,975), which provides support to the possibility that selling is used as an adjunct income source for employed, low-wage earners or simply offsets the cost of personal use. Of the 24 recent sellers, 14 are participants in the Oregon Medical Marijuana Program (OMMP); restated in slightly different terms, 18 of the respondents are participants in the OMMP program and 14 of those sold in the last year. Ten of the 14 individuals who have sold more than one pound of marijuana in the last year are participants in the program as well (see Table 3).

**Table 3.** Marijuana Selling and OMMP Participation.

<b>Ounces Sold in Last Year</b>	<b>OMMP Participant?</b>		<b>Total</b>
	<b>No</b>	<b>Yes</b>	
15 or less	6	4	10
16-48	3	6	9
49 or more	1	4	5
<b>Total</b>	10	14	24

The groupings present in Table 3 can be elaborated further by examining the aggregate amount of marijuana sold: the first group ( $n=10$ ) sold 51 ounces, the second group ( $n=9$ ) sold 253 ounces, and the third group ( $n=5$ ) sold 850 ounces. The top three sellers moved nearly an equivalent amount of marijuana through the underground economy as all other sellers combined (544 ounces vs. 559 ounces). Though it sounds like a lot of marijuana (69 pounds), the magnitude of these sales must be contextualized in relation to the total demand in Oregon. The amount of marijuana reportedly sold by respondents in this study would meet the personal needs of 245 average users, with an overall consumer/seller ratio of approximately 10:1.

#### **Who Grows and Why?**

Sixteen respondents admit to growing marijuana; 12 of those are participants in the OMMP and four produce the drug without state protection. Growers from this study sold a total of 721 ounces (mean: 45 ounces per grower; non-growers sold a total of 433 ounces) of marijuana in the last year for a mean price of \$175 an ounce. Limited data obviously hampers the generalizability of these findings, but the results do provide an interesting window into demographic characteristics of growers, rationalizations for growing, and the size of production operations. Thirteen of the 16 growers are male; 11 of the 16 hold a bachelor's degree or above; 14 are employed; average age is 31 years; all but one is white; and all are either married or in a stable relationship. The ranked rationalizations for growing offered by these producers are presented in Table 4. Self-reliance is the highest ranked and most cited reason for growing, followed closely by "enjoy gardening." There appears to be a strong ideological commitment to

**Table 4.** Counts and ranks of reasons for growing.

Reason	<i>n</i>	Mean rank	<i>n</i> ranked as #1	
			Medical	Illegal
Being Self-Sufficient	12	1.75	6	2
Enjoy Gardening	12	2.66	1	0
Marijuana's Positive Impact	10	2.9	2	2
Helping Others in Need	8	3.75	0	0
Black Market Avoidance	8	4.25	0	0
Commitment to Freedom	6	4.5	0	0
Spiritual Aspects	5	4	0	0
Making Extra Money	4	4.5	0	0
Business Challenge	2	6.5	0	0

*n*=13

the notion that marijuana has a positive impact on people's lives, as well as to helping other people in need (by extension, marijuana is viewed as fulfilling this unmet need). Surprisingly, making extra money or engaging in production because of the business challenge involved are the least cited and lowest ranked of all rationalizations, despite the fact that 14 of the 16 growers claimed to have sold marijuana in the last year.

Most growers use both indoor and outdoor methods to produce marijuana (*n*=9); two exclusively grow outdoors and five only grow indoors. The mean plant counts reported—i.e. the average number of plants (seedling, vegetative, and flowering) grown at one time—is 18.5 (std. dev.: 12.8; min: 4, max: 50). All respondents who grow marijuana would be considered small-scale producers by previous researchers (Weisheit, 1992; Decorte, 2010). The mean gross revenue generated by marijuana sales annually by these growers (\$7,800) supports the “small-scale” designation as well, particularly when larger producers (*n*=2) are excluded; in that case, the gross revenue drops to \$2,971 per grower.

#### **Marijuana and Oregon's Informal Economy**

How much marijuana is consumed and produced in Oregon, and how large is its informal marijuana economy? As noted above, estimations suggest that around 550,000 adult Oregonians use marijuana each year (SAMHSA, 2009), and data collected in this study indicate that the average user consumes 6.75 ounces a year—using these figures, Oregon requires about 154,000 pounds of marijuana to meet its internal demand. At an average reported price of \$177 per ounce, this internal market would generate more than \$436 million in revenue per year, making it Oregon's third most valuable commodity (Oregon Blue Book, 2011). An important point to note is that these are estimates of Oregon's internal marijuana market size; if exports to other states were included, this figure is likely to be much larger. Using data gathered in this study offers the possibility of a slightly more nuanced projection of marijuana's contribution to Oregon's informal economy; unfortunately, the RDS sample constructed for this study did not attain equilibrium, so accurate population estimates are not possible. On the other hand, enough data were collected to offer tentative econometric projections (which should be reexamined in a fully-funded study of this population).

*Demand*

Estimates for Oregon indicate that 10.27% of individuals 26 or older have used marijuana in the last year, and 6.58% used in the last month; for persons in the 18-25 age category, 36.96% used in the last year and 21.9% used in the last month (SAMHSA, 2009). Marijuana demand models can be constructed using population estimates for these age groups (18-25 year old and 26 or older) and the survey-derived use amounts associated with each category of user (with per month results multiplied by 12 to attain yearly figures). The model is expressed as:

*(1) Marijuana Demand Model*

$$D = (((18-25 \text{ POP} * \%Users) * Amount) + ((>26 \text{ POP} * \%Users) * Amount)) * 12$$

Total annual adult demand is 12 times the monthly demand by young adult users between the ages of 18 and 25, plus 12 times the monthly demand by older users aged 26 and older. The monthly demand for each age group is equal to the number of users multiplied by the average amount used. Separating light users (operationalized as individuals who use once a month or less) from heavy users (operationalized as using multiple times each month) and applying the formula above to each resulting group can further specify the total marijuana demand in Oregon:

*(2) Light User Demand Model*

$$D = (((265,677 * .15) * 1.75g) + ((2,701,901 * .0369) * 3.25g)) * 12$$

The light-demand model is equal to the sum of light, young user consumption and light, older-user consumption. For young users, this is the population aged 18 to 25 (265,677) times the portion that lightly uses marijuana (15%), multiplied by the average use in this age group (1.75 grams). For older users, this is the population aged 26 or older (2,701,901) times the portion that lightly uses marijuana (3.69%), multiplied by the average use in this age group (3.25 grams). The aggregate monthly demand (393,765 grams) is then multiplied by 12 to arrive at yearly demand figures (4,725,180 grams), which is equal to 10,417 pounds at a conversion of one gram per 0.00220462 pounds.

*(3) Heavy User Demand Model*

$$D = (((265,677 * .219) * 22.4g) + ((2,701,901 * .0658) * 17.6g)) * 12$$

The heavy-demand model is equal to the sum of heavy, young-user consumption and heavy, older user consumption. For young users, this is the population aged 18 to 25 (265,677) times the portion that heavily uses marijuana (21.9%), multiplied by the average use in this age group (22.4 grams). For older users, this is the population aged 26 or older (2,701,901) times the portion that heavily uses marijuana (5.58%), multiplied by the average use in this age group (17.6 grams). The aggregate monthly demand (4,432,322 grams) is then multiplied by 12 to

arrive at yearly demand figures (53,187,864 grams), which is equal to 117,259 pounds at a conversion of one gram per 0.00220462 pounds.

Using this approach, the total amount of marijuana demanded in Oregon for 2012 was approximately 127,676 pounds, which translates to \$361 million (using the average price per ounce of \$177). This is a smaller estimate than was derived from mean usage data.

Separating medical users out of the aggregate user population can further specify demand models. This is the case because (1) light medical users consume less than their unlicensed counterparts and (2) heavy medical users consume more than their unlicensed counterparts. In both situations, isolating medical users should lead to a smaller (and more accurate) aggregate demand figure. About 55,000 individuals are registered with the state as legal medical users; data collected in this study suggests that 11% are between the ages of 18 and 25, 11% meet the criteria for “light users,” and usage rates vary between unlicensed and licensed using populations. The augmented demand models are:

*(4) Light User Demand Model + Medical Users*

$$D = (((265,677 * .15) * 1.75g) + ((2,701,901 * .0369) - 6,050) * 4g) + (6,050 * 1g)$$

The “light-demand model + medical users” is equal to the sum of light, young-user consumption and light, older-user consumption. For young users, this is the population aged 18 to 25 (265,677) times the portion that lightly uses marijuana (15%), multiplied by the average use in this age group (1.75 grams). For older users, this is the population aged 26 or older (2,701,901) times the portion that lightly uses marijuana (3.69%), minus the number of 26 or older light medical users (6,050), multiplied by the average use in this age group (3.25 grams)—the result is then combined with the number of light medical users (6,050) times their average use (1 gram). The aggregate monthly demand (450,391 grams) is then multiplied by 12 to arrive at yearly demand figures (5,404,692), which is equal to 11,915 pounds at a conversion of one gram per 0.00220462 pounds.

*(5) Heavy User Demand Model + Medical Users*

$$D = (((265,677 * .219) - 6,050) * 20.54g) + (((2,701,901 * .0658) - 42,900) * 10.4g) + (6,050 * 33g) + (42,900 * 32.6g)$$

The “heavy-demand model + medical users” is equal to the sum of heavy, young-user consumption and heavy, older-user consumption. For young users, this is the population aged 18 to 25 (265,677) times the portion that heavily uses marijuana (21.9%), minus the number of 18 to 25 year-old heavy medical users (6,050), multiplied by the average use in this age group (20.54 grams). For older users, this is the population aged 26 or older (2,701,901) times the portion that heavily uses marijuana (5.58%), minus the number of 26 or older heavy medical users (42,900), multiplied by the average use in this age group (10.4 grams). The result is then combined with the product of 18 to 25 year-old medical users (6,050) and their use amount (33 grams), as well as the product of 26 or older medical users (42,900) and their use amount (32.6 grams). The aggregate monthly demand (4,071,812 grams) is then multiplied by 12 to arrive at yearly demand figures (48,861,744 grams), which is equal to 107,721 pounds at a conversion of one gram per 0.00220462 pounds.

This approach suggests that total demand is around 119,636 pounds, with a value of \$339 million (using the average price per ounce of \$177)—not as large as previous estimates, but still sizeable in relation to other commodities in the state. Demand from medical patients alone is estimated to be 42,441 pounds per year and valued at \$120 million.

### **Supply**

Estimates of marijuana supply are difficult to construct due to the small sample size obtained in this study ( $n=16$ ). For example, 75% of medical users in this study produce their own supply (all are considered “heavy users”)—if this were true for the population of Oregon medical users, total demand would be reduced by 31,927 pounds (\$90.4 million). Additionally, most produce a small surplus (mean: 45 ounces per year). If this were an accurate depiction of the medical population of users, the quasi-legal production of medical marijuana in Oregon would supply the market (after meeting personal needs) with 140,508 pounds of the finished drug for \$398 million in annual gross revenue.

Similarly, 6.9% of illegal users also grow marijuana without a license from the state. Three fourths of these growers are under 26 years old and are considered “heavy users.” The mean amount sold in the last year by these producers is 16.5 ounces. Projecting these rates onto the estimated population of Oregon users yields 11,103 illegal growers (9,309 are 18 to 25 years old; 1,794 are 26 or older). Estimated production from these growers is approximately 11,450 pounds, which would produce gross revenue of \$32 million per year. If self-sufficient, their production would also reduce aggregate demand by 4,827 pounds (\$13.6 million).

Table 5 presents the estimated marijuana demand and supply figures for Oregon derived from the preceding equations. Demand estimates range from a low of 82,882 pounds (light + heavy + medical users, less self-sufficient growers) to a high of 231,935 pounds (using the mean use projections), with an estimated value ranging from \$235 million to \$657 million. Supply estimates are very rough projections due to the small number of growers identified in this study ( $n=16$ ). Additionally, supply and demand estimates are highly sensitive to changes in self-sufficiency assumptions, particularly regarding medical users. Anecdotal evidence from within the Oregon medical community suggests that far less than 75% of patients produce their own marijuana, but more data is required to confirm this.

**Table 5.** Oregon marijuana demand and supply estimates.

Demand / Supply	Pounds	Gross Market Size
<b>Demand</b>		
Light / Heavy / Medical User, less Growers	82,882	\$235 million
Light / Heavy / Medical User	119,636	\$339 million
Light / Heavy User	127,676	\$361 million
Mean Use	231,935	\$657 million
<b>Supply</b>		
Medical Growers	140,508	\$398 million
Unlicensed Growers	11,450	\$32 million

## Discussion

Even though the sample of Oregon marijuana users constructed for this study is not representative (RDS equilibrium was not achieved), the data collected offer several key insights into the structure and size of this particular informal economy and suggests policy changes are probably necessary.

Oregon decriminalized the possession of one ounce or less of marijuana to the level of a civil infraction—you can receive a ticket and pay a small fine—decades ago, but the sale of any amount of marijuana is still charged as a felony. Most marijuana users—legal or otherwise—obtain the drug from friends. This reconfirms decades-old research (Becker, 1963; Goode, 1970) and suggests that the buying and selling of personal quantities of the drug primarily occurs peer-to-peer, rather than “pusher-to-user.” The importance of this finding cannot be overstated; if 33% of marijuana users sold the drug in the last year, this translates to approximately 181,500 Oregonians committing drug distribution felonies for the year. To put this figure in context, 19,262 were arrested on drug related charges in Oregon in 2011; further, a total of 133,414 adults were arrested in the state in 2011 (FBI UCR, 2011). This either means that law enforcement has dramatically failed to uphold Oregon laws or Oregon lawmakers have ignored the reality of drug distribution network topologies (or, more likely, both). Oregon marijuana distribution appears to meet “robust network” criteria in the dual sense that (1) many nodes are responsible for and take part in the exchange of this drug and (2) it “performs well in the face of attack” (Goyal & Vigier, 2010, p. 2). Lawmakers and law enforcers must take note: the criminalization of marijuana sales is an ineffective and piecemeal approach to controlling this substance—there is no centralized source to attack and there are too many active participants to incarcerate. If the goal is to control access to the drug, distribution should be centralized and overseen by the state (either directly or through licensure). Controlling production in a logically consistent fashion may not be possible under the current legal regime, as the medical marijuana program has legitimized and culturally entrenched small-scale, distributed production (and, as demonstrated in this study, most medical users/growers sell the drug, albeit in small quantities).

The situation is further complicated by rationalizations offered by marijuana growers: though the amount of marijuana produced and sold in the state likely rivals other top commodities, the vast majority of producers reportedly engage in this activity to help other people and are not attempting to earn a significant profit. Sales by growers seem to offset personal use costs, offset production costs, and make up for slightly lower than average incomes. This finding could be attributable, in part, to sampling bias, as all of the growers in this study are considered “small-scale” (fewer than 99 plants; all but two had less than \$10,000 in annual sales). Even larger producers must exist to meet in-state demand; however, none were identified using the RDS procedure. The implications of this are profound: if a legalized distribution system were put into place with limited production licenses or mutually-exclusive tiers of operation (as has occurred in Washington), thousands of small growers would be locked out of this emerging market, while a few large-scale producers will reap most of the benefits. For a state with high unemployment and significant income inequality, it is difficult to envision this type of change as positive.

Proponents of legalization often cite potential tax revenue as a justification for altering the current legal environment. How much could the state of Oregon raise if the drug were legalized? The answer depends on the true market size, effective tax rates levied, retail price, and the proposed method of production and distribution. California’s relatively laissez-faire

approach to medical marijuana (plant count limits are still in effect for producers) offers some insightful clues; levying a sales tax on medical marijuana at the final distribution point (dispensaries), the state raised between \$58 million and \$105 million in 2011 (Lifsher, 2011). Using the demand models constructed from this study's survey results (presented in Table 5), the estimates of tax revenue are offered in Table 6.

**Table 6.** Oregon marijuana tax revenue estimates.

Demand Model	Pounds	Total Tax / Gram	Revenue
Light / Heavy / Medical User, less Growers	82,882	\$1	\$37,594,687
Light / Heavy / Medical User	119,636	\$1	\$54,266,041
Light / Heavy User	127,676	\$1	\$57,912,928
Mean Use	231,935	\$1	\$105,204,071
Light / Heavy / Medical User, less Growers	82,882	\$2	\$75,189,375
Light / Heavy / Medical User	119,636	\$2	\$108,532,083
Light / Heavy User	127,676	\$2	\$115,825,857
Mean Use	231,935	\$2	\$210,408,143

With a total tax of \$1 per gram, Oregon could see gross tax revenues increase between \$37 million to \$105 million per year. At \$2 per gram, gross tax revenue generated would be between \$75 million to \$210 million per year. Even the lowest estimates are more than double the tax revenue obtained from alcohol licensure (\$16.2 million in 2011).

The amount of revenue generated by legitimizing marijuana-related occupations (growers, trimmers, retailers, plant and seed sales) could prove to be more than direct taxes levied on marijuana itself. Assuming that 15% of the market's gross revenue is recouped through personal income taxes, Oregon could expect to see between \$35 million and \$98 million in additional income tax revenue each year. Combined with the above estimates of direct taxation on marijuana sales, the state could likely expect to earn between \$72 million and \$308 million by legalizing marijuana. Though this sounds impressive, particularly in the midst of crushing cuts to state programs from reduced revenues, these additions only amount to 1.4% and 6.4%, respectively, of the current \$4.8 billion in revenue collected by Oregon. Additional savings could be derived from the criminal justice system; a thorough calculation is outside the scope of this study, but Miron (2005) estimates that enforcement and incarceration savings are likely to be double that of tax revenue generated from marijuana sales. If that were the case, marijuana legalization—in addition to providing a more logically coherent legal system and social integration for those participating in this particular black market activity—could prove to be a serious economic force in the state.

Finally, selecting the appropriate tax rate and licensing structure are the two most important policy considerations if the goal is to harmonize the existing informal marijuana market with its newly formalized counterpart—understanding the structure of the existing local market is critical. Researchers and policymakers often view illegal and legal markets as separate entities, but they in fact are part of a unified commodity production effort. In that regard, current participants in the informal market must have a mechanism to enter into the formal market if actor compliance is to occur; microbreweries, microdistilleries, and small vintners offer convincing parallels to draw from in that regard. Similarly, effective tax rates on any marijuana sold should be kept low in Oregon due to the existing average price (\$177 per

ounce) in the informal market; expecting Oregon consumers to pay prices of \$370 to \$465 an ounce (Washington) or over \$500 an ounce (Colorado) strains credulity. Oregon stands at a crossroads in regards to marijuana: with appropriate policy construction, it can harness the history and ecology of the State of Jefferson into a positive economic force. Contrarily, inappropriate policy construction will likely continue the trend of rising economic inequality and exploitation experienced by this internal periphery.

### Conclusion

This study investigated the size and composition of Oregon's informal marijuana economy using webRDS and survey methods. The results suggest that average marijuana users consume approximately 6.75 ounces per year and pay approximately \$177 per ounce. Most users purchase the drug from friends and nearly one third of all respondents indicate that they sell marijuana in small quantities. Growers tend to sell inauspicious quantities to friends and relatives and rarely earn more than \$10,000 annually from their sales. Importantly, the composition of distribution networks suggests that the informal marijuana economy is a "robust network," particularly in states that allow personal medical production; the implications of this for lawmakers and law enforcers are profound in that it demonstrates that the 40-year-old "war on drugs" is not winnable using traditional law enforcement techniques. Several taxation schemes are presented to offer estimates of revenue if the drug were legalized in Oregon; these findings suggest that marijuana could contribute modestly to the state's total revenue (much more than alcohol).

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# The State of Jefferson and the Future of Regional Journalism

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## Abstract

*With a focus on Josephine County in southern Oregon, this essay explores how media industry closures, consolidations, and cutbacks are adversely affecting coverage of regional and local news in many parts of the country, and the communities served. It addresses how numerous journalism schools are expanding their programs to fill the void. Specifically, the article explores how the School of Journalism and Communication (SOJC) at the University of Oregon established an experimental class of undergraduates to cover such stories, and why. The author is a professor in multimedia journalism at the SOJC and oversaw a team of a dozen student journalists who covered Josephine County as a special assignment.*

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Secessionists envision the State of Jefferson as an autonomous province carved from rural communities now part of southern Oregon and northern California. Real or imagined, the State of Jefferson is located at the center of an ideological divide. Events unfolding in Josephine County, Oregon, which borders California, focus on the plight of social services. The issues at stake also provide a lens for examining the state of regional journalism.

Josephine County made national headlines in spring 2013 when National Public Radio (NPR) and the *New York Daily News* picked up a story about a local woman's desperate call to 911. In a documented audio recording, she was heard panicking as her ex-boyfriend forced his way into her home. Due to budget cuts, the operator told her there were no available officers on duty to respond. Her request for help went unanswered, and she was raped (Hastings, 2013; Templeton, 2013).

The incident is just one example of how this southwestern Oregon community is grappling with maintaining public safety amidst political debates about tax increases, small government, environmental protection, and timber subsidies. Burglaries are up 70% and theft nearly 80%, as legislators attempt to address social service issues that will determine Josephine County's future (Johnson, 2013). What that future holds is uncertain.

Media scholars join other social scientists in posing a related and unanswered question: how can communities like Josephine County come to consensus about such complex matters when regional news organizations—charged with keeping the public informed—are also cutting back? With a focus on Josephine County, this essay explores how media industry closures, consolidations, and cutbacks are adversely affecting coverage of regional and local news in many parts of the country and the communities served. It addresses how numerous journalism

schools are expanding their programs to fill the void. Specifically, this article explores how the School of Journalism and Communication (SOJC) at the University of Oregon established an experimental class of undergraduates to cover such stories, and why. I am a professor in multimedia journalism at the SOJC, and I oversaw a team of a dozen student journalists who covered Josephine County as a special assignment.

The decline of mainstream news organizations has itself been in the news over the past decade, and cutbacks in the Pacific Northwest have shared the headlines. In 2009, the 150-year-old *Seattle Post-Intelligencer* cut its print edition in favor of a less costly online-only offering. In 2013, following several rounds of layoffs, the West Coast's oldest continually published newspaper, the *Oregonian*, announced it was reducing home delivery to just three days a week.

Broadcast media in the region have also been affected by cutbacks and corporate consolidation. In 2013, Fisher Communications, a Seattle-based owner of broadcast properties throughout the region, bought KMTR-TV in Eugene. The company consolidated that station's newsgathering operations with KVAL-TV, a Eugene television property it already owned. Within months of that announcement, Fisher was acquired by the Sinclair Broadcast Group, a Maryland-based operator of 144 television stations across the United States (Ramakrishnan, 2013). Prior to divesting its broadcast holdings, Fisher took pride in the fact that its roots were in the Pacific Northwest and that its reach extended to Roseburg, Oregon, which neighbors Josephine County.

Continuing cutbacks and consolidation in Northwest media have prompted other news organizations in the region to explore expansion. Oregon Public Broadcasting (OPB), the state's NPR and Public Broadcasting Station (PBS) affiliate, pointed to the diminishing presence of the Associated Press (AP) and the *Oregonian* when it announced plans to build a statewide news consortium. In March 2013, OPB hired a former AP reporter to travel the state and seek participation from daily, weekly, tribal, and college newspapers, as well as television stations and bloggers. The John S. and James L. Knight Foundation and the Oregon Community Fund split the start up costs, granting OPB a total of \$500,000 to launch the initiative (Schaffer, 2013).

The strategy seeks to make previous competitors into partners, inviting them to join forces to achieve mutual objectives. Online content management software allows participants to share stories at no cost during the first two years of the program. The hope is that over time participants will find increasing value in the service and will pay in future years. Some 40 to 50 potential contributors were approached as prospects, including the SOJC.

We welcomed the invitation as an opportunity, given that active news gathering is an integral part of journalism education. Since their inception, journalism schools have had student-produced publications, radio broadcasts, and television programs. However, the distribution of student media has most often remained distinct from professional media, in the form of college-operated newspapers and broadcast stations. More recently, financially challenged mainstream media companies have embraced the practice of including student-produced content alongside professional work. The practice is so pervasive that a special session convened to discuss the matter at the 2012 annual conference of the Association for Education in Journalism and Mass Communication in Chicago. Deans, professors, and legal scholars gathered from Columbia University, University of Missouri, University of North Carolina (Chapel Hill), University of Southern California (Annenberg), Boston University, University of Maryland, Arizona State

University, University of Minnesota, and University of Oregon. They were joined by executives from the Knight Foundation, the Poynter Institute, and the Student Press Law Center. Participants sought to identify and share “best practices” through continued dialogue. Concerns centered on potential liabilities, yet most agreed that potential benefits outweighed risks.

The SOJC has been forward thinking in terms of establishing partnerships. OR Media is our in-house production unit, which I manage in addition to my research and teaching accountabilities. Our objective is to cultivate alliances with mainstream media companies and create public venues for the best of our students’ work. Our partners include the PBS NewsHour, OPB, the *Oregonian*, the *Register-Guard*, KEZI-TV, KVAL-TV, and KLCC-FM. Our production operation consists of three full-time recent graduates who mentor teams of students. The mentors bridge a generational gap between instructors and students, and allow for consistent production outflow during holiday and vacation breaks. We manage a cohort of approximately 25 students who meet each term on Wednesday afternoons from 2:00 to 4:00 p.m. It is a variable (one to four) credit course, chosen by students based on pre-established goals and objectives. Students suggest and bring projects, or join existing teams. Our approach is in keeping with the teaching hospital pedagogical model, advanced by Eric Newton at the Knight Foundation (Newton, 2013).

Our partnerships seek to provide students with richer and more immersive work experiences, when compared to traditional internship programs where the opportunity to engage in real reporting can be limited. The trend towards mainstream distribution of student work provides emerging journalists with opportunities to gain professional bylines and screen credits from distinguished news organizations, and to pursue higher-profile assignments.

The SOJC viewed the social services situation unfolding in Josephine County as an opportunity for our students to uncover stories that perhaps were being missed by the mainstream news outlets because of financial constraints. Mark Blaine, the area coordinator for our journalism program, conceived the project and worked closely with me on implementation. Our intent was to recruit a team of student writers and multimedia storytellers to investigate untold stories, and to share the completed work with our media partners.

Students were eager to take on the project. However, as an institution, we had to pause to consider potential risks and ethical issues. Unforeseen liabilities can arise when students leave an insulated campus environment to embark on news-related assignments, especially in crime-challenged communities. As instructors, we operate with an understanding that student journalists are journalists-in-training, meaning many are first-time reporters.

Beyond safety issues, we needed to also be mindful of cultural differences—whether real or perceived. The city of Eugene and the University of Oregon are often characterized in the popular press as havens for “liberal elites,” who may not fully grasp nor respect working-class values. The university enrolls students from all over the world, and strives to foster a culture of inclusiveness. Yet it is fair to acknowledge that individuals bring a personal perspective to the new experiences they encounter.

Student journalists can also be judged by community members as less than legitimate because of their youth and inexperience. Young journalists can carry an extra burden when working to establish trust and credibility with prospective sources. As professors, we stress that building rapport is an essential step in the process of documenting an authentic and meaningful story.

We instructed the team of students to leave their green-and-yellow UO Ducks regalia at home when entering Josephine County. There was much discussion about also leaving personal biases behind. While important to address, we did not view any of these issues as insurmountable. Relevant matters were discussed and we agreed to view challenges that might arise as potential educational opportunities.

Encouraging student leadership is considered a “best practice” in journalism education. It establishes a management structure that is driven by students rather than instructors—empowering young people to take ownership of their learning, as opposed to viewing the experience as a traditional hierarchically organized class. However, a commitment to student leadership brings its own set of challenges. To succeed, instructors must step back into the often uncomfortable role of advisor. This requires a high level of trust and transparency by all parties. Students charged with managing their peers can encounter unforeseen difficulties. Tensions can arise in the process of holding peers accountable for the quality and timely delivery of their work.

I was fortunate to recruit Adrian Black, one of our nontraditional students, to lead the team. Black served previously in the US armed forces, and is four to five years older than most of his classmates. He also had tackled tough reporting assignments, through internships with professional publications. He later confessed that his military experience was both a bonus and a burden. Several students resisted his regimented approach to making requests.

Placing students in leadership positions in no way allowed our instructor team to abdicate responsibility for ensuring proper oversight of the project. There were numerous discussions about professionalism and safety. Students were instructed to travel in teams of two, whenever possible. This was especially stressed to students choosing to participate in police “ride-alongs,” where outcomes sometimes can be unpredictable.

In one harrowing incident, circumstances changed in an instant. A team of students rode along with a sheriff who was suddenly rerouted to the scene of a suicide shooting. With lights flashing and sirens blaring, the patrol car sped off to investigate the scene of the tragedy. Yellow police tape, an ambulance, and a medic team left little to the imagination about what would be found inside. The students were asked to wait in the police vehicle until the sheriff could assess the real gravity of the situation. Within minutes, they were invited to enter the home of the deceased—with their cameras (see Figures 1-3, next page).

The incident was cause for alarm for a multitude of reasons. We were concerned about the psychological wellbeing of the students who had not anticipated how the experience might unfold. They also were faced with an ethical dilemma. How should they capture the story? While law officials authorized their actions, they were on their own to determine the appropriateness of documenting certain details. They were thrust into making the kind of moment-by-moment decisions that are familiar to seasoned journalists, dealing with a delicate balance between serving public interest and a family’s right to privacy.

While television crime dramas like “CSI: Crimes Scene Investigation” and “Law and Order” show graphic depictions of gun-inflicted wounds, news organizations generally shield the public from such lurid details. The students intuitively framed their camera shots in a manner that excluded explicit images—while grappling with their inner-emotions about being present in the room.

Faculty members, our dean, and I became aware of the details the following Monday. We sat with the students involved individually, and offered the option of professional





**Figure 1.** Josephine County Sheriff Gil Gilbertson arrives at the scene of a self-inflicted gunshot wound, near Grants Pass, Oregon (photograph by Adrian Black).



**Figure 2.** Gilbertson interacts with the victim's spouse while emergency medical technicians attempt to stabilize the victim and call for transportation (photograph by Adrian Black).



**Figure 3.** An ambulance technician arrives with a stretcher (photograph by Adrian Black).



psychological support. Michael Busian, the younger of the two students, shared that while he was shaken by the experience, he had few regrets. His ride-along mate that day was student team leader Adrian Black. Prior military experience introduced Black to the grim reality of death several years before, allowing him to lend support to his classmate.

Law officials in Josephine County provided our students unfettered access because they want to bring public awareness to the difficulties they encounter daily because of strained resources. The sheriff's office only has one deputy to answer calls in a county of 83,000 people. Two years earlier, there were 22 deputies. Meanwhile, the number of citizens applying to carry concealed weapons rose 49% in 2012 (Johnson, 2013). Simultaneously, civilian anti-crime groups are stepping forward to fill the gap. Legislators and community members fear that without change a tragic incident like the one that led to the fatal shooting of Trayvon Martin by George Zimmerman may be imminent.

It is reasonable to ask whether citizen patrol units and student journalists should have to face violence in ways that trained professionals come to expect. Both are stepping forward to fulfill a public service—one to inform, the other to protect. While budget crises led to this present change in practices, a valid question is the effect on the future of both professions. Student journalists are not financially compensated for the content they contribute to news organizations, nor are citizen anti-crime groups that patrol neighborhoods. It is difficult to get corporations and taxpayers to start paying for services they are accustomed to receiving for free.

Journalism schools welcome opportunities to train students in real and significant ways. However, our larger mission is to prepare them to become working professionals. We know the future will continue to be marked by technological change, but we trust that future will include compensation, and will be guided by journalism's core principles of ethics, transparency, and fairness. In similar fashion, we know that economic challenges are cyclical, and trust that legislators and community members in Josephine County will arrive at solutions that will lift them out of the current crisis.

As a society faced with uncertainties, we learn to measure and mitigate our actions—with a shared commitment to serving the greater good.

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# Scenario Planning for Building Coastal Resilience in the Face of Sea Level Rise: The Case of Jacobs Avenue, Eureka, CA

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## Abstract

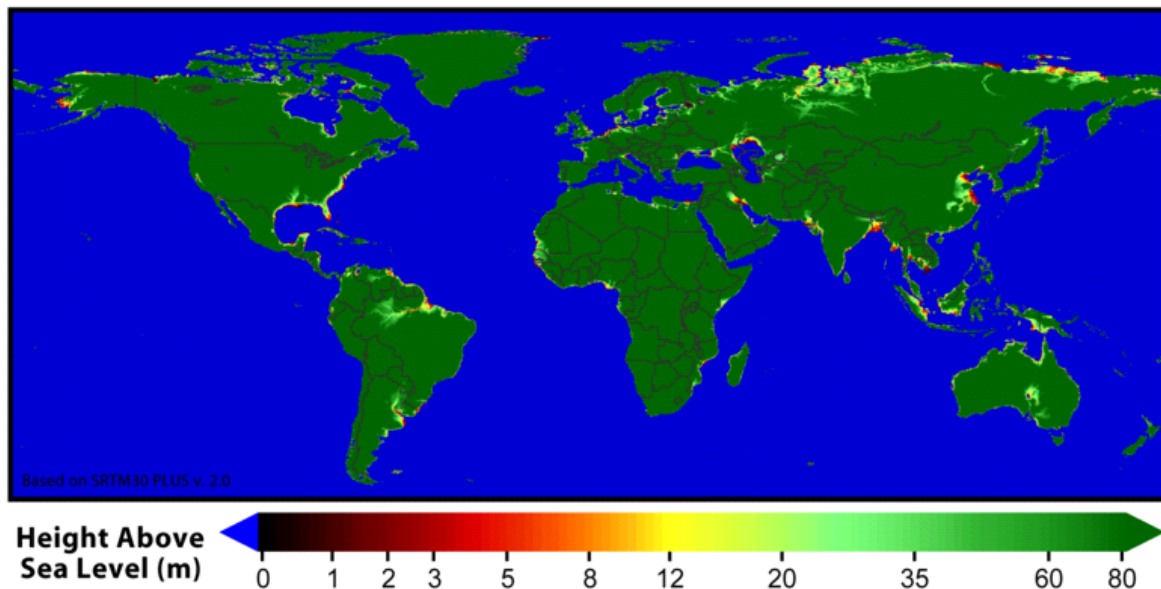
*This article examines issues surrounding flood control measures for the Jacobs Avenue community located in Eureka, California. This area of northern California is experiencing some of the most rapid rates of sea level rise recorded throughout the state. Researchers conducted interviews with stakeholders, developed geospatial analyses, and reviewed policy documents in order to understand the social, environmental, and political context related to sea level rise planning for Jacobs Avenue. From this information we developed a scenario-based set of management options to guide stakeholders in future decision-making regarding the fate of Jacobs Avenue. We explored the potential challenges and benefits of three possible scenarios: no action, levee improvement, and strategic retreat. Our analysis reveals that there are no easy solutions. Lack of funding and lack of a clear political path towards retreat make it extremely difficult for planners to take proactive steps that might ultimately contribute to increased safety, as well as economic and environmental benefits, for flood-vulnerable communities. The scenario framework developed in this paper can be a useful tool for a wide range of coastal communities, in particular those of geographically isolated northern California and southern Oregon.*

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## Introduction

Sea level rise represents a new kind of threat that will require localities to consider how they can adapt and plan for a future with higher seas. Strong evidence indicates that on a global scale sea level is rising and will continue to rise into the future (Church & White, 2006; IPCC, 2007; Overpeck et al., 2006; National Research Council, 2012). Current and projected sea level rise can have enormous implications for coastal communities, such as those geographically isolated in northern California and southern Oregon. Rising seas increase the likelihood of coastal flooding, coastal erosion, and storm surge inundation, threatening valuable coastal communities and infrastructure (National Research Council, 2012; Wu et al., 2002; Mimura, 1999). Sea level

rise will not be uniform across the globe, causing some areas to face greater levels of inundation and others less (see Figure 1). In the area that encompasses the “State of Jefferson,” Humboldt Bay in northern California—home of the historic port city Eureka—has experienced the greatest rate of sea level rise recorded in the entire state of California (Laird, 2013). Land subsidence combined with rising seas has led to an average rate of relative sea level rise at 4.72 millimeters per year (18.6 inches per century) (Laird, 2013). Experts project that the sea level surrounding Humboldt Bay will rise 6 inches by 2030, 12 inches by 2050, and 36 inches by 2100 (Laird, 2013).



**Figure 1.** Global vulnerabilities to sea level rise showing the non-uniformity of coastal inundation (image from Rohde, 2014).

As a result of these projections, planners around Humboldt Bay have taken preliminary steps to prepare for future sea level rise. One of these steps has included the development of a sea level rise vulnerability assessment for Humboldt Bay (Laird, 2013). Among the local conversations about the bay’s rising sea level, one geographic region has emerged as particularly vulnerable: a tract of land referred to as Jacobs Avenue. This low-lying peninsula is surrounded by Humboldt Bay to the north and Eureka Slough to the south and west (see Figure 2, next page). The protective levee surrounding the properties has structural challenges, making it vulnerable to possible flooding in the present as well as into a future with higher seas. This lack of structural integrity has resulted in the properties losing their accreditation for Federal Emergency Management Agency (FEMA) flood insurance (Mattson, 2011; Seemann, personal communication, 2013). The loss of accreditation places community members of Jacobs Avenue at a crossroads where they must decide how they plan to move forward with flood protection.

In addition to being at high risk for flooding, these properties are also an important site of social and economic activity for the local community. Jacobs Avenue contains 31 residential, commercial, and industrial parcels, which are home to many individuals and host some of Eureka’s most lucrative businesses. A 2004 report indicates that the businesses from Jacobs Avenue produce 480 jobs and approximately 10% of the City of Eureka’s total annual tax



**Figure 2.** Locator map of Jacobs Avenue, Eureka, California. Jacobs Avenue is almost entirely surrounded by water, with Humboldt Bay to the north, Eureka Slough to the south and west, and a drainage ditch connecting to Eureka Slough to the east. The tract is armored by Highway 101, the levee in question, and an additional levee east of the tract, to defend against floods (map created by authors using NAIP data and Humboldt County GIS data).

revenue, equating to \$760,000 (Harper, 2004). Damage to parcels from inundation or flooding could have serious implications for the city and the region as a whole. Effective sea level rise planning could be essential for protecting the residents, businesses, and revenue generated from businesses in Jacobs Avenue.

For this paper, we conducted an in-depth exploration of the unique social, political, economic, environmental, and infrastructural factors connected to potential sea level rise planning and adaptation for Jacobs Avenue. From this research, we developed a scenario-planning analysis exploring the potential advantages and disadvantages and implications of three different sea level rise planning scenarios. Our analysis draws from the coastal resilience framework, which examines factors that can reduce a coastal community's vulnerability to disturbances such as sea level rise. It is our goal that this scenario planning can provide important information for local planners, residents, businesses, and landowners concerned with the fate of Jacobs Avenue. However, we also believe that the scenario-planning framework

developed in this paper is a tool that could be useful for sea level rise planning in other regions. Given the State of Jefferson's history of environmental activism, Humboldt Bay has the potential to be a leader in the area of effective sea level rise adaptation and planning.

### **Coastal Resilience and Hazard Management**

Coastal resilience is an emerging concept within the field of coastal planning that provides a conceptual framework through which to evaluate coastal planning projects as well as to establish goals for the development and continuation of robust and vibrant coastal communities (Beatley, 2009; Klein et al., 2003; Nicholls & Branson, 1998). C. S. Holling defines resilience as "the capacity of a community to absorb and utilize or even benefit from disturbances and changes that affect it, in doing so the community is able to persist without a qualitative change in its structure" (quoted in Beatley, 2009, p. 3). Coastal resilience applies the theory of resilience to coastal communities. The concept of coastal resilience is particularly relevant when attempting to plan for communities that can better respond and adapt to natural hazards such as coastal storms, flooding, and tidal inundation—all of which are likely to increase as a result of sea level rise.

Resilience is understood to be an interdisciplinary concept encompassing environmental, social, economic, and political aspects of a given community or region. In his framework for coastal resilience, Beatley (2009) highlights four key planning dimensions: land use and built environment, ecological, social, and economic dimensions. In this analysis, we look at the potential for various scenarios to contribute to the coastal resilience of the City of Eureka by evaluating the different alternatives through an interdisciplinary lens that touches upon all the key planning dimensions.

In the broader field of hazard management, planners and scholars have focused on two main and often competing strategies to reduce impacts from natural hazards and sea level rise: (1) rebuild/fortify threatened infrastructure and (2) strategic retreat (Adger et al., 2013; Young, 2013). Under the rebuild/fortify model—the more traditional approach to hazard management—communities are rebuilt in the same locations following natural disasters, and areas vulnerable to such hazards are fortified or made less vulnerable through engineering projects such as the improvement of levees or the building of sea walls (Young, 2013). However, the option of strategic retreat in the face of coastal hazards has begun to gain traction in the planning community (Abel et al., 2011). Under this model efforts are made to move residences and infrastructure out of vulnerable locations and those areas are then converted into open space or coastal wetlands. One of the highest profile examples of the strategic retreat model is New York Governor Cuomo's post-Hurricane Sandy plan, which included voluntary buyouts for homeowners who reside in areas vulnerable to hurricane impacts with the intention to convert the properties into open space (NYS Homes and Community Renewal, 2013).

The fortify and strategic retreat approaches to coastal hazards management come with various advantages and disadvantages depending on the context of the community. Many recent high profile coastal plans, such as New York's and Louisiana's, contain some elements of both models (NYS Homes and Community Renewal, 2013; Coastal Protection and Restoration Authority, 2012). The scenario-planning framework set forth in this paper explicitly provides planners with a means to visualize the various costs and benefits associated with different approaches to flood and hazard management of a particular parcel of land.



## Methods

We utilized three primary methods to develop this sea level rise planning analysis of the Jacobs Avenue parcels: (1) interviews with key stakeholders connected to the parcel, (2) document review of key planning and historical documents related to the site, and (3) GIS spatial analysis of the parcel and its particular vulnerabilities.

We interviewed seven individuals selected purposively for their expertise and perspectives on Jacobs Avenue and its vulnerability to sea level rise. Respondents included two business and property owners of the Jacobs Avenue district, an official of the Army Corps of Engineers, a tenant of the Lazy J mobile home complex situated on Jacobs Avenue, and three individuals who agreed to the use of their names: Hank Seemann, Deputy Director (Environmental Services) of the Humboldt County Public Works Department; Aldaron Laird, an environmental planner familiar with the Humboldt Bay region; and Bob Merrill, district manager of the North Coast District Office of the California Coastal Commission. Interviews provided important information about the social and political context in which planning for Jacobs Avenue takes place.

We conducted an extensive review of materials relating to flood management in the Jacobs Avenue parcel, including government records, historical documents, policy documents, climate change models, and scholarly literature. We supplemented this analysis with a review of case studies and literature related to flood zone management and sea level rise planning more broadly, looking for examples to draw from in the consideration of planning for Jacobs Avenue. Additionally, spatial datasets were acquired from Humboldt County, the National Agriculture Imagery Program (NAIP), and the National Oceanic and Atmospheric Administration (NOAA). We utilized these datasets and performed geospatial analysis to query for and delineate particularly vulnerable areas along the Jacobs Avenue levee as well as other land use features.

Finally, we brought these three types of information together utilizing a scenario-planning framework. Scenario planning involves bringing together the best information to project potential futures for a particular place based on a range of possible scenarios or planned activities. “The goal of developing scenarios,” as Carpenter (2005, p. xxi) explains, “is often to support more informed and rational decision-making that takes both the known and the unknown into account.”

We developed a scenario-planning framework with three distinct and plausible scenarios for the Jacobs Avenue parcel:

- **No Action**, in which little to no action would be taken towards minimizing flood risks for the parcel and the voluntary and disjointed management of the current levee would continue to be the norm.
- **Levee Upgrade**, in which steps would be taken to significantly upgrade and strengthen the existing Jacobs Avenue levee and its management structure. The scenario draws from the rebuild/fortify model of hazard management.
- **Strategic Retreat**, in which businesses and residents are incentivized to migrate away from of the Jacobs Avenue location over a 20-year timeframe. This scenario draws from the emerging strategic retreat model of hazard management.

We explore the potential future for Jacobs Avenue under each scenario, and analyze the strengths and weaknesses of each approach.

### Jacobs Avenue and Its Legislative Context

In many ways it is not surprising that Jacobs Avenue is facing flood concerns. Historically the property was a coastal wetland (see Figures 3 and 4). It first became isolated from Humboldt Bay to the north with the construction of the railroad and later Highway 101 (Laird, personal communication, 2014). In the 1930s, Frank Herrick, the initial landowner of the tract, constructed a mile-long levee on the south side of the property to drain the area and isolate it from Eureka Slough (Mattson, 2011). After the parcel was diked and drained, it was utilized



**Figure 3.** An 1870 US Coast Survey of Jacobs Avenue depicting wetlands and numerous tidal veins connecting the landscape (image from Laird, 2007).



**Figure 4.** A 1931 Aerial Mosaic of Jacobs Avenue depicting early settlements in Eureka to the southwest, with Highway 101 transecting the image and undeveloped tidally influenced land where Jacobs Avenue currently lies (image from Laird, 2007).



primarily for agricultural purposes. In addition, the Murray Field Airport was constructed on land adjacent to Jacobs Avenue just after World War II (Laird, personal communication, 2014). Deeds from the Humboldt County office indicate that in the early 1950s descendants of Herrick subdivided the tract into smaller individual parcels. The subdivision signaled the transition from agricultural uses of the property towards the commercial and industrial uses that dominate the property today (see Figures 4 and 5). The tract currently supports a diversity of uses, including a mobile home park, a used car and auto wrecking facility, a vehicle rental outlet, a storage facility, and agricultural and industrial supply stores.



**Figure 5.** A 1958 Aerial Mosaic of Jacobs Avenue depicting a growing Eureka and parcels with infrastructure upon the newly created Jacobs Avenue (image from Laird, 2007).

Jacobs Avenue has maintained flood protection from the bay to the north by the raised railroad bed and the Highway 101 corridor. On the south side, the original levee constructed in the 1930s is still the primary source of flood protection. The levee is maintained by individual property owners, each responsible for his or her own section of the levee. This has led to a system of uneven management in which some landowners have invested in upgrades, maintenance, and repairs while others have not. In the 1980s, several landowners worked with the City of Eureka to conduct a significant upgrade on the eastern portion of the levee. Through various initiatives, the landowners, the city, and the county have attempted to move towards the development of a levee district to oversee maintenance of the levee protecting Jacobs Avenue, but this effort has been encumbered by political and legal complications (Mattson, 2011).

The history of Jacobs Avenue has also been marked by the development and evolution of federal flood management policies. In 1968, the US Congress created the National Flood Insurance Program (NFIP) to provide government subsidized flood insurance to residents living

in areas prone to flooding hazards. Two important factors led to the creation of this program—citizen concerns over the consequences of hurricanes and flooding, and the refusal of private companies to provide insurance to residents living in flood prone areas. The NFIP has been criticized by many planners and scholars for promoting and subsidizing continued residence and development within hazardous areas (King, 2011; Burby, 2006). Under the NFIP, the Federal Emergency Management Agency (FEMA) is charged with developing flood zone maps that delineate location of land areas that are vulnerable to experiencing an extreme flooding event at least every 100 years. These designations are depicted on FEMA's Flood Insurance Rate Maps (FIRM). As a part of this mapping process, FEMA evaluates the quality of levees, dikes, and other flood protection structures.

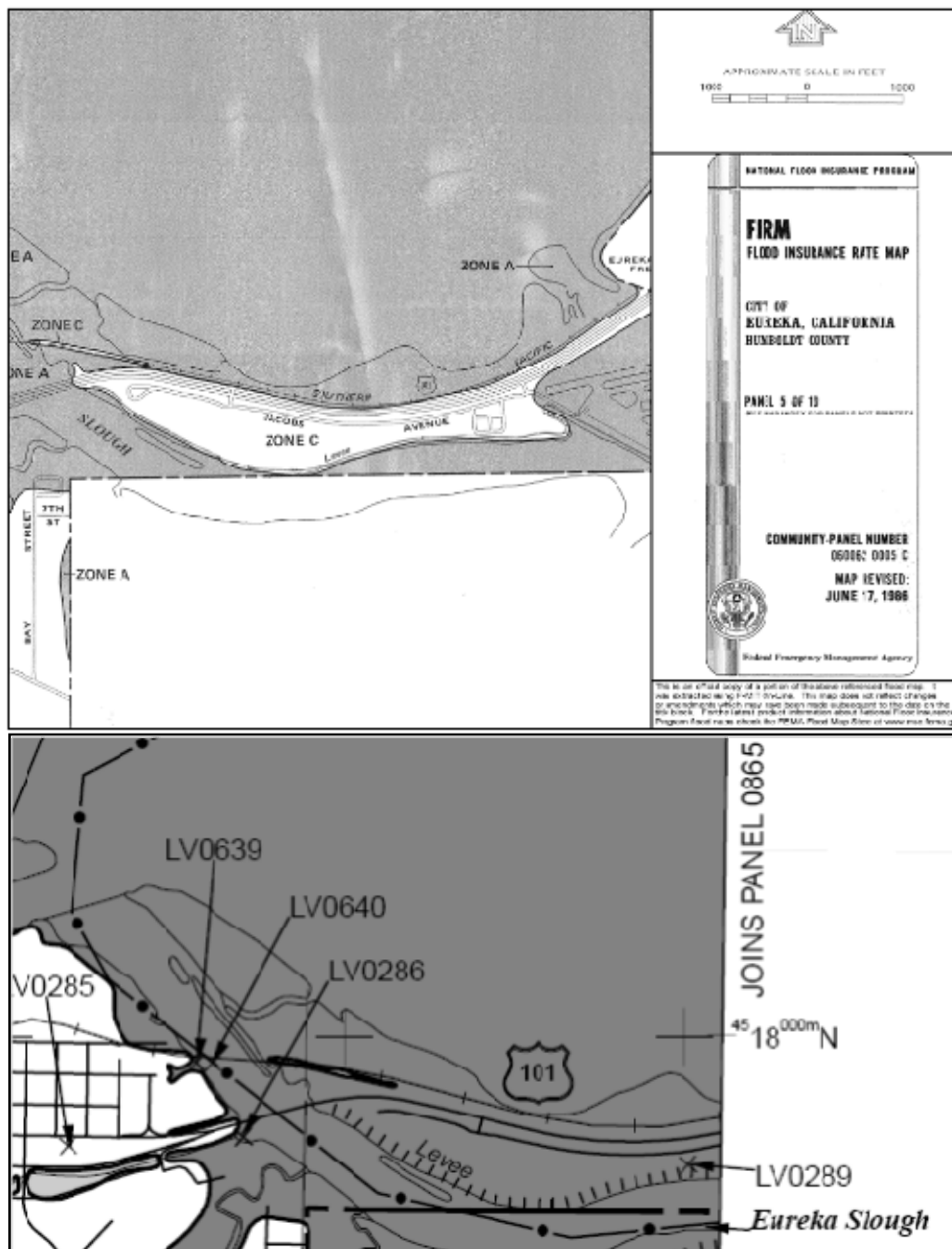
The catalyst for raising awareness on Jacobs Avenue and its levee occurred in 2004, when FEMA began the process of updating its national FIRM. On the previous FIRM, Jacobs Avenue was categorized in Flood Zone "C," meaning FEMA believed the existing levee protected the property from a 100-year flood event. The new 2004 FIRM process required flood control structure owners to obtain evidence from a licensed engineer stating that their levee or dike "meets and will continue to meet minimum standards related to hydraulic, structural, operational and maintenance aspects of levee performance" in order for it to be accredited (Mattson, 2011, p. 2). Flood control structures that lack an engineering assessment or fail to pass minimum standards result in FEMA non-accreditation, signifying an unsafe area where residents are required to purchase and hold flood insurance.

Jacobs Avenue landowners were notified about the pending change to their flood zone status in 2004, however an engineering assessment was never performed. Due to the lack of a viable assessment of the levee, FEMA changed the status of Jacobs Avenue to "Zone A-Special Flood Hazard Area" (Seemann, personal communication, 2013; Mattson, 2011) (see Figure 6, next page). Through this new designation, FEMA indicated that it was not convinced the levee could provide adequate protection against the 100-year flood mark (9.37 feet). This new flood designation introduced new costs and new considerations of risk to the Jacobs Avenue landowners. In particular, a national condition for property owners within "Zone A" is the requirement to purchase flood insurance—which is quite costly—for any property with a federally backed mortgage. As a result, landowners, planners, and the public have begun conversations about the future of the tract. This watershed moment provides a great opportunity for a scenario-based analysis of the property so landowners can consider the consequences of various planning strategies. Below we provide an interdisciplinary analysis of three flood management scenarios for Jacobs Avenue.

### Scenario 1: No Action

*"I don't really feel any better that we've maintained our levee, it just makes me more aware of everything that hasn't been maintained."* (Jacobs Avenue landowner, personal communication, 2013)

Under the no action scenario planners and landowners would take very few steps to reduce flood hazards in the Jacobs Avenue tract. This alternative assumes a continuation of current land use policies, specifically: non-uniform levee management among landowners, and a failure to address the area's downgraded status in FEMA's FIRM. Taking steps to improve the flood infrastructure or change the use of hazard prone areas can be incredibly challenging. Not only



**Figure 6.** Top: FEMA’s 1986 Flood Insurance Rate Map (FIRM) depicting Jacobs Avenue within Zone C (white), an area in which levees provide adequate protection from the 100-year flood (Humboldt County Public Works Department, 2012). Bottom: FEMA’s 2009 Draft FIRM changing Jacobs Avenue designation to Zone A (shaded region) (Humboldt County Public Works Department, 2012). As outlined in LeFever (2001, p. 2), “Areas subject to inundation by the 100-year flood event. Mandatory flood insurance requirements apply.”

are infrastructure upgrades very expensive, but they also require a lengthy and uncertain process of permitting. In addition, any changes to land use management in hazardous areas can be encumbered by political opposition from stakeholders who prefer the status quo. As a result, no action can be seen as the easiest—or with lack of suitable funding the only—option for management of flood prone areas. Therefore it is important to evaluate and consider the possible consequences if no action is taken in the management of Jacobs Avenue.

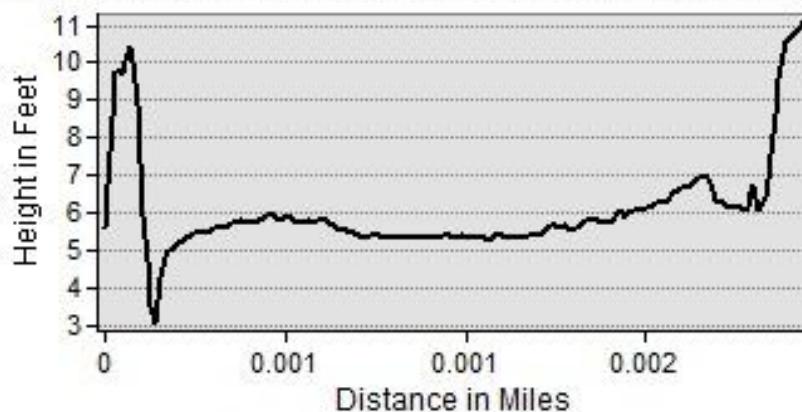
### **Social Considerations: Levee Management and Potential Conflict**

Many social and economic factors are important in the consideration of the no action scenario. To start, it is important to understand the social and political aspects related to levee management. An important facet of Jacobs Avenue is the lack of a single levee owner; rather, the levee is a shared responsibility among all parcel owners. Over 30 businesses and numerous residents on Jacobs Avenue are responsible for the upkeep of the levee (Seemann, personal communication, 2013). There has been communication among landowners to create a centralized levee district to solve the disjointed management issue; however, specifics regarding the powers of residents relative to business owners within the California Water Code have negated the possibility of the levee district forming.

Because the landowners are predominantly business owners, not residents, they cannot form a levee district and instead the Jacobs Avenue tract has been classified as a flood subzone area, which allows interested individuals to participate as a unit with Humboldt County Public Works department as the group's representative (Seemann, personal communication, 2013; Humboldt County Board Orders, 1955). Designation of a flood subzone also authorizes landowners to pay assessments on their property taxes, which go into a fund to pay for improvements and other beneficial activities related to flood protection (Seemann, personal communication, 2013). Under this subzone formation, landowners and business owners are only able to conduct indirect management of their levee using Humboldt County as a proxy for their issues and demands. For any action to take place with regards to management of the area's levees landowners and the county will have to engage in productive dialogue. Under a no action strategy, this kind of relationship-building and joint decision-making would not be required.

While the no action strategy would not require the engagement in complex social and political negotiations necessary to make changes to the levee or flood management, it could also produce important social challenges. Namely, the no action strategy has the potential to lead to serious conflict among landowners and business owners about the relative upkeep of their respective sections of the levee. Jacobs Avenue is basin shaped with Highway 101 sitting approximately 12 feet above the ground level of the tract and the levees ranging from 10 to 12 feet above ground level (see Figures 7 and 8, next page). This topography was created to protect the economic resources on the tract, however due to the uneven levee it is possible that even a small levee breach could inundate the entire area. This situation can create social pressures and conflict because improper management of just one section of the levee by just one landowner can create vulnerability for the entire neighborhood. One land and business owner said,

I don't really feel any better that we've maintained our levee, it just makes me more aware of everything that hasn't been maintained. Though we feel better that there is less likelihood that we will be liable for a breach...it's questionable if they will be blamed for the breach. (Property owner, personal communication, 2013)

**3008 Jacobs Ave, John's Used Cars & Wreckers**

**Figure 7.** A cross section depicting the basin-like topography of Jacobs Avenue. The peak on the left side of the chart represents the levee and the peak on the right represents the Highway 101 corridor. The height of the levee is approximately 10.5 feet, a mere 14 inches above the expected 100-year flood event. With tides regularly inching towards the 9.37-foot threshold, the 100-year flood level is losing significance (data derived from NOAA LiDAR, 2011; NAIP imagery; and ArcMap software).



**Figure 8.** A photograph taken from atop Jacobs Avenue levee depicting the Lazy J mobile home complex below the levee top and the Eureka Slough separated to the right (south) (photograph by Evan Wisheropp).

**Socioeconomics: Distribution of Costs and Risk**

There are also potential political and equity challenges related to who is responsible for the upkeep of the levee compared to who might experience the most harm from the flood event. Under the current model, landowners are responsible for the upkeep and maintenance of the levee. It is possible that after assessing the situation, the landowners may decide that it is too economically risky to invest in levee upgrades, leaving tenants and other occupants vulnerable to their decision. The expense of building additions to levees as well as the difficulty of obtaining permits for construction can provide a disincentive to landowners in taking proactive steps to improve flood management at their property. However, many of the properties on Jacobs Avenue are leased and this situation may not be agreeable to the residents and tenants of properties who are unwittingly placed at risk. A resident of the Lazy J mobile home complex explained, “I think that an owner [of the Lazy J] has a responsibility to inform the tenants of the conditions that they are living under and the safety of the levee... I can tell you that I don’t remember ever being informed [of] anything about the conditions or risks or hazards” (Lazy J resident, personal communication, 2013). If no action is taken towards protection, property and business owners would be putting employees, residents, and infrastructure at risk for potential flooding and danger.

There are economic costs to consider under the no action alternative. When a flood does occur under the no action alternative, if landowners purchased national flood insurance it is likely that FEMA will provide financial assistance to them to cover the cost of damages. However, FEMA’s intention is not to make landowners whole again, but rather to aid them during a calamitous time (Chabel, 2013). Historically, this passive approach has been seen as an effective gamble compared to the hassle and expense of levee buildup. Additionally, while the expense of proactive measures to improve levees for potential flooding and sea level rise would likely be borne by local (county or city) sources, which are often financially burdened, post-disaster emergency funds from FEMA would come from the federal government (Burby, 2006; King, 2011). Economically, under the no action alternative, the local city and county government would benefit from not needing to finance large-scale levee improvement projects. Both the City of Eureka and Humboldt County have limited and stretched budgets, so this could be seen as a major benefit to this scenario. If the landowners purchase federal flood insurance there is at least some guarantee of federal support following a flood event.

Under the no action scenario, there is also the option neither to pay flood insurance nor proactively keep flood protection structures accredited. If a flood causes damage and the flood protection structures are neither accredited nor flood insurance held, FEMA will provide limited financial relief; specifically, the aid FEMA can offer is capped at \$30,000 (Chabel, 2013). As a result we would recommend that even under the no action scenario landowners make sure to purchase the insurance given the flood vulnerability of the property. However, even with the purchase of flood insurance landowners have no guarantee that they will receive the high levels of flood assistance given to communities by the federal government in the past. Total reliance on FEMA and the NFIP contains an embedded false sense of security because FEMA has limitations to its responsibilities. Due to the economic recession of 2008 the federal government has been struggling to pay off debt while simultaneously trying to preserve programs such as emergency management. There will be significant pressures in the coming years at all levels of government to scale down spending in a variety of sectors (FEMA [5], 2011). A 2011 FEMA document stated that “[a]s a result of these budget pressures, a significant number of emergency management programs have already experienced budget



freezes or reductions...some think tanks have suggested cutting Federal Homeland Security grants (including emergency management)” (FEMA [5], 2011). Property owners that are confident in FEMA’s expected level of aid during a flood event may be caught surprised if they are not paying attention to such reports (Lee, 2006).

It is important to consider the economic costs the community might incur in the event a flood does occur in Jacobs Avenue. Given the current vulnerability of the area and the conditions of rising seas, this is a near certainty under the no action alternative. The Jacobs Avenue business district is important to Eureka because of the large revenue it supplies, approximately \$760,000 annually in sales tax; it would be risky to allow for no action to be taken. Assuming the occurrence of an inundation, Eureka would lose tax revenue and jobs until the land is drained and repaired, which could take months or even years. It may not be straightforward to drain and repair land after it is inundated. As sea levels rise groundwater will also rise, so drainage will need to be modified to accommodate a higher water table, increasing the scope of work necessary to recover from floods. As mentioned above, FEMA may cover some of these costs, but not all of them, and likely not the cost of the lost tax revenue while repairs were being completed. It is important for Eureka to consider the costly rebuilding procedures including the additional complications caused by climate change, such as higher groundwater levels, greater frequency and intensity of storms, and the powerful tidal movements of Humboldt Bay, when considering taking no action regarding Jacobs Avenue’s levee.

#### **Environmental Considerations**

In addition to safety concerns surrounding the high flood risk under the no action scenario, there could be long-term negative environmental impacts of taking no action. Jacobs Avenue is an industrial sector; in the event of a flood, waters could mix with chemicals used at the various automobile and machinery yards and enter Eureka Slough and Humboldt Bay. Chemicals typically found in automobile salvage yards include: acetylene gas, automotive fluids, degreasing agents, gasoline, hydraulic oils, fuel additives, diesel gasoline, asbestos, lead, and sulfuric acid (EPA, 2013). The abundant marine life in Humboldt Bay would be subject to ingestion of such chemicals, which is likely to cause bioaccumulation up the food chain in the local ecosystem (Oost et al., 2003). Some of the toxins on site could have considerable half-lives and the longer a chemical’s half-life, the greater the risks are to the host organism, even in low chemical concentrations (Bryan et al., 1979).

#### **Overall**

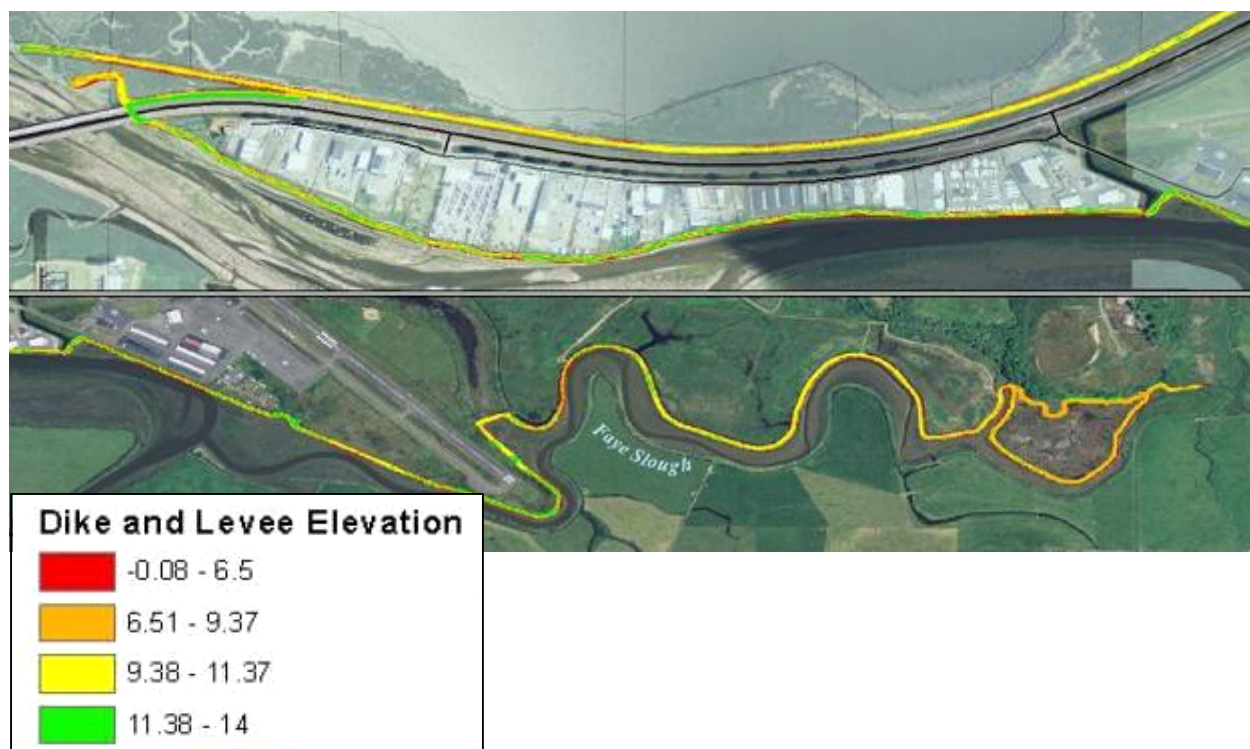
There are several benefits to a no action scenario with regards to Jacobs Avenue. Landowners would not be required to work together with county officials to regulate and improve the infrastructure of their levees. If the landowners purchased national flood insurance, it is also likely that FEMA would pay for the damages and reconstruction following a flood event. However, the no action scenario also provides a significant safety and economic risk for the individuals and businesses residing on at the tract in the event of flooding. It also presents an environmental risk, as flooding would mobilize any toxins or chemicals present at the site. Finally, evidence indicates that the no action gamble is becoming increasingly risky. With sea level rising, the frequency of flood events at Jacobs Avenue is likely to increase. Even if the tract recovers from one flood event, it would still be vulnerable to successive events thereafter. In addition, given the financial situation of the federal government, citizens may no longer be able to rely upon large-scale assistance from the federal government following such flood

events. If a no action scenario is pursued in Jacobs Avenue, it is recommended that at the very least the landowners purchase flood insurance so they remain eligible for federal assistance once a flood occurs.

### Scenario 2: Levee Improvement

*“It’s a real possibility that we could have two, three feet of water in the buildings here if there were a failure of the levees.”* (Jacobs Avenue landowner, personal communication, 2013)

The levee improvement alternative would invest in upgraded flood protection by combining proactive planning with a commitment to current infrastructure. This alternative assumes that plans to build the levee protecting Jacobs Avenue would ensue regardless of whether the engineer assessment found the levee to be compliant or noncompliant with NFIP standards. Additional height and base width would need to be added to the levee in order to bring the levee up to NFIP standards of protection against the 100-year flood and to build proactively against sea level rise. Due to the levee’s uneven heights, it is predicted that the upgrade would take place in sections rather than in the levee’s entirety, with construction efforts prioritizing the lower and more vulnerable sections of the levee (see Figure 9).



**Figure 9.** Map depicting the elevations along the Jacobs Avenue (top) and Faye Slough (bottom) levees. Elevations below the 100-year flood mark of 9.37 feet are red and orange. Elevations below 2 feet of freeboard are yellow; elevations in compliance with NFIP standards are green. Sections of red, orange and yellow are throughout the north and south sides of the property. The interspersed colors on the south side highlight the unevenness of protection from the Jacobs Avenue levee (data from Department of Commerce, 2012; Chinmaya, 1995).



### **Permitting Considerations**

Conversations with landowners and planners from the region indicate that there could be several logistical and political challenges involved with the implementation of this scenario. Numerous permits would be required before a levee improvement project could take place. A coastal development permit (CDP) is a major component of this project and is administered by the California Coastal Commission. Currently, the Coastal Commission contains a “no further armoring” policy in many flood protection structure’s CDPs, meaning that the expansion of the levees into new areas would be extremely challenging to permit. However, the California Coastal Act, which is upheld by the California Coastal Commission, includes language indicating that that landowners and planners have an inherent right to maintain and repair structures already in place (Coastal Act, 2006). This “inherent right” clause creates a less arduous pathway for obtaining coastal development permits for the improvement of existing levees when compared to what the process might be to permit the establishment of new levees.

However, there is a fine legal line between what would constitute maintenance or repair of an existing levee and what would constitute new levee development. As Bob Merrill of the California Coastal Commission stated, “There’s always the question of when does repair and maintenance become replacement?” The general policy of the California Coastal Commission is that an existing structure is considered to undergo new development if additional volume is built upon it, or if 50% of the existing structure is replaced with different materials (B. Merrill, personal communication, 2013). Under this standard, the improvement and fortification of the Jacobs Avenue levees, particularly if they are to be of a height and strength to withstand potential sea level rise, would be considered “new development” because additional volume would be added to the height and base of the levees. Therefore, this levee improvement option would likely require review by the Coastal Commission and a coastal development permit, which would not only be costly and time-consuming but also would present an uncertain outcome.

In its consideration of granting a permit for the fortification of the Jacobs Avenue levees, the Coastal Commission would also need to consider possible wetlands fill that could result from the project. The current levees’ structures are located on Eureka Slough wetlands, so any expansion of the base would require increased fill of these wetlands as well as potential disturbance of these ecologically fragile sites. The California Coastal Commission is hesitant to approve projects that result in wetlands fill, potentially adding another challenge to the permitting process.

### **Economic Considerations**

Economically, the various components of a levee upgrade project could total millions of dollars. An average, each linear foot of levee construction costs \$31.70 (NMFS, 2012), and the Jacobs Avenue levee is approximately one mile. The desired additional height would ultimately be up to the County of Humboldt, but the minimum freeboard height increase would be approximately 1-1.5 feet to reach at least 11.37 feet. Freeboard is the space between the water level and the levee top; in this case the 100-year flood mark is the level of significance from which freeboard is measured. This minimum height increase would meet the NFIP standards of 2 feet of freeboard above the 100-year flood threshold of 9.37 feet (King, 2011). The county and landowners may want to raise the levee heights 2-2.5 feet to account for future sea level rise. A levee to accommodate sea level rise might be 12.37 feet which would include 2 feet of freeboard above the 100-year flood level with an added 12 inches of sea level rise as is

predicted by 2050 (Laird, 2013). Given these figures, the approximate estimate of the levee construction is \$167,376-\$418,440, depending on the additional heights desired. This cost reflects the construction of the levee only and does not take into account the cost of environmental impact assessments, erosion stabilization, endangered species surveys, or permit applications. The project in its entirety could cost several million dollars. State grants are available but often require privately matched funding, which would place the financial burden on Humboldt County Public Works department and landowners. The levee improvement scenario would be extremely expensive, and the county or the city would be required to contribute significant funds to pay for the improvements. This might be a worthwhile investment for Eureka, considering that the tract contributes \$760,000 of tax revenue to the city each year. However, if the landowners and county agree that the necessary fundraising is not realistic, the levee improvement scenario may not even be an option they could pursue.

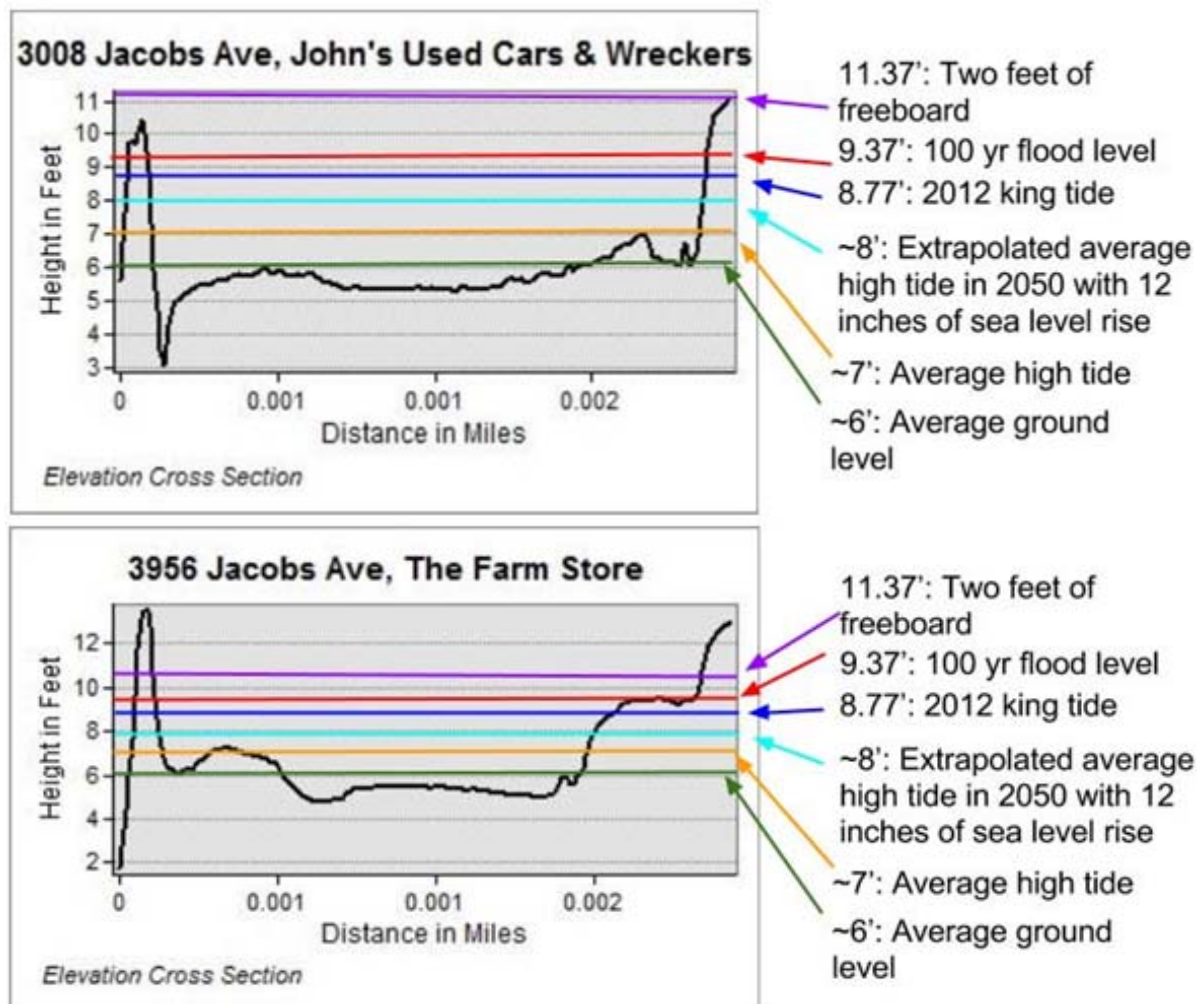
### **Environmental and Structural Considerations**

The levee improvement alternative would also bring about several immediate and long-term environmental impacts (Laird, personal communication, 2013). The land Jacobs Avenue lies upon is historically tidal marshland and is by nature transient. A levee upgrade scenario will need to plan for three important environmental considerations: king tides, groundwater rise, and the hydrologic unit concept.

King tides are the most extreme tides of the year, which take place between December and early February. In December 2012, king tides in Humboldt Bay reached a stage height of 8.77 feet, just 7.2 inches below the 9.73-foot 100-year flood threshold of significance (California King Tides Tide Chart, 2013). King tides are projected to become more extreme with rising sea levels, and they will continue to pose a threat to Jacobs Avenue infrastructure and people. As one resident of the Lazy J mobile home complex said, “Dealing with sea level rise on Jacobs Avenue is pretty scary because the water is pretty doggone high at times” (Lazy J resident, personal communication, 2013). A benefit of levee improvement is that it could provide landowners and residents with added security in these high water conditions. A comparison of vulnerable and structurally sound sections of levee can be found in Table 1 and Figure 10 (next page). Under the levee improvement strategy, the vulnerability of properties behind the levee would likely be significantly reduced.

**Table 1.** Varying sections of levee along Jacobs Avenue.

<b>Business:</b>	<b>Levee Elevation (ft):</b>
Johns Used Cars and Wreckers	10.5
The Farm Store	14
United Rentals	13.75
Humboldt County Heavy Equipment	10.75

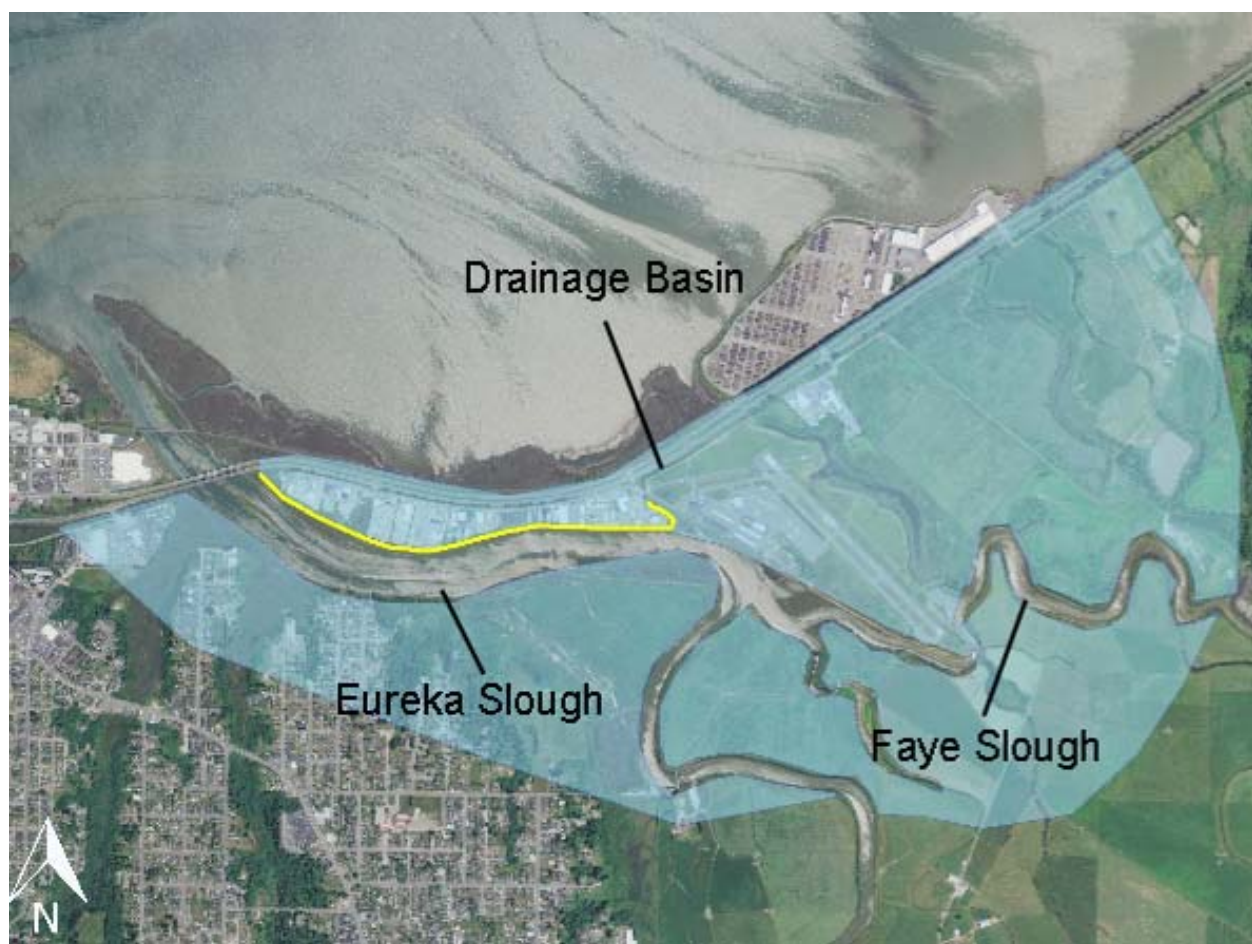


**Figure 10.** Cross sections of vulnerable (John's Used Cars & Wreckers) and structurally sound (The Farm Store) portions of levee with associated thresholds of significance. Satellite imagery and a 1-meter resolution Digital Elevation Model (DEM) of the landscape shows the average ground height in the Jacobs Avenue basin to be approximately 6 feet. High tide stage heights at the Eureka Slough Bridge record at 4.75-8.5 feet, varying throughout the year, placing the high tide at approximately 7 feet (ProTides, 2011) (representation created using NAIP imagery and NOAA LiDar data).

The Jacobs Avenue tract already has challenges with storm water drainage. During a site visit to Jacobs Avenue shortly after a storm event, our research team observed that water had visibly collected in the streets and stood stagnant due to the absence of stormwater infrastructure. As sea levels are projected to continue to rise, groundwater levels will also rise and further complicate the stormwater drainage problems of Jacobs Avenue (Laird, personal communication, 2013). Currently precipitation is only able to drain from the parcel at lower tides when the tide gates are open. If the groundwater table and the sea level rise, it is foreseeable that this method of drainage will be defunct and the parcel would not be able to drain, creating flood conditions. "They are at the bottom of a bowl... They rely on it draining out at low ride, so if you have rising tides and groundwater it is going to be a problem... Even if

the shoreline wasn't breached by a high tide...drainage is really going to become the thing that puts them out" (Laird, personal communication, 2013). This means that in addition to improvements to the levee infrastructure, stakeholders are likely also going to need to improve the stormwater infrastructure in order to protect the tract from flood risks. These improvements likely would add increased costs, permitting requirements, and environmental impacts.

Under the levee upgrade scenario, landowners would still need to consider the cumulative impacts of the surrounding hydrologic unit. There is a degraded levee upstream of Jacobs Avenue located at Faye Slough, which is vulnerable to overtopping during high tides, floods, and tsunamis (see Figure 9). If a levee breach were to occur there, properties within Jacobs Avenue could experience flood impacts through the eastern unarmored portion of the Jacobs Avenue levee (Laird, personal communication, 2013) (see Figure 11). Extending cooperative management to include the Faye Slough levee would substantially increase the costs and permitting requirements associated with the project.



**Figure 11.** Eureka Slough hydrologic unit, an area of interconnected waterways experiencing shared impacts of tidal fluctuations. A levee failure in Faye Slough could bring about flooding on Jacobs Avenue regardless of levee improvement efforts due to the unarmored eastern edge and the tract's basin-like topography (data derived from NAIP imagery; NOAA LiDar; Laird, 2013; and Laird, personal communication, 2013).

**Overall**

The levee upgrade alternative would provide important benefits to the community. It would increase their security and protection in the event of an almost guaranteed future flood event. Given how close the water has already come to overtopping the levee infrastructure, this is an important consideration. However, the levee upgrade would require considerable permitting hurdles and economic investment, some of which might not be feasible for the current landowners. The levee upgrade scenario would provide important safety and property protection benefits to the tract in the near future; however, it is unclear how this scenario might fare in the long term. As sea levels continue to rise, the upgraded levees may no longer be sufficient to withstand the higher water conditions. When considering this scenario, stakeholders would need to ponder seriously whether it is worthwhile to spend the political, social, and economic capital to improve the levees when at some point in the future these levees would need to be upgraded again, or quite possibly the water level would rise to such an extent that fortifying and inhabiting the tract no longer remains a viable possibility.

**Scenario 3: Strategic Retreat**

*“If you have no skin in the game, it’s easy to say ‘let’s just abandon it’.”* (Jacobs Avenue business owner, personal communication, 2013)

In the face of imminent sea level rise, tsunamis, and the troubling prospects of taking no action or spending millions of dollars to upgrade levees, planners have begun to consider an additional alternative for coastal management: a planned strategic retreat where at-risk residents, businesses, and infrastructure are relocated to less vulnerable locations (McGuire, 2013). Strategic retreat is the least codified of these possible alternatives for Jacobs Avenue. Few other localities have conducted strategic retreat, so there are not many existing models or pathways for how this goal could be accomplished. As a result this process would require a certain creativity and ingenuity among planners. In addition, relocating so many landowners, businesses, and residences is likely to encounter significant political, economic, and logistical challenges. However, given the persistent nature of sea level rise and the changes rising seas are likely to bring to coastal landscapes, this is an essential scenario for planners to consider.

This scenario-planning alternative assumes movement away from the tract would take place over a 20-year time span, in order to create the necessary framework to incentivize this type of movement and also to allow optimal parcels to become available within the City of Eureka. Contiguous properties would be preferable because they would preserve the community’s character, however the acquisition of sufficient tracks of property may be difficult and not entirely necessary.

**Environmental and Social Benefits**

The strategic retreat scenario has the potential to deliver important environmental benefits. Historically, the Jacobs Avenue property was salt marsh wetlands. Research indicates that wetlands such as those at Jacobs Avenue provide important ecological services to the coastline including the provision of estuarine habitat for marine resources, the filtration of water and pollutants entering the marine environment, and the alleviation flood impacts by storing and filtering varying amounts of water (Randolph, 2012). In the event of strategic





**Figure 12.** Photograph of the tract’s coastal wetlands while facing Eureka Slough Bridge at low tide (photograph by Evan Wisheropp).

retreat, the Jacobs Avenue tract could be converted back to wetland habitat, which could provide numerous ecological and social benefits (see Figure 12).

A major benefit of the strategic retreat scenario is the reduction in coastal hazards. Numerous concerns such as personal safety, flood insurance, levee maintenance, and threats of sea level rise would no longer have to be managed by landowners. While implementing a strategic retreat framework for businesses would require lengthy planning, the outcome would ensure that lives and property would no longer be at risk.

#### **Challenges of Facilitating Retreat**

A key challenge to the strategic retreat scenario will be the development of a fair and legal mechanism to relocate residents and businesses off the vulnerable property. Measures to incentivize movement could include enacting building restrictions or tax penalties on properties opposing movement, as well as making financial benefits available to landowners willing to move. Governor Cuomo’s post-Sandy buyout plan offers a possible model for this type of program. His plan facilitated retreat through a voluntary mechanism where eligible property owners were offered the option either to take the pre-storm fair market value of their property and move, or to remain in their post-flood desecrated location. The program incentivized mass movements away from vulnerable areas by offering each property owner within an entire block of houses an additional 10% to their pre-storm fair market value offer if everyone in the block decided to take the buyout and move (NYS Homes and Community Renewal, 2013). Any efforts to relocate businesses or landowners would need to consider the legal implications for private property owners on the tract. Under property law, the development of policies that render particular properties unusable or unbuildable by their private owner could be considered a “takings” and the government would be required to compensate landowners (Ruhl et al.,

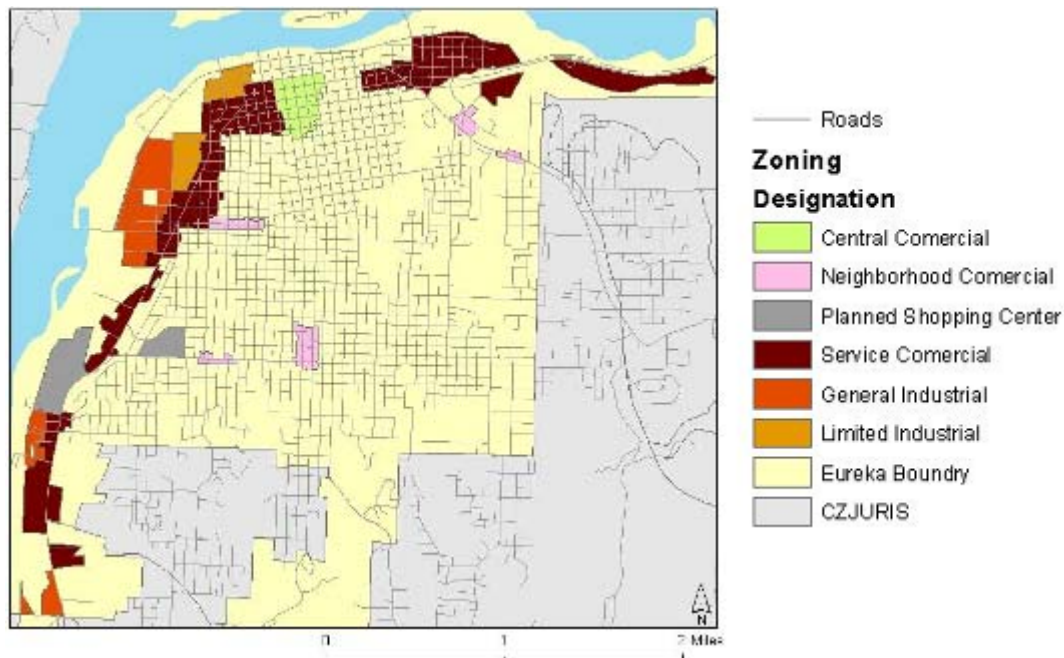
2007). For this reason voluntary incentive-based relocation programs may be more legally feasible and socially acceptable.

Interviews with individuals connected to Jacobs Avenue indicate that they have significant attachments to the place, such that relocating them would likely be met with resistance. For the single group of residents in the Lazy J mobile home complex, much of their sense of place comes from the fact that the park is very clean and safe, conveniently located with beautiful views of the water on both sides. As one resident said,

The Lazy J is pretty nice, it's a unique, small park. It's a sweet location...10 minutes to south Eureka and 10 minutes to Arcata, it's perfect. It's right in the middle of everywhere you want to go in that area. This place is pretty slim pickings as far as RV parks [go]... There really is no place else to go for the tenants. (Lazy J resident, personal communication, 2013)

Business owners describe how important the convenient location—right off the highway—of Jacobs Avenue is for the vitality of their businesses. As one business owner said, “You have clear visibility coming from both directions on the highway” (Personal communication, business owner, 2013).

An initial exploration of vacant properties in Eureka indicates that it is unlikely the planners could locate another parcel for relocation that would have similar amenities and convenience of Jacobs Avenue. Our preliminary analysis indicates that available land is limited to the areas depicted in Figure 13. Currently, the available contiguous parcels within Eureka large enough for the businesses of Jacobs Avenue are located within the tsunami zone.



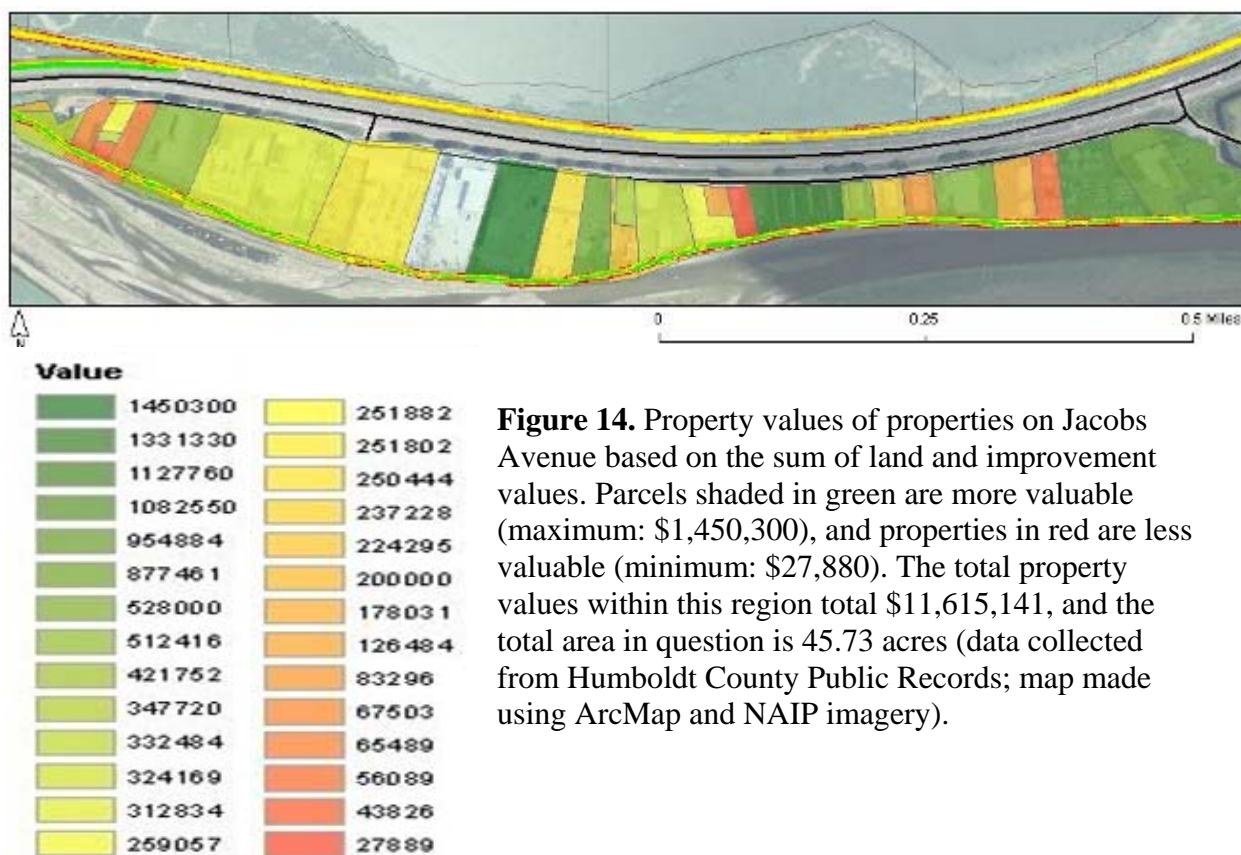
**Figure 13.** Industrial and commercial zoning classifications within the City of Eureka (Department of Commerce, 2012; Chinmaya, 1995; USDA, 2012; Withers, 2009). Most industrial and commercial parcels are within the tsunami hazard zone, thus strategically retreating the Jacobs Avenue businesses to these parcels would not achieve a complete hazard-free transition (data derived using ArcMap software).

Relocation to these parcels might not be wise because it would simply mean moving valuable infrastructure and human communities from one area of hazard to another. Currently the only suitable vacant parcels within Eureka are scattered. However, within the 20-year timeframe of strategic retreat it is possible that more parcels within Eureka could become available. Under this scenario, the city would need to work to set aside and appropriately zoned parcels of land for relocation.

This scenario would require a proactive strategic retreat—attempts would be made to relocate residents and businesses prior to a major flood event. This adds an additional layer of social complexity. A disaster or flood can be an important motivating event to stimulate significant action such as relocation. Governor Cuomo's buyout program was successful and feasible in large part because residents of the areas had recently experienced the effects of a significant disaster and as a result may have been more motivated to take action. Jacobs Avenue has not had the same experience.

### Economic Considerations

The strategic retreat strategy could also be very expensive. The City of Eureka or Humboldt County would likely need to compensate landowners for their property, at least to some extent. A representation of property values in Jacobs Avenue is displayed in Figure 14—the total value for all parcels is estimated at just over \$11.5 million dollars. It is unlikely the city or county would be able to bear this price tag. It is likely that city and county planners would not have access to the billions of dollars of hurricane relief that were available to the State of New York to support Cuomo's buyout plan. A local planner indicated the need for financial support of relocation:



**Figure 14.** Property values of properties on Jacobs Avenue based on the sum of land and improvement values. Parcels shaded in green are more valuable (maximum: \$1,450,300), and properties in red are less valuable (minimum: \$27,880). The total property values within this region total \$11,615,141, and the total area in question is 45.73 acres (data collected from Humboldt County Public Records; map made using ArcMap and NAIP imagery).



I think that they are going to have to get money to help these people relocate because I think at some point FEMA is going to stop insuring them...and if they can't get insurance they won't be able to get bank loans and they won't be able to improve their businesses. (Laird, personal communication, 2013)

Until recently few funding sources were available to support relocation efforts as part of a hazard mitigation strategy. As of 2013, FEMA's Hazard Mitigation Assistance grant programs have made available funding streams to support pre-disaster mitigation and flood mitigation assistance through individual states—relocation is a possible activity supported by these programs (FEMA, 2013). Planners may want to contact FEMA as well as the California governor's Office of Emergency Services to see if money might be available for relocation or levee upgrade. These grant programs are new, so it is unclear if and how they could be utilized to support an effort like strategic retreat from Jacobs Avenue.

It is possible that businesses choosing to relocate would suffer initial economic hardships because of the change in venue. Many Jacobs Avenue businesses consider the convenient location of the tract as an important factor in their success. Relocation could result in lower revenues for businesses and the city of Eureka. The success of relocated businesses would depend on the viability of the new locations. Planners should consider this factor if and when developing sites for relocation.

#### **Overall**

It may not be feasible to implement strategic retreat immediately, but phased out over time this approach could be achievable. Once funding is secured, the parcels could be prioritized by landowner's willingness to move and levee heights. A stakeholder meeting could take place between landowners, Humboldt County, and the City of Eureka to inform landowners of the opportunity to relocate with financial compensation. Landowners would then be able to express interest or decline and remain where they are and take their chances with flood insurance. Through a phased retreat these buyout opportunities could be made available every five years or so to allow landowners to gauge their risk comfort level as storms visit the area and sea level gradually rises. Strategic retreat may prove easier to implement as properties pass hands into the next generation of ownership, allowing heirs to gauge if they would rather receive a payout or continue the business where it currently resides. As the rate of sea level rise increases and understanding of the matter grows, so does the government's responsibility to enact funding to allow for this type of dialogue to take place. Strategic retreat would set a precedent for future generations, emphasizing the importance of questioning current conditions of coastal development and the long-term resilience people's livelihoods, property, and safety.

#### **Conclusion**

This scenario-based analysis reveals that sea level rise adaptation presents a nearly intractable problem with few easy solutions. Each of the three scenarios comes with significant challenges and drawbacks. The no action alternative would continue to leave people and infrastructure vulnerable to flood impacts, the levee upgrade alternative would come with high costs and permitting challenges and may only be a temporary solution as sea level rises, and the strategic retreat alternative lacks a clear political path, would require a large scale mobilization of resources and people, and would likely be met with social resistance.

Having completed this analysis we would recommend that Jacobs Avenue move forward with some hybrid of both the no action and strategic retreat scenarios. For the near future we recommend that landowners purchase flood insurance and make only small-scale individual investment in levee reinforcement. In the meantime, we recommend that landowners along with city and county officials begin conversations to develop a fair process for planned retreat from the area. This would need to be a participatory process that includes stakeholders in Jacobs Avenue as significant drivers in the conversation about their properties' fate. Strategic retreat would likely take many years, but given the timeframe of sea level rise projections now is a great time to begin the process.

An important finding of this analysis was just how appealing the no action strategy could be, despite the fact that it would put people, infrastructure, and the environment at risk. If landowners bought flood insurance they could be assured of some government assistance following a flood event, whereas assistance for flood management activities such as a levee upgrade or strategic relocation would be difficult to attain. While the strategic retreat alternative offers the best long-term safety, economic, and environmental benefits, the political path and financing for this option remain murky at best. This analysis reveals that government policies surrounding flood management can provide a huge disincentive, in some cases even a barrier, to proactive flood and sea level rise planning. If landowners can only get compensation for mitigation or relocation after a flood event occurs, they are left with little choice but to sit and wait for that flood to arrive. This conundrum points to the need for a significant alteration of the government's funding and incentives structures surrounding hazard management.

Recent changes in FEMA's grant program as well as to the National Flood Insurance Program indicate that the government is considering this transition. The 2013 FEMA Hazard Mitigation Assistance grant program establishes potential funding mechanisms for proactive flood management, which possibly could include strategic retreat. The 2012 Biggert-Waters NFIP Reform act made significant changes in flood insurance policies in the US, including a phasing in of increased flood insurance rates for properties in high-risk zones and a call for strategic remapping of the nation's flood zones. This reform has since been amended by the 2014 Homeowner Flood Insurance Affordability Act, which requires gradual increases to flood insurance rates rather than immediate increases. The HFIA Act arguably slows the momentum of flood insurance reform and foils the acceptance of unorthodox approaches like strategic retreat via preserving subsidized insurance rates (FEMA [9], 2014). As the policies of this 2012 and 2014 reform are phased in, many landowners across the nation are going to face the same situation as the Jacobs Avenue community—they will discover that they are now located in flood zone areas and that their insurance rates are eventually going to be considerably higher. These changes could provide an important flashpoint for community members to take stock and engage in some long-range planning regarding flood hazard management. The scenario-planning framework outlined in this paper could be a valuable tool to allow stakeholders to consider possible actions and to plan for a better future.

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# Learning the Klamath Knot... and Creating a Bureau of Reclamation

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**Figure 1.** In creating her Bureau of Reclamation, visual artist Becky Evans collects materials from the dried bed of Summer Lake in Lake County, Oregon (2013).

In the early summer of 2010 I discovered a glimpse of Eden. I was on a journey following the great Klamath River from one of its sources to the Pacific Ocean. I began at an upper tributary called Spring Creek. Walking toward the creek's edge I found myself surrounded by gold summer light, turquoise pools of water, and a garden of wildflowers and butterflies. The water in Spring Creek is cold and pure. The constant temperature of 38-40 degrees Fahrenheit, the striking clarity, and the steady water level lead to speculation that the water flows underground from Crater Lake. Looking into the sandy bottom, I saw a collection of unfamiliar, smooth dark rocks. They ranged in size from pebbles to baseballs. Picking one up, I found the rock was slippery, soft, and pliable. Something alive! I later learned that this cold pure water is home to a wonderful, rare species of algae called Mare's Eggs (*Nostoc pruniforme*).

This was one of many remarkable places I discovered while I was "learning the Klamath Knot." The Klamath Knot lies within the mythical State of Jefferson, a unique part of northwestern California and southern Oregon. It is called a knot for good reason. It is a



confounding tangle of geology that makes a home for rare plants and the greatest diversity of conifer species in the world, an interlacement of complex land forms, extremes in weather and politics, and an impenetrable puzzle of competing interests: recreation, agriculture, mining, fishing, logging, dams, and water diversion.

I am an artist and I call the Klamath Knot my home. Living at its western edge, in the shadows of ancient redwoods and near Humboldt Bay, I think of my homeland as a place not defined by county lines and state boundaries, but by its watersheds.

My work could be described as landscape based, working in the plein air tradition. All of my work begins on location. But my idea of working “en plein air” goes beyond the familiar painter’s easel facing a lovely view. My creative process involves walking, waiting, looking, painting, mapping, collecting, and gathering (see Figure 1, previous page). I draw inspiration and insight from the natural environments I explore. This leads me to questions, the questions lead to research, and the answers (or further questions) inform my art.

Each site presents itself in a different way, so the finished work is always created and discovered from this long engagement with time and place, and then with paint or paper or sticks or mud.

Recently, my work has dealt with reclamation and renewal. I have altered over 25 US Geological Survey topographical maps. Taking out the roads, towns, and signs of development on the maps, I reclaim the land, the rivers, and the lakes. One of these maps resulted from seeing firsthand the bloom of toxic algae in the Klamath River behind Copco Dam in the high heat of summer (see Figure 2). The toxic algae led to the devastating fish kill of 2002 and continues to seriously harm the river. I decided I would not wait any longer for the Klamath Restoration Agreements to be implemented. I painted out the dam, reestablished the river’s natural course, and brought the salmon back to the spawning creeks.



**Figure 2.** “Taking Down Copco Dam,” USGS map, acrylic, graphite, wasp nest; 28 x 20 inches (2013).

Another reclamation project involved collecting sands from over 30 watersheds in the Klamath Knot. I created Klamath Watershed Preserves by placing the sands in Mason jars and using a traditional canning kettle to seal the jars. Those same black, white, green, and ochre sands were used to create an 8-by-8-foot compass to help guide us to be better citizens of our homeland (see Figure 3).

I also made drawings out of the charcoal left from forest fires in the Kalmiopsis Wilderness after I witnessed the astonishing renewal and abundance of growth below the ghost trees... young pines, azaleas, kalmiopsis, bear grass, ripe berries (see Figures 4 and 5, next page).

My Bureau of Reclamation has now widened beyond northern California and eastern Oregon to areas of Nevada and the eastern Sierra. I have continued to work on USGS maps to return diverted water and recreate historic water levels to Summer Lake in Oregon, Pyramid Lake in Nevada, Mono Lake and Owens Lake in eastern California (see Figures 6 and 7, page 178). My work has also included offerings to these damaged bodies of water in the form of vases and bowls made up of the lake's mud, sands, and stones. And I created a Prayer Rug for Climate Change from the puzzle pieces of a dried lakebed. These and other projects are not just about the land, but *of* the land.

I see narratives in the lines of waterways over the Earth's topography. There is language in the pattern of residue and shaped chaos at the high water mark. There are signs and portents in places of extraordinary natural beauty and extraordinary natural disaster. The marks and debris left at the river's edge, the charred wood after forest fires, the lines made by receding lakes all create a form of writing. As I explore my homeland, I find that each day tells a new or familiar, yet eternal story. My work is my translation of what I read there.

*Recommended reading:* The Klamath Knot by David Rains Wallace (University of California Press, 2003).



**Figure 3.** Artist Becky Evans creates a compass from sands preserved from the Klamath Knot watershed (2010).





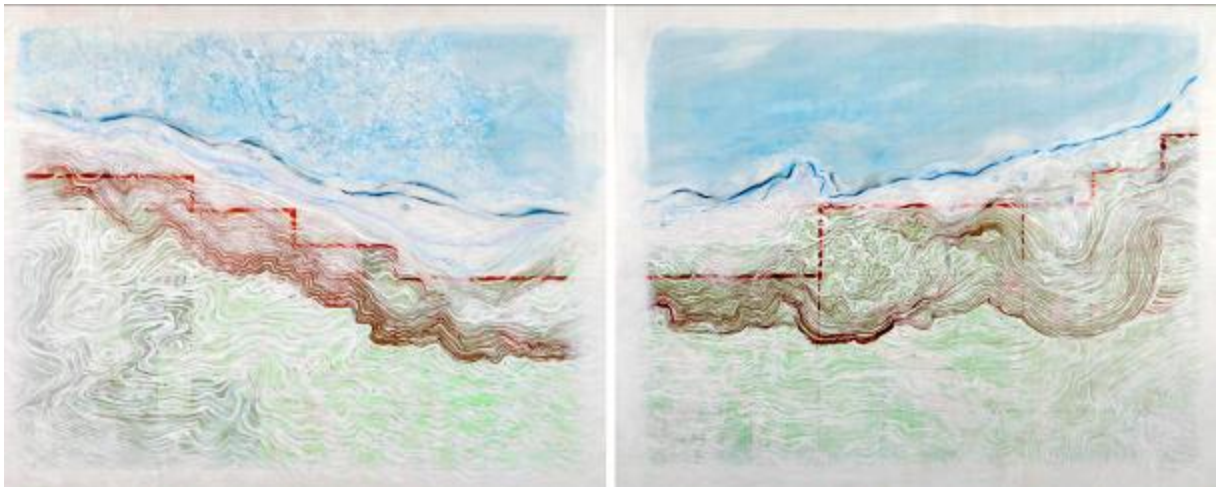
**Figure 4.** “After the Fires, K'Ldik-kyoh, Kalmiopsis Wilderness,” acrylic, charcoal, chalk, ashes, mica on vellum; 48 x 36 inches (2010).



**Figure 5.** “After the Fires, tL'oh-tel, Kalmiopsis Wilderness,” charcoal, graphite, mica on vellum; 47 x 36 inches (2010).



**Figure 6.** “Reclamation—Owens Lake from Lone Pine,” USGS map, colored pencil, watercolor, under beeswax; 20 x 50 inches (2013).



**Figure 7.** “Reclamation—Summer Lake, West,” USGS maps, colored pencil, watercolor, under beeswax; 20 x 50 inches (2013).



## Interview: Novelist Keith Scribner Personalizes the Politics of Secessionism in *The Oregon Experiment*

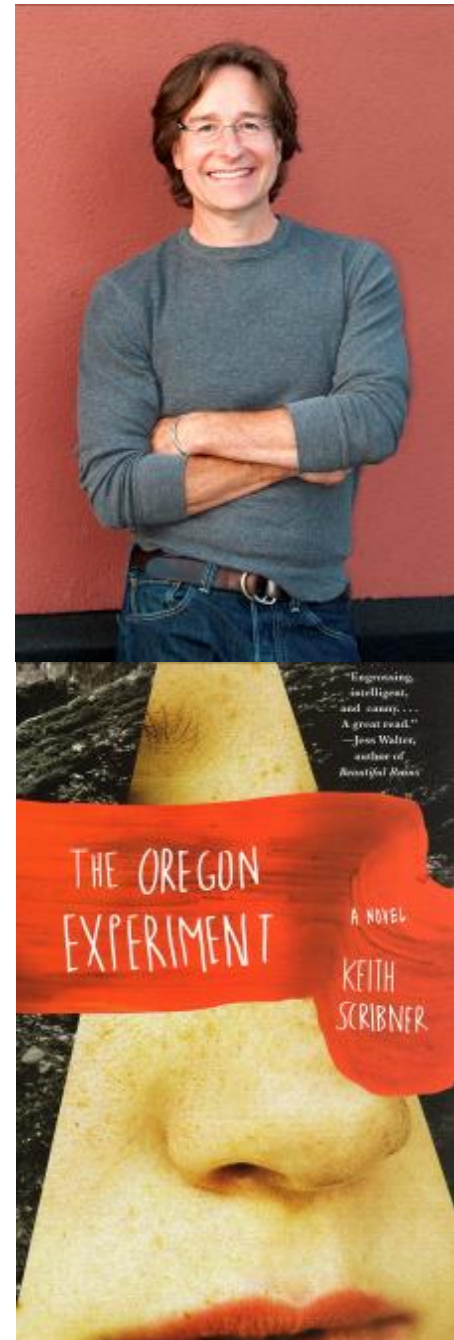
Keith Scribner's most recent novel, *The Oregon Experiment*,<sup>1</sup> personalizes the politics of secessionism. Scanlon and Naomi Pratt are Easterners who have recently moved to small-town Oregon, where he has taken a job as a professor specializing in domestic radical and mass movements; she is a professional "nose" (perfume designer) who has lost her sense of smell. Their relocation is an act of reinvention, he finding abundant local research material and her nose reawakened by new western scents. However, reinvention soon threatens their marriage when the lives of Scanlon's research subjects—Clay, an anarchist who loathes him but is drawn to his wife, and Sequoia, a sensuous secessionist who attracts the professor—become intertwined with theirs. Set against the background of local protests against state and federal authorities that are redolent of dynamics in the contemporary State of Jefferson secessionist movement, *The Oregon Experiment*, as enthusiastically reviewed in the *San Francisco Chronicle*, "makes the potential cultural and economic independence of Cascadia worth pondering rather than snickering at..." In an interview with the editor of this issue of *HJSR*, Scribner, who is a professor of English and Creative Writing at Oregon State University, elaborates on how the State of Jefferson influenced *The Oregon Experiment*.<sup>1</sup>

**The title of your novel refers to a fictionalized secessionist movement. To what degree is *The Oregon Experiment* informed by the State of Jefferson secessionist movement?**

The State of Jefferson was the primary movement I researched for the novel, although I studied several others

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<sup>1</sup>*The Oregon Experiment* was published in hardback in 2011 by Knopf and reissued in paperback in 2012 by Vintage.



too. My Oregon Experiment secessionists take inspiration from State of Jefferson (which I rename State of Liberty in the novel); one of the characters was formerly involved with State of Liberty but became disillusioned during the so-called Klamath Water Wars. The Oregon Experiment secessionists share with the State of Jefferson a strong regional identity, a distrust of power centers in state capitols and Washington, DC, a sense of being ignored and peripheral, an independent spirit that they can go it alone and do a much better job of managing their lives, economy, and resources, an idealized vision of what their new state would look like, the desire for reinvention, and so on. In short, most of what motivates the State of Jefferson. A difference is that my fictional secessionists are characterized more as lefties compared with at least the historical ideology driving the State of Jefferson.

**How did you become interested in the State of Jefferson secessionist movement? What aspects do you find compelling?**

Much of the identity and meaning for the State of Jefferson seems to arise out of the images and memory/mythology of the 1941 secession. I'm interested in how that mythology informs who they are now, both as individuals and as a movement. We all search for narratives that explain to us who we are, that define us, and we find them in family history, religion, culture, society, nation, region, profession, and so on. I'm fascinated by how an individual's consciousness could be informed by, say, the 1941 secession—how that narrative is woven into his very identity. More broadly, I'm fascinated by how all Americans—shaped to some degree by the myths of the American dream—identify with a secessionist movement like the State of Jefferson. The go-it-alone frontier spirit, the promise of westward expansion, and the promise of reinvention of the self are all part of the narrative we tell ourselves about who we are. The State of Jefferson confirms a spirit we value in ourselves. (Oddly enough, the State of Jefferson and *The Great Gatsby* have a lot in common.) There's much more I could say here, but I'll just mention finally that we as a nation we were born of a secessionist movement and our greatest national crisis, the Civil War, was of course precipitated by a secessionist movement. The impulse and the notion run deep.

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***The Oregon Experiment* has been translated into French and has sold well in France. What aspects of the novel do you help explain the popularity of the novel among the French?**

I think the French, too, find that the State of Jefferson appeals to their understanding of the American narrative. There's also an interest generally in France about the American West. And the French are no strangers to major political demonstrations. In the novel Scanlon rejoices that

“[e]very few years, over crop subsidies or tariffs, all the farmers in France drove tractors to Paris and parked the length of the Champs-Élysées, holding the street hostage until they got what they wanted.” I believe the sensuality of the novel is also appealing to them. Naomi is a professional “nose,” a genius nose, who has completely lost her sense of smell years before the novel begins. In the opening pages, as she and Scanlon arrive in Oregon for the first time, the rich and wonderful smells of the place reawaken her olfactory powers.

**The political secessionist movement of your novel takes place in parallel with a personal-level secession of sorts, namely that of the unraveling of the relationship between protagonist, Scanlon, and his wife, Naomi. Could you expand on this parallelism? What is the relationship between the political and the personal?**

The personal and political serve as metaphors for each other in the novel. All of the characters are seceding from someplace, someone, or something. Sequoia has cut ties with her family, especially her father, which surely informs her views of the government as patriarchy. Scanlon and Naomi have left the East and each in their own way try to “go native” in the Pacific Northwest. The strain of being in a new place, with a new job and a new baby creates a rift between them; they each idealize a better life separate from the other. And in terms of this connection I keep coming back to identity and reinvention of the self. Most people around the world don’t consider for themselves this promise implicit in being American that you can uproot and recreate yourself with ease.

**Scanlon is a New Yorker who arrives in Douglas, a fictionalized small university town in Oregon, to feed his academic interests in anarchy and secession, all the while with the intent to return East. Do I detect a theme of colonialism here?**

Absolutely. Scanlon and Naomi come to the provinces with the plan of taking what they need, of bettering themselves, even exploiting the place and its people, and returning East: Scanlon

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with intellectual capital, Naomi with a perfume of her own creation made from a hormone secreted by the (fictional) Pacific Northwest leaping frog. Without giving away the end of the novel, I’ll say that I believe that Manifest Destiny is freighted with the same myths as other parts of the American Dream. One problem with reinvention, of course, is that as far as we travel, we can’t escape our pasts.

**In addition to Scanlon and Naomi, the novel’s main characters are Clay, an anarchist who could be associated with the “black-mask” types based in Eugene, and Sequoia, a secessionist on the State of Jefferson mold. While many place the anarchist and the secessionist movements, as they have played out in Jefferson, at poles along the political spectrum, your novel hints at commonality among them. Can you expand on this?**



The anarchists I researched and interviewed were pretty communal. They distrusted government in all forms, but also felt the need to work together on a very small scale to keep society and basic necessities in working order when the government collapses. Some of them even saw themselves as community organizers, taking and offering classes on how to make your own beer and shoes. Like the secessionists they value the local.<sup>2</sup>

**Scanlon, you, and I represent what many in the State of Jefferson secessionist movement would describe as the “liberal elite,” a group they claim is unable—or unwilling—to understand them. How well-founded is this charge?**

I think we must do the best we can. One huge obstacle is that we are not a part of their narrative. Or if we are, we’re what they define themselves in opposition to. Scanlon, as an academic, is flawed because on the one hand he feels powerful sympathies for the groups he studies (his academic niche is radical action and mass movements), so he becomes personally involved with them, and on the other hand he over analyzes to the point where he’s blind to the heart of a moment. I’ve tried to do better than Scanlon: to explore the deeply human hopes and dreams, the folly and futility, and that profound desire to make ourselves anew.

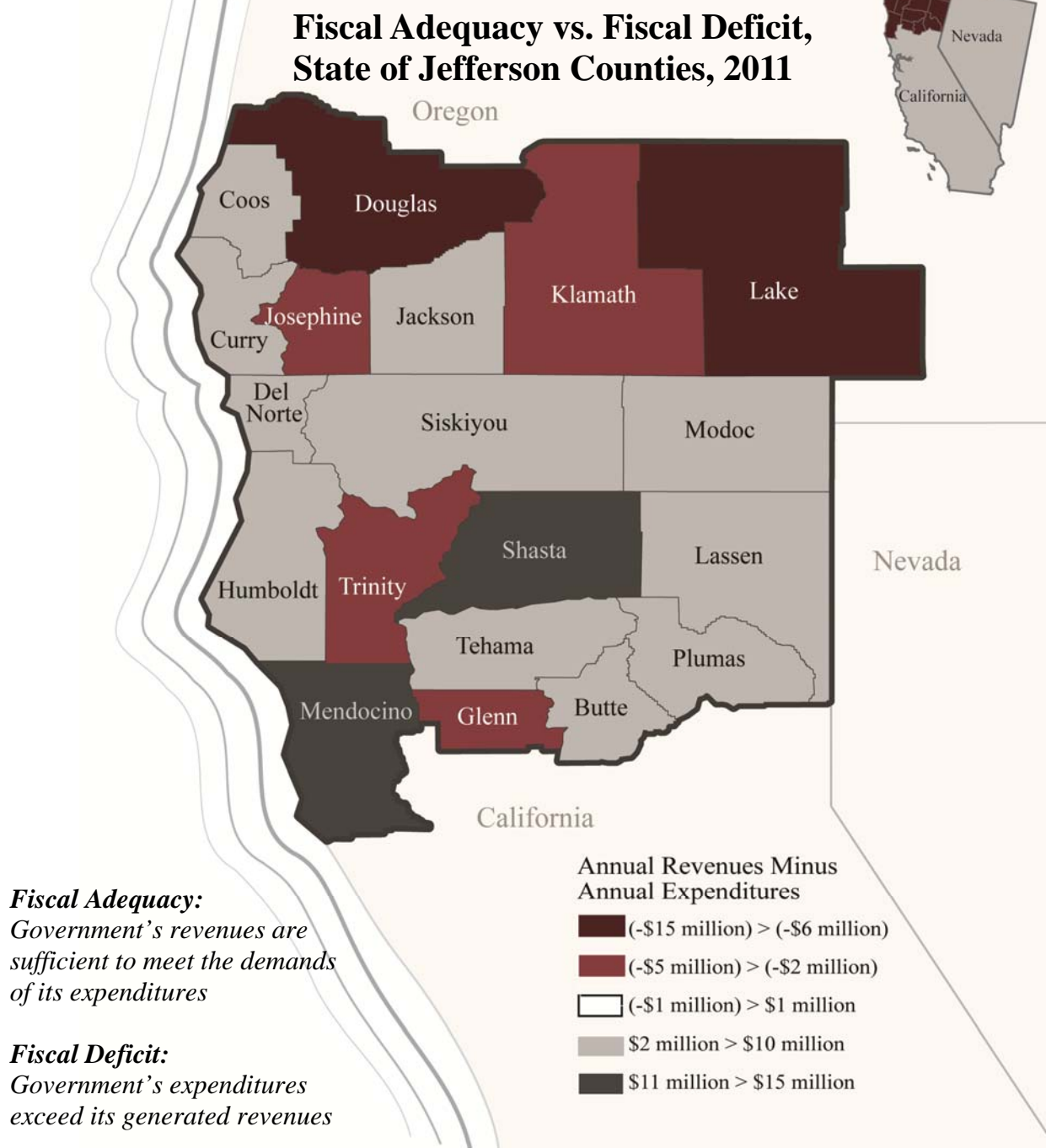
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<sup>2</sup>Scribner’s piece in the *Daily Beast* about the anarchist he met can be accessed at [www.thedailybeast.com/articles/2011/07/21/american-anarchists-are-like-your-next-door-neighbor-keith-scribner.html](http://www.thedailybeast.com/articles/2011/07/21/american-anarchists-are-like-your-next-door-neighbor-keith-scribner.html)

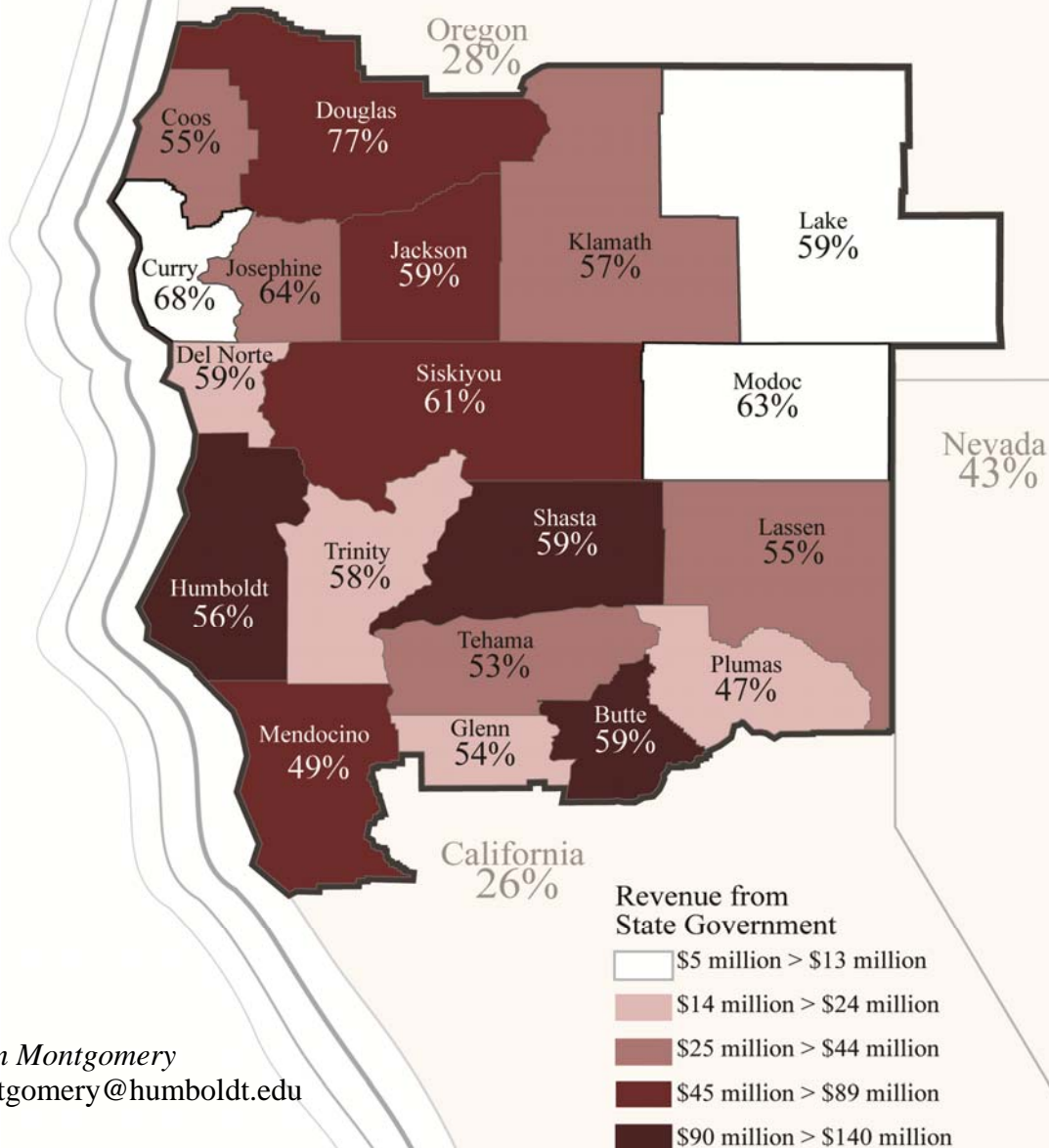
## Fiscal Viability in the State of Jefferson

Providing an understanding of the fiscal reliance the counties have on their higher state governments, this geographic visualization examines the financial situation of the southern Oregon and northern California counties of the proposed State of Jefferson. Fiscal adequacy was determined by deducting total county expenditures from total county revenues, and financial support



from state government was determined by calculating the percentage of state funding out of the total reported revenue. The majority of the counties receives nearly 50% of their revenue from their higher state governments, and without this support, these counties would face financial hardship and difficulty providing public services to their communities.

### Percentage of Revenue Received from State Government

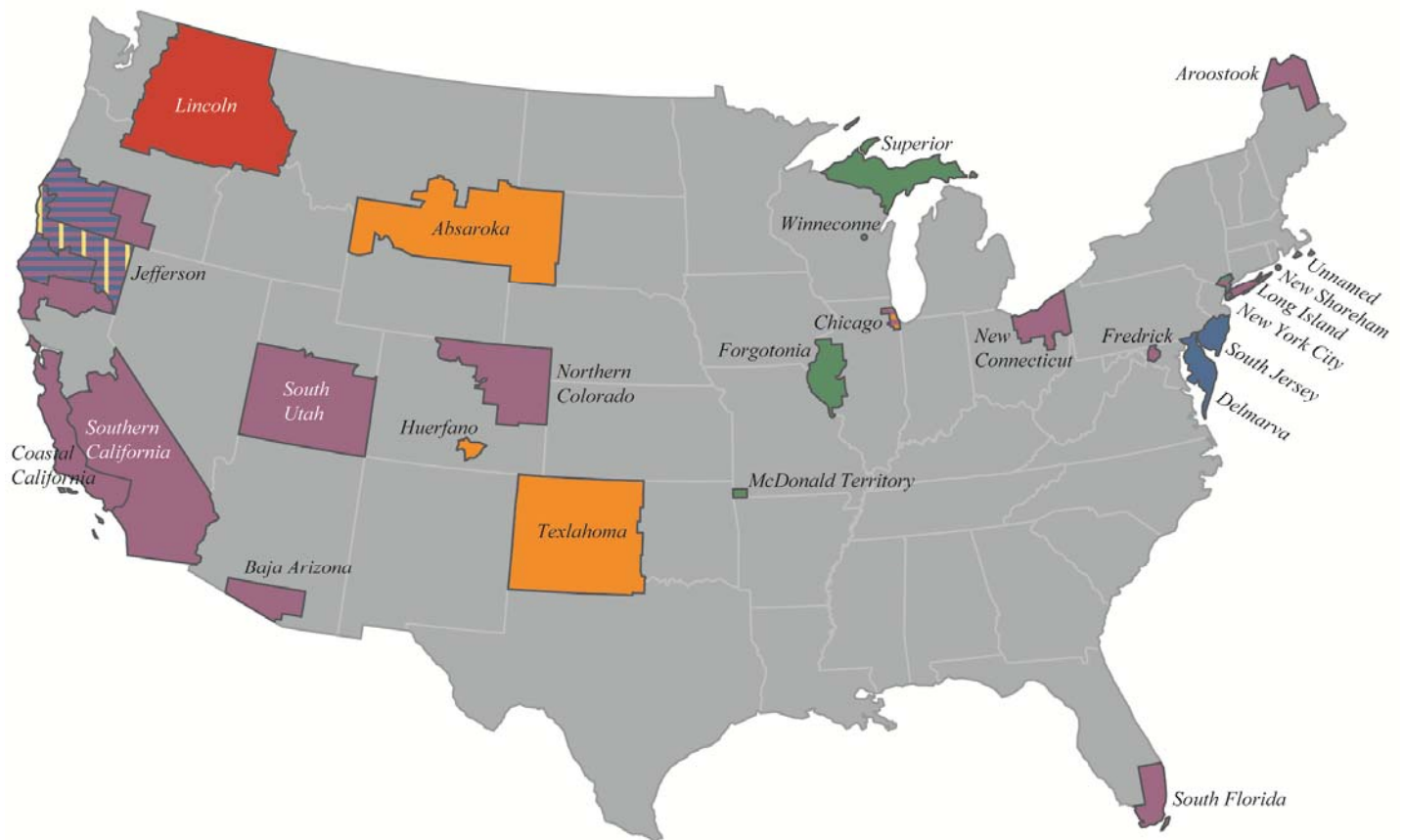


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Sources: State and county comprehensive annual financial reports, fiscal year 2011

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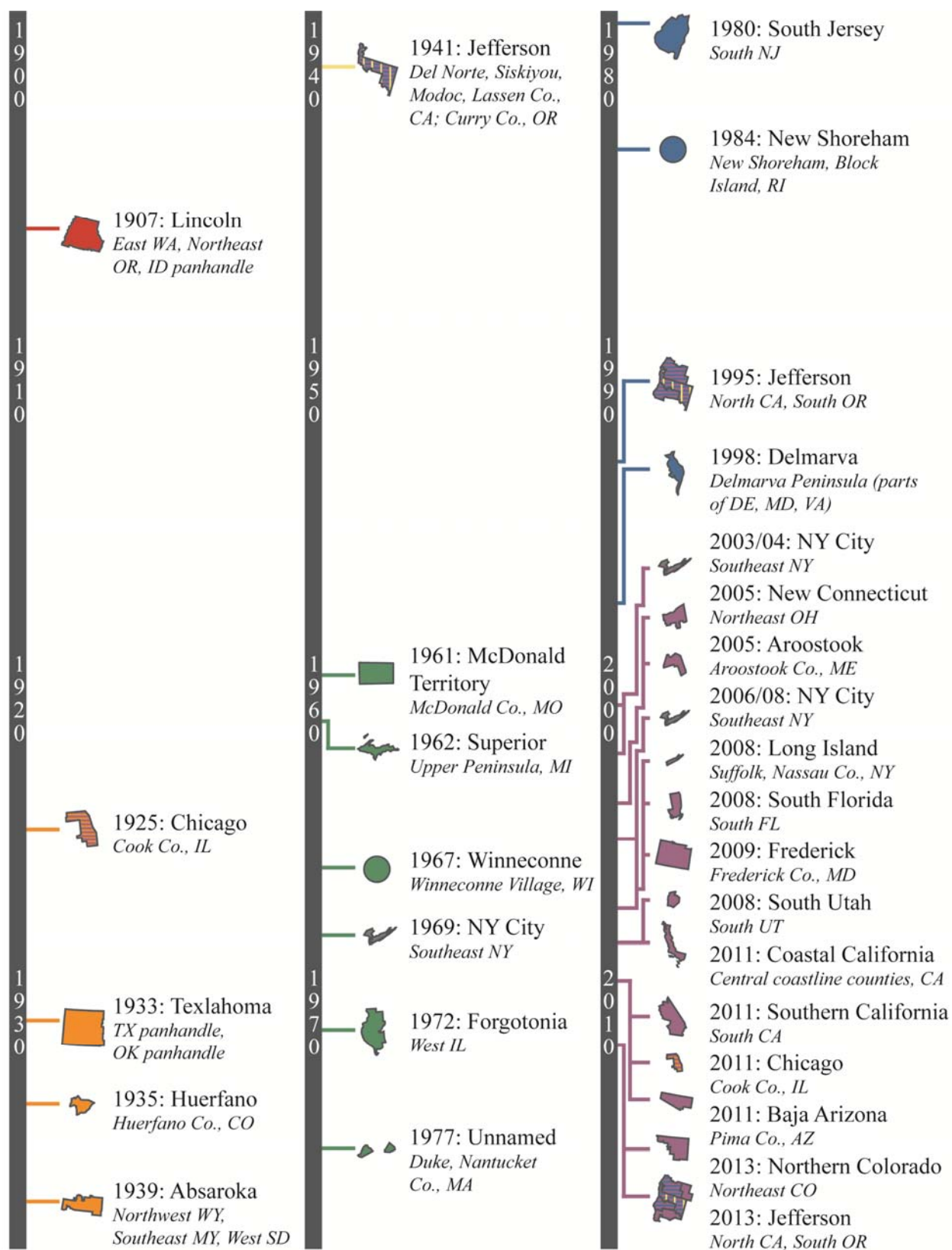
## New State Movements, 1900-2013



The separatist vision espoused by some State of Jefferson supporters is in no way a unique idea. Almost as long as there has been a United States there have been people who, feeling alienated from their host state governments, have sought to break away into smaller, more self-regulating political territories. In fact, the current State of Jefferson movement in northern California and southern Oregon is not even the first proposed “Jefferson” in the nation’s history. A region that would later become Colorado as well as parts of Utah, Wyoming, and Nebraska was proposed as the Jefferson Territory as early as the 1850s. An area of Texas was also proposed as the State of Jefferson as early as the 1870s. These Jeffersons are by no means the only regions

of the US that have sought to separate and form new states. A slew of regions have proposed secession from their state, territory, and national governments, including regions that have sought to secede so they could join other states, territories, or countries. This map displays new state movements, regions of existing states that have sought to become their own states, that have occurred in the US since 1900. Only regions for which adequate temporal and spatial data could be identified were included in this cartographic visualization. Names and data on the depicted movements were obtained from open-source websites.

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## Book Reviews

*Oregon plans: The Making of an Unquiet Land Use Revolutions.* By Sy Adler. 2012. Corvallis, OR: Oregon State University Press. 240 pp. Paperback \$24.95. ISBN: 978-0-87071-651-5

The fundamental struggle in land-use planning is to find an appropriate balance between economic growth, social equity, and environmental protection. Enabling such a balance to exist requires, at times, seemingly dichotomous priorities: a genuine interest in public input and participation, and deft political machination to appease and mediate between influential stakeholders, many of whom are paid lobbyists. The actors in the politics of land-use planning rarely select a single arena within which to achieve their goals. Instead, they operate within the sphere of influence—be it legislative, administrative, or judicial (through litigation)—they believe is most conducive to success. Consequently, the decisions in land-use planning are not made in isolation from any particular political process—community plans and zoning ordinances are not quietly conceived in the confines of government buildings, nor are they immune from public and private scrutiny. Land-use planning is an intensely debated and, at times, grueling process in which multiple interests collide in almost every imaginable political venue. Sy Adler’s *Oregon Plans: The Making of an Unquiet Land Use Revolution* is a story about the push and pull between the entities involved in the creation of land-use policies and goals in Oregon, and how opposing interests reached resolution and compromise.

*Oregon Plans* is an exhaustive chronological inventory of the personalities, legislation, interest groups, and numerous bureaucratic entities that created and implemented Oregon’s land-use plan. The level of detail in this volume is impressive. As a historical account of the legal and political context for land-use planning in Oregon, the book is impeccable. Adler recounts and explains virtually every nuance, every peculiarity that precipitated the formation of Oregon’s program, drawing deeply from both interviews and historical archives, and frequently utilizing quotes from influential politicians, officials, and activists. At times, however, the depth of detail becomes overwhelming. The prose is often cluttered with acronyms and planning jargon, which can make it difficult for non-specialists to interpret certain events and their significance. The technical writing style and heavy reliance on names and acronyms are understandable given they are necessary to tell the story; absurdly long and bureaucratic sounding agency names, committee titles, and legal language are fairly ubiquitous in land-use planning. A more fundamental critique of *Oregon Plans* is that it lacks the contextualization and clear, explicit analysis that is necessary to extrapolate the lessons learned in Oregon to the field of contemporary urban and regional planning.

The backbone of Oregon’s land-use policies, and the focus of Adler’s book, is a piece of state legislation called SB100. This bill, although it morphed significantly from its original form to when it became law in 1973, reflected a growing sentiment that the state was rapidly losing farmland and other valuable natural resources to urban sprawl. Some constituents believed local governments, the entities responsible for regulating growth, had succumbed to “capture”—a phenomenon by which private development interests exert inordinate influence over land-use



decisions, to the detriment of the public good. Environmentalists, planners, and state officials, notably Governor Tom McCall, believed the state needed to intervene to protect natural resources that were important to all Oregonians. These included the traditional common pool resources, such as clean air and water, but the priority was mainly on farmland. A theme throughout the book was the balance of power between the state and local governments; who should exercise more control over land-use planning decisions?

SB100 created two state institutions to interpret and implement Oregon's new land-use law, a commission and a corresponding staffing department. After consultation with environmental non-profits—notably the Oregon Environmental Council—industry representatives, state agencies, local government, and a massive public participation effort, the commission adopted a set of legally binding state land-use goals and corresponding guidelines. County and city governments were required to prepare comprehensive plans that were consistent with state goals, which would be reviewed and potentially approved by the state land-use department. The state had seemingly established ascendancy over local governments. But Adler explains that environmental interests, planners, and other proponents of SB100 had originally lobbied for even greater state dominion. The legislation had given authority to the state department to establish “areas of critical state concern” (it had been under consideration to include such areas directly in the legislation, but the idea was later scratched due to political infeasibility), which were potentially huge swaths of land that would be zoned and managed directly by the state. Resistance from industry and realty groups hobbled the initiative.

Oregon eventually found a functional balance between state and local authority, and more generally, between conservation and development. Adler contends that the success of SB100—84% of the farmland in the Willamette Valley had been zoned exclusive agriculture by 1980—could be attributed to a citizen watchdog group that helped ensure compliance with state goals; a citizenry with an interest in land-use reform; and tenacious, intelligent, and highly influential political leaders. All of these are valid conclusions, but there is an important piece of context that is absent from Adler's book: Oregon's land-use revolution occurred in the 1970s, an era characterized by a national interest in environmentalism. Several landmark pieces of federal legislation were passed, such as the National Environmental Policy Act, Endangered Species Act, Clean Air Act, and others, which reflected the greatest cultural awareness of environmental issues in the United States at any period in history. The interest in land-use planning in Oregon likely was, to a certain degree, a manifestation of the broader national investment in environmental protection. In addition to providing a discussion of the larger political context, *Oregon Plans* would have benefitted from a more involved discussion of the socio-cultural implications of the state's land-use policies.

A topic that barely enters the periphery of the book, but could have been consequential, was the role of women in Oregon's land-use history. As Adler states, “Interestingly, a majority of the House Environment and Land Use Committee were women. In the early 1970s...the environment was seen as a women's issue” (p. 75). As the story continues, however, it appears that a majority of the key political actors in Oregon's land-use revolution were men. Adler had an opportunity here to open a dialogue about the role and influence of gender in the politics of land-use planning in Oregon during the environmental era. Was the presence of women in important legislative committees influential to the outcome of land-use policies? Did a house committee comprised mostly of women affect the political dynamics that shaped legislation? Rather than exploring these issues, Adler glances over what could have been a fascinating analysis of gender in land-use planning.



Another under-scrutinized topic in the book was the social and economic dynamic in Oregon's land-use policies. One consequence of the emphasis on farmland preservation, for example, was the tendency of zoning ordinances to lower the value of agricultural property. Once zoned exclusively agricultural, farmland was essentially taken off the table for development and its value within that context completely dissolved. Farmers who previously had been able to rely on their property to command a high market value, and potentially provide for their retirement, felt as though Oregon's planning practices had limited their capacity for economic advancement. While there was a majority consensus that farmland preservation was in the state's best interest, there is an irony in a policy that constricts the welfare of the stewards of the land it is intended to protect. Conversely, the members who participated in the state's public goal development process were of a completely different socio-economic demographic. Adler explains, "As a group, they tended to be long term residents of their county and likely to own their homes. Most had college degrees and relatively high incomes. Two-thirds were male. They clearly were not a representative sample of Oregonians" (p. 105). Although this seems like a significant inequity, Adler continues without critical examination. If the successes of public participation and outreach efforts are measured in the diversity of constituents they include, then Oregon's goal development process most certainly came up short.

Despite any inadequacies in Oregon's solicitation of public comment—and it should be noted that in many respects the outreach was robust and comprehensive—Oregon had begun a trajectory toward improved livability and, arguably, more resilient communities. Although resilience thinking had not quite entered the planning lexicon when Oregon's land-use revolution began (C. S. Holling published his influential paper on resilience in 1973), the legislators, activists, and planners who created and implemented SB100 had constructed a solid legal framework for creating more resilient communities. By emphasizing the preservation of farmland, for example, Oregon's land-use legislation implicitly acknowledged the importance of food security to livable communities. But it also tacitly prioritized farmland—and its comparatively longer benefit horizon—over untethered development and its associated short-term economic gains. The ability of a representative government to belay immediate economic benefit, and instead promote more sustainable development patterns, such as preserving farmland, is a strong indication of community resilience—and is a characteristic for which Oregonians should be proud.

Adler chronicles an important piece of land-use planning history in Oregon. The organizational structure of the book lends itself well to the extraordinarily complex political and legal proceedings that occurred. Adler captures that complexity and presents the underlying functions and circumstances consistently without noticeable bias. The book will undoubtedly provide valuable information for those seeking insight into Oregon's land-use planning policies. It's an important story to tell, particularly given the theme of resilience that underlies some of its conclusions. But do not expect a revealing analysis of the consequences and implications for modern planning. Adler does not attempt to unpack the difficult issues—like gender roles, environmental justice, and socio-economic disparities—that appear between the lines of *Oregon Plans*. That likely was not within the scope of the book. But those are the planning issues that quietly pull the connection between the social, environmental, and economic realms out of balance; and which most require productive discourse and fearless exploration.

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*West Of Eden: Communes and Utopia in Northern California*. Edited by Iain Boal, Janferie Stone, Michael Watts, and Cal Winslow. 2012. Oakland, CA: PM Press. 320 pp. Paperback \$24.95. ISBN: 978-1-60486-427-4

The writing of history has left the American communal and “back-to-the-land” movements of the 1960s largely brushed aside, characterized as little more than the immature petulance of self-indulgent hippies seeking to escape responsibility. The editors of *West of Eden: Communes and Utopia in Northern California* contend that this portrayal is tinged with political motivations and has thus far succeeded in detracting from any serious inquiry into the subject. With this book, they aim to provide a starting point from which the American communing movements can be contextualized and analyzed in a meaningful way. The editors, historians Iain Boal and Cal Winslow, anthropologist Janferie Stone, and geographer Michael Watts, offer *West of Eden* to highlight the work of their larger “Communes Project,” a collaboration of the Institute of International Studies at the University of California, Berkeley and the Mendocino Institute. In doing so, they weave together an eclectic collection of essays written by 14 contributing authors (including the four editors) ranging from extensively researched histories to colloquial, first-hand narratives of the commune experience. Taken together, this collection succeeds in familiarizing the reader with the history, political motivations, and nature of the communal movement as it played out in northern California, while also initiating an inquiry into its lasting social and political impacts in contemporary America.

The uniting thread among these essays is a focus on the burgeoning ventures in communal living that took place in the 1960s and 1970s, specifically in northern California. However, beyond this unifying theme, the essays vary greatly in content and style. The extensively researched and well organized exposition and argumentation found in many of the essays such as Jeff Lustig’s “The Counterculture as Commons” or Felicity Scott’s “Bulldozers in Utopia: Open Land, Outlaw Territory, and the Code Wars” can be contrasted, for example, with an excerpt from one of the many personal narratives that Cal Winslow aggregated in his contribution, “The Albion Nation”:

At that time, the SLA [Symbionese Liberation Army], that whole thing was going on. Things were really fractionalizing in the movement. I guess it was when Nixon was in power. I think people were a little disillusioned. The antiwar movement was falling apart. So that’s another piece of it. (p. 162)

The hodgepodge of writing styles and differing levels of biases at times leaves the reader scrambling to choose the correct lens through which to analyze the text. This occasionally results in a confusing read; however, it also one of the book’s strengths. Because its base-level purpose is to provide a foundation for potential students of the subject, this volume makes good use of the wide range of sources by providing not only history, context, and suggestions on how one might think about the communal projects, but also by providing a window into the primary research from which these conclusions were reached. This results in not only an engaging read, but also makes the book a convenient starting point for both secondary and primary research.

Another strength of *West of Eden* is the attention given to the role of differing conceptualizations of space. Multiple essays throughout the book engage with ideas of the reclaiming of space and the spatial relationships between the communing movements. In his recounting of the history of communing movements, Timothy Miller portrays the back-to-the-land movements in the early 1900s as being “solitary spaces” (p. 5). As groups of people relocated to the rural hinterlands, the goal of these movements was to fully support themselves on a plot of land, separate from the urban core. These solitary-spatial projects, however, quickly found themselves to be unsustainable. Perhaps taking a note from history, the communing movements of the 1960s are found to be much less about discrete spatialization, with much collaboration between the rural and the urban. In introducing the major themes of the book, Boal describes the interaction between the spaces of city and country to be complex and unfit for any sort of dichotomous comparison (p. xiv). Meanwhile, Lustig’s exploration of the physical and imagined “commons” speaks to the “political scaffolding” left by earlier movements as well as the roles of the open spaces of San Francisco’s Golden Gate Park and UC Berkeley’s campus (p. 35). He argues that the geography of these existing conditions played a critical role in the incubation of collective activity. Scott conceptualizes space in a different way, understanding the creation of communes as “an exodus from official systems of managing land and the built environment—from property rights and trespass laws to building codes as well as health and safety regulation” (p. 58). Through an examination of the legal battles of the “code wars,” Scott illustrates how the reactionary claiming of space was used as an explicit means of challenging the codes of capital’s spatial order. The claiming and reordering of space as means of achieving a political agenda is a reoccurring theme that is handled well throughout the book.

The final essay in *West of Eden* is a discussion by Watts in which he examines the collection of communal movements in relation to the broader upheaval of world events in the 1960s. He sees these communing and back-to-the-land movements as being one of many paths that were taken during this time period in an attempt to construct an alternative world. While these movements were, by name and nature, communal, Watts argues that they were also highly individualistic and, in some senses, libertarian. Out of this, he contends, came of the emergence of not only the New Left normally associated with the American communing movement, but also the development of neoconservatives and the New Right.

While the communing movements did not last beyond the 1970s, their legacies are still felt in contemporary America. Today, we still see this “desire to control one’s own life” manifesting in discourse and political contentions across the nation (p. 238). As we once again approach what some would call the “crisis of legitimacy for the institutions of capitalist modernity,” the scrutiny of these past communing movements becomes all the more relevant (p. xxiv). *West of Eden* accomplishes the task of beginning the excavation of the American communing movements and provides an integral perspective, useful in any attempt to understand the complex political and social culture of northern California, southern Oregon, and, indeed, much of broader contemporary America.

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*A Journey Through the 51<sup>st</sup> State: The Elusive State of Jefferson.* By Peter Laufer. 2013. Guilford, CT: Morris Book Publishing. 215 pp. Paperback \$18.95. ISBN: 978-0-7627-8836-1

The State of Jefferson is not an uncommon response when the rural people of southern Oregon and northern California are asked where it is they consider home. To search for such a state in any atlas would be futile, as the lengthy ontogeny of Jefferson has never resulted in any official entity. Yet the imagined toponym can be found painted on the sides of barns, embroidered into flags and shirts, as well as emblazoned on posters, parade floats, cars, and even official road signs. In his 2013 book, *A Journey Through the 51<sup>st</sup> State: The Elusive State of Jefferson*, Peter Laufer, professor of journalism at the University of Oregon, explores the bucolic landscape astride California and Oregon in search of those calling themselves Jeffersonians.

In a bid to demystify the nature and character of what has often been dismissed as “myth,” a “legend,” or a “state of mind,” Laufer takes his reader on a journey to discover the modern and historical hearths of the State of Jefferson. His penetrating interviews, personable commentary, and insightful historical research presciently illuminate the marrow of what has since matured into a rapidly expanding grassroots movement aimed at fulfilling the highly normative pursuits of justice, liberty, and happiness. Wishing to be left alone, at least from the grips of current governance arrangements, the provincial patriots in northern California and southern Oregon seek salvation from what they view as an insidious state by placing their hopes, their dreams, and their livelihoods into the long-held myth of a State of Jefferson.

Although the region has seen multiple calls for separation, most salient in the collective consciousness was a movement in 1941 that also sought to realize Jefferson as a new state, then what would have been the 49<sup>th</sup> state of the United States. Having been jettisoned while on the brink of fruition after a dramatized campaign, the movement, its capital, and its symbols remain relevant and paradigmatic fables in the minds of many Jeffersonians, in spite of stark contradictions. Aiming to characterize the “elusive state,” Laufer begins his journey in “the obvious place...Yreka, the once and perhaps present capital city of the presumptive state” (p. 1). Scouring multiple archives in the region, Laufer’s inquiry into the 1941 movement reveals events that divulge not only the separatists’ grievances and demands, differing greatly in nature from those of the contemporary movement (the 1941 movement was driven by the desire for an improvement, expanded road network, i.e. greater government involvement, while today’s would-be separatists oftentimes echo the “government is bad” trope espoused by Tea Partiers throughout the US), but also the caricaturized nature of their campaign, evoking questions of the processes capable of so heavily altering a people’s desires. The emphasis Laufer invests in the historical composite of the region is manna in understanding the worldview of the rugged individualists, painting a picture of the exposed reality of those who husband the dream of a State of Jefferson. In this facet, Laufer’s lengthy, impressive background as a working journalist whose body of work transverses the globe, proffers a firm and panoptic insight that rewards the reader with a foundation that makes this book highly accessible.

As a veteran journalist turned academic, Laufer is able to articulate broader understandings and perspectives. His previous work in such places as the US-Mexico border and the former Yugoslavia, as well as a lifetime of personal experience stateside, makes Laufer an ideal guide as he is able to characterize the Jefferson drama as a tale taking place in the rural frontier between two urbanized regions. While touching on more theoretical approaches to understanding Jefferson, Laufer makes evident his professionalism and tact as he grounds his

approach by urging his subjects to expound clearly their perceptions and reflections surrounding their politically charged reality.

Academically, Laufer's fascination with borders, both real and imagined, is explicit throughout the book. With alacrity, he brings to the fore their ability to play ambiguous roles as both centrifugal and centripetal forces within a society, furthermore accenting this dualism by personally connecting the dialogues of otherwise entrenched and embittered groups of environmentalists, indigenous tribes, and industrious individualists. Moreover, Laufer's uncanny ability to empathize with these otherwise contentious groups begets a work in itself free from an increasingly volatile rhetoric; instead, punctuations of distilled sentiments allow the reader an unencumbered—yet fully embodied—perspective of the salient issues fueling talks of secession.

Laufer makes plain in his preface the paradigm he explores in *A Journey Through the 51<sup>st</sup> State*, adding to the broader dialogue that “enforcing an existing social and political union that brings together divergent types can be difficult at best, disastrous at worst” (p. xvii). Nowhere is this paradox explored more than in interviews found in the latter half of the book. The intimate perspectives of residents, so split along industrial and postindustrial sentiments, highlight the role this contrast plays in mobilizing and characterizing either side. The focus on the many condensation points of disaccord is indeed a mainstay of this book, allowing readers their own windows into the world into which Laufer delves.

Far from a harmonious cadre, the would-be Jeffersonians comprise a rather contentious group, each often painting the other in atavistic terms. Laufer, although sympathetic to each group's plight, shows no trepidation in presenting curt comments and questions of the opposing side in his interviews, if only to gauge the response of the subject. Many of the questions posed by Laufer, often taken directly from the opposition, are blunt and not rarely comical. Questions such as “Why do you want to ruin my life...prevent me from earning a living...and destroy my business?” (p.196) represent the at-times loaded accusations that Laufer deftly incorporates to provoke his respondents, cutting through the posturing common when addressing a sympathetic ear. This, coupled with an unmatched reflexivity, yields an incredible mosaic that reveals a coherent drama and imparts a sense of the acute and serious nature of a people locked in what they see as a struggle for survival. In fact, the local condensation of disaccord that Laufer explores in his research, conducted from late 2011 to early 2013, has since erupted into a movement that has generated substantial tangible support in both the real and virtual worlds.

The original namesake of this ambiguous, amorphous state remains unknown, as Laufer documents; however, today there is little deviation from the belief it was after the third US president, Thomas Jefferson. As the drafter of the US Constitution, a document deified by many in the current State of Jefferson movement, President Jefferson plays the role of figurehead in a jingoist movement such as the current secessionist movement in northern California and southern Oregon; but the deified president may represent more than just a fundamental patriotism espoused by some in the fabled Jefferson region. Often described as “the ‘American Sphinx’ because of the contradictions and inconsistencies” (p. xiv), perhaps Jefferson is more accurately representative of all who call this mythical state home.

As a populace, the people of the State of Jefferson comprise of a variety of groups, each struggling to be heard, fighting for the right of representation. That power is presently determined by long-established—and unlikely to be altered in any foreseeable future—state borders that bisect mountains, deserts, valleys, and coasts of this geo-cultural frontier. It is evident in Laufer's telling that as long as the strings of the state flow from their urban

puppeteers into Jefferson, there will always be those who dream of cutting them. Written in a wonderfully approachable, reportorial, and reflexive fashion, Laufer's *A Journey Through the 51<sup>st</sup> State* acts as a personable and knowledgeable guide on a shared journey to explore the depth inherent to dreams.

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***Trouble in the Forest: California's Redwood Timber Wars.* By Richard Widick. 2009. Minneapolis, MN: University of Minnesota Press. 353 pp. Paperback \$25.00. ISBN 978-0-8166-5324-9**

Richard Widick's *Trouble in the Forest: California's Redwood Timber Wars* is an in-depth content analysis and empirical research project aimed at understanding the cultivation of the redwood social imaginary. He focuses on public perception, land use, property rights, and the culmination of such forest practices in Humboldt County, located in the northwest corner of California, where giant redwoods thrive. This far western frontier was one of the latest sites of development and exploitation in the US. The relatively short history of Euro-American colonization began in 1850 when explorers and settlers first landed in Humboldt Bay.

Widick begins *Trouble in the Forest* with an overview of the historical makings of outside migrants landing in Humboldt Bay, providing deep detail on who was part of the initial settlements and how rapid the extrapolation of natural resources occurred. Logging was not the only form of investment in the land—farming and mining also turned into landholding stakes. In the Introduction, Widick mines archival print media as he runs through many of what he identifies as the most important events in this story. He labels the Indian Island massacre of 1869, the Great Lumber Strike of 1935, the foundation of the company town of Scotia, the death of David “Gypsy” Chain, and the Luna tree sit as sites for developing the forest social imaginary in Humboldt.

*Trouble in the Forest* is structured around each of these events and their surrounding epochs in Humboldt (for example, the Great Lumber Strike of 1935 is included in a chapter discussing all of the preceding and subsequent labor struggles—what organizations were involved, who took part, and what they participated in are discussed in detail). Much effort was taken to grasp how these events came to be and their outcomes. Public perceptions as they were archived in various print media or through interviews were analyzed to provide comprehension of the social imaginary created in Humboldt.

Widick spent two years in Humboldt County researching what the redwood struggle transmitted. Some of his questions include the following: how and why did the timber wars originate and sustain themselves, where are they leading, and what do they tell us about globalization and our nation? “My method is to combine the cultural theory of social imaginaries with elements of media studies and environmental sociology in the writing of social history” (p. 37), he declares. By analyzing mass media representations and primary historical sources, Widick provides insight into the foundational and challenging social imaginary (shared

Widick clarifies his intentions by declaring that the Wiyot were the first and hardest hit by white settlers. It can be assumed that not much was reported in the public media during this time on the other tribes.

*Trouble in the Forest* recommends itself to any academic audiences desiring to research the social relationships within the Humboldt region. This book clearly lays out the historical making of the region's social imaginary, vital in making sense of the current social environment. Pieces and chapters of *Trouble in the Forest* can be used in classroom formats to describe tensions over private property, land rights, and social movements. The book is also recommended to local environmental activists who seek a fuller understanding of the key events, people, and work of the timber wars.

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***Planning Paradise: Politics and Visioning of Land Use in Oregon.* By Peter Walker and Patrick Hurley.** 2011. Tucson, AZ: University of Arizona Press. 312 pp. Paperback \$26. ISBN 978-0-8165-2883-7

*Planning Paradise* explores the post-2000 transformation of Oregon's land-use planning system, a movement characterized by voter-approved ballot initiatives designed to undermine the landmark 1973 Land Conservation and Development Act. The act, which required municipalities to develop plans protecting agricultural land and natural resources while simultaneously containing sprawl, was among the first to introduce land-use planning at the state level. Oregon remains one of only a few states with such a system, making recent attacks on the 1973 mandate a serious departure from nearly four decades of progressive land-use planning. Through the novel narrative of *Planning Paradise*, authors Peter Walker (professor of Geography at the University of Oregon) and Patrick Hurley (associate professor of Environmental Studies at Ursinus College) expand upon what could otherwise be a simple sequence of legislation through emphasis on character development and in-depth case studies based on primary research and interviews.

Walker and Hurley begin by characterizing the social and political climate of the early 1970s and offer four factors behind passage of the 1973 legislation: the national environmental movement, economic concerns of commercial farmers (and, to a lesser extent, resource extraction industries), the ability of political personalities to inspire nonpartisan and grassroots cooperation, and sustained efforts to engage the public with the legislative process. They then introduce two post-2000 ballot initiatives that successfully challenged the act, beginning with Measure 7 (2000), which sought to reimburse landowners for any loss in property value due to regulation. Although overturned, Measure 37 (2004) passed and allowed for regulations to be waived in lieu of financial compensation. Measure 49 (2007) was then passed to reduce the number of claims filed subsequent to Measure 37 by eliminating retroactive claims, enacting more stringent standards for proving devaluation, and excluding claims for commercial and industrial uses.

The majority of the book is dedicated to understanding what has occurred in recent decades to shake the foundation of land-use planning in Oregon because all pre-2000



challenges had failed with voters or legislators until 53% of voters passed Measure 7 and 61% passed Measure 37. To that end, *Planning Paradise* explores land-use regulation in three representative “planning landscapes”: the Willamette Valley, Central Oregon, and Southern Oregon. Eastern Oregon is excluded because its rural population does not experience sprawl to the degree of the other regions; Coastal Oregon is also excluded because much of the conservation characteristic of that region extends from the 1967 Beach Bill rather than the Land Conservation and Development Act of 1973.

The Willamette Valley is the most populous, urban, and agricultural region in Oregon and is represented by the Portland Metropolitan Area. The region’s dual identity as both city and country epitomize Walker and Hurley’s argument that the “powerful cultural *visions* or ideals” (p. 15, emphasis in original) represented by each entity are responsible for landscape creation and conflict. The case study examines the Metro Council’s attempt to annex the rural community of Damascus through expansion of Portland’s Urban Growth Boundary without any local input, arguably resulting in “urbanization without representation” (p. 168). The process was undertaken with faithful attention to the 1973 mandate but did not consider the financial and structural issues that would face both Portland and Damascus following annexation.

Central Oregon is a rapidly growing region with several small urban centers that have historically been reliant on agriculture and resource extraction. In recent years, however, economic emphasis has been on the development of large resorts comprised of short-stay and residential units. Recent proposals to build resorts in the Metolius Basin are used to exemplify state-level intervention in local planning processes that had followed state law but took advantage of loopholes to allow large-scale development. Construction was stalled by several years of political back-and-forth before the state decided the basin should be considered an Area of Critical State Concern, protected for the benefit of all Oregonians rather than developed for the benefit of a few.

Southern Oregon is described as a region with a rural-residential population dependent on resource extraction, though an increasing number of recreation- and retirement-minded newcomers are arriving to take advantage of its topography and climate. In line with popular images of the State of Jefferson, Walker and Hurley portray southern Oregon as possessing “its own brand of independence *within* this state of proudly independent-minded political thinkers” (p. 209, emphasis in original). For this reason, some municipalities have chosen to develop a regional planning consortium comprised of volunteer participants (i.e., the Bear Creek Valley Regional Problem Solving planning process area, or BCVRPS). It is within this localized approach to planning that the authors suspect future planning will be accomplished. However, they stop short of discussing BCVRPS as a form of “new regionalism” in which voluntary and cooperative local governance supersedes centralized control.

These case studies suggest a spectrum of adherence to the 1973 act, from the most vertically structured engagement with protocol, to state overturning of municipal decisions, to local-scale regional planning. In all situations, however, Walker and Hurley conclude that in recent decades citizens have begun to see the Land Conservation and Development Act as “sclerotic” and interpret post-2000 ballot initiatives as popular efforts to make the process more flexible and equitable. They argue that the narrative of the early 1970s was one of statewide benefit and identity but shifted toward one of individual rights and regional identity; what began as a movement toward economic and environmental sustainability began to look to many Oregonians as infringement on property rights through state-sponsored eminent domain.

This feeling was supported from the 1980s onward by national-scale property rights activism and rapid immigration to the state that brought citizens unfamiliar with the origins and unique legacy of Oregon's land-use regulations. Furthermore, partisan politics have discouraged legislative collaboration and sincere efforts to engage the public have waned. However, Walker and Hurley also note that the year Measure 37 was passed over half of Oregonians polled still believed that stringent planning made their state a better place. Interviews revealed that many voters were not aware of the ramifications of approving Measure 37 and have since acknowledged the importance of land-use planning. Furthermore, 62% of voters approved of Measure 49's efforts to limit Measure 37. Although no clear solution is defined, their conclusion seems to be straightforward: there is continued support for a statewide planning mandate, but for Oregon to remain a model system the process must involve the public to accommodate changing perspectives.

*Planning Paradise* would benefit from a brief comparison of Oregon's planning woes to at least one similar phenomenon to explore how other groups have dealt with comparable issues. For example, challenges to 1970s-era conservation easements have increased in recent years as new landowners—many of whom are heirs of the original easement donors—acquire protected land and realize its perpetually diminished economic and/or development value. The social and legal responses to this phenomenon may present some parallels to Oregon's current situation in that clear solutions are few, but amendments to easement law should account for changing public opinion.

Overall, Walker and Hurley provide an in-depth regional and historical analysis that can serve as a multi-scalar examination of landscape useful not only to planners but also geographers, historians, and political ecologists. This is especially true when viewed in light of the authors' introductory chapter that acknowledges inspiration from foundational concepts in these fields, which makes *Planning Paradise* a useful practical text for undergraduate and graduate courses.

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***Humboldt: Life on America's Marijuana Frontier.* By Emily Brady.** 2013. New York, NY: Grand Central Publishing, Hachette Book Group. 272 pp. Hardcover \$27.00. ISBN 978-1-4555-06767

In the summer of 2010, veteran journalist Emily Brady (*New York Times*, *Time*, *Village Voice*, etc.) moved to Humboldt County to write a book about how California legalized marijuana. As it turned out, California did not legalize marijuana that year, but the book that emerged is much richer for it. In search of what she viewed as a soon-to-be-vanishing way of life, Brady crossed the Redwood Curtain and entered another world—an underground world of marijuana growers, sellers, transporters, and law enforcement. *Humboldt: Life on America's Marijuana Frontier* is a chronicle of the world she entered and the people she met; it is both a snapshot and a history of the marijuana culture and industry in what, according to Brady, is widely considered the premier pot-growing region in the country.

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The story is told primarily through the lives of four Humboldt County residents. The first is Mare, a 70-year-old woman and a longtime back-to-the-lander. She first came to Humboldt in the 1970s and, like many arriving in the area then, first started growing pot only for personal consumption. This was long before a marijuana industry existed in Humboldt. A committed outdoor grower, like so many early Humboldt residents, over time Mare began to sell to others. Second is Crockett, a 35-year-old man who was raised on a commune in Marin County, north of San Francisco. He remembers pressing marijuana seeds into the ground as a boy and his mother selling to fisherman. Attending school, he was admonished by his mother to keep their way of life secret and had always, as he tells it, been involved in the marijuana industry. Crockett, who moved to Humboldt County to manage a large grow, is emblematic of the “green rush” that brought, and still brings, young (mostly) men from all over the country to the region. Third is Emma, a 23-year-old woman and a daughter of growers. She grew up living “off the grid” in a small town near the coast in Humboldt. All aspects of her life, her childhood memories and those of her friends as well, were affected by the culture of growers and dealers in which she was raised. It was only after moving away from Humboldt, taking a conventional job in the city, that she began to realize how unusual her formative years were. The fourth main character is Bob, a man approaching 50 years old who worked as a deputy with the Humboldt County Sheriff’s department. Bob had been with the department for four years. He patrolled the southern Humboldt area near Garberville and was on a first-name basis with many of the locals. Being tasked with enforcing the law in an area where most people’s primary source of income (growing cannabis) is illegal was clearly a Sisyphean task. As Brady puts it, “It wasn’t easy being a deputy sheriff in a town of outlaws” (p. 51).

Brady gives an intimate, firsthand view of the area and the culture as told by those who lived it, however, the book is valuable in other ways. It provides fascinating background and historical references that help the reader understand the pot culture as it used to and currently does exist. For example, the reader learns about the Campaign Against Marijuana Planting (CAMP). Each year for eight weeks during the 1980s and 1990s, hundreds of law-enforcement personnel from various agencies would descend on Humboldt County in an attempt to eradicate marijuana. Using planes and helicopters to spot marijuana grows, agents would play a high-stakes game of cat and mouse with the growers. If a grow was spotted, on-the-ground personnel would move in to make arrests and eliminate the crop.

The result of these multimillion-dollar operations had an effect contrary to the one law enforcement intended—it raised the price (and thus the desirability of growing) cannabis. As Brady notes, “In the early 1990’s, some master growers in Humboldt earned as much as \$6,000 a pound for their outdoor crop” (p. 25). Given that a single outdoor plant, if properly tended, can yield a pound of dried bud (the highly potent dried flower cluster part of the plant), the result of CAMP was to make the financial lure of growing almost irresistible.

CAMP notwithstanding, Humboldt in many ways has been at the forefront of some of the recent changes in marijuana attitudes and policy. We learn that in 1996 Proposition 215, which legalized the medical use of marijuana in California, became law. Under Humboldt County District Attorney Paul Gallegos (who, Brady notes, attended a fundraiser by the Humboldt Growers Association) prosecution of marijuana crimes was deemphasized in the county. In 2003 Gallegos allowed 215 cardholders (cards were and remain easily available to virtually anyone) to grow up to 99 plants and possess up to three pounds of marijuana (Gold & Nguyen, 2009). In the space of a few years established Humboldt growers went from black helicopters and armed soldiers descending on their crops to competing with anyone who had a

215 card and a grow light. These changes and their effects were, and continue to be, immense. From a secretive outlaw culture and way of life to a (almost) respected enterprise, the residents of Humboldt have been there, and Brady has chronicled it.

*Humboldt: Life on America's Marijuana Frontier* created quite a stir in the area when news of it was released. Many people in the county were anxious to read the book, recommending or passing it on to friends and family after they had read it. Both from my own observations and my conversations with residents who have read the book, it appears that Brady's representation of Humboldt is accurate. The book is many things: it is a history of Humboldt, the marijuana outlaws and pioneers, the hippies who moved here to get back to the land, those drawn only by the money, and local law enforcement tasked with arresting their friends and neighbors for a drug on the verge of legalization. Brady is fine journalist, but, much to her credit, the volume appears to be collaboration between an oral historian and an anthropologist. The book does not in any way come across as dry; it is a rich, intensely human story of the lives of the people working in and affected by the marijuana industry in Humboldt. There is a vast amount of detail and much to be learned from this book.

Not only is the book both interesting and informative, it is also a fun read. It is a terrific story and difficult to put down. It is not polemic and does not take a particular point of view on the legality of cannabis. In that way *Humboldt: Life on America's Marijuana Frontier* may disappoint those who hold a particular bias toward the subject. It does, however, allow the reader to experience what Brady herself experienced, learn what Brady learned, and feel what Brady (and those she spoke with) felt. In this way the book allows readers to come to their own conclusions regarding many of the controversial issues surrounding marijuana. Though a story of Humboldt County, it is much more than simply a portrait of a single place; it is also the story of various individuals' hopes and dreams and how those hopes and dreams played out within the outlaw culture of marijuana cultivation. It is a unique and fascinating story that I would recommend it to anyone.

### Reference

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## Endnote: Conference Previews

### Contributions from *Perspectives* *on the State of Jefferson*



**Figure 1.** Jefferson scholars gather at the University of Oregon on the occasion of the forthcoming publication of this issue of *Humboldt Journal of Social Relations*. Back row (left to right): Seth Crawford, Keith Scribner, Kerry McNamee, Chelsea Teale, Erik Kenas, Matthew Derrick, Peter Laufer, Christopher Weinstein, and Evan Wisheropp. Front row (left to right): Laura Hurwitz, Rebecca Batzel, Alexis Grant, Sara Matthews, Connor Mullinix, Becky Evans, Kari Norgaard, and Ed Madison (photograph by Nicole Ibarra).

Jefferson scholars convened at the University of Oregon in Eugene on May 30, 2014 for a conference on the theme *Perspectives of the State of Jefferson* (see Figure 1). Organized by UO's School of Journalism and Communication and Humboldt State University's Department of Geography, the conference featured presentations from authors representing seven of the articles appearing in this issue of *HJSR*, spurring lively discussion about issues confronting communities of southern Oregon and northern California. Conference participants agreed that the State of Jefferson constitutes a unique region and requires greater engagement from scholars,

artists, and others who care about and are interested in the place, lest its meaning be left primarily to secessionists to define.

During a working lunch and conference-closing roundtable discussion, conference participants identified a number of directions for future research on Jefferson, including continuing the task started in this issue of *HJSR*—outlining, exploring, and moving toward an enhanced understanding of what makes Jefferson a cohesive region. In particular, some of the topics identified for future research include:

- comparative research on secessionism
- economic strategies employed by communities of Jefferson for dealing with structural change
- race relations in the region (historical and contemporary)
- health issues impacting Jefferson communities
- how the region interacts with and is affected by globalization
- acute social issues in the region (e.g. drug abuse, crime, and violence)
- environmental problems in Jefferson (in particular those stemming from the legacy of resource extraction)
- artists' imaginations and interpretations of the region
- additional focus on Indigenous issues
- educational access and achievement in the region

The gathering inspired participants to continue research along these lines. "I haven't walked away from a conference feeling so energized in a long time," said Seth Crawford, a sociologist at Oregon State University who grew up in Jefferson (southern Oregon). "Maybe it's nostalgia for home or just feeling like the concerns of a long-marginalized space were finally being heard, but I felt like there was strong concordance among the messages delivered—and, to me, it really resonated with the region's character."

The conference concluded with a proposal to meet again in 2015, holding the second annual Jefferson Studies conference at Humboldt State University.

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## Contributor Biographies

**Seth S. Crawford** was raised by logger-hippies in an electricity-less log cabin in the Kalmiopsis Wilderness of southern Oregon (42°34'57.09"N, 123°37'20.09"W). He was educated in Oregon (BA + MPP, Oregon State University; MS + PhD, University of Oregon) and is actively engaged in the Oregon policy development arena. Crawford is an environmental sociologist who studies the political economy of resource issues (particularly energy and marijuana).

**Matthew A. Derrick**, raised in the State of Jefferson (Myrtle Creek, Douglas County, Oregon), is an assistant professor in the Department of Geography at Humboldt State University. His academic research thus far largely has focused on the relationship between group identity and territory in post-Soviet Russia's Muslim-majority regions. He sees similar dynamics in parts of contemporary Russia and Jefferson in that both are engaged in an ongoing struggle to overcome decades-long, large-scale structural changes that impact the ways in which place is understood and the manner in which people define themselves.

**Becky Evans** is a land-based artist. Her recent solo exhibits explore the unique bioregions in the Klamath Knot, the State of Jefferson, and the edge of the Great Basin. She exhibits her work regionally and nationally. Her artist residences have included the Morris Graves Foundation, (Loleta, California), Playa (Summer Lake, Oregon), and the Earthwatch Institute (Skagit River, Washington). She was a faculty member of the Art Department at the College of the Redwoods (Eureka, California) for 30 years. She has her home and studio near Humboldt Bay, California (more information on Evans and her art can be found at [www.beckyevans.com](http://www.beckyevans.com)).

**Hannah Gosnell** is an associate professor of Geography in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. Her research interests have to do with agricultural landscape change, water resource management, climate change, environmental governance in the context of rural working landscapes, and the ways in which laws and institutions might evolve to better reflect changing geographies and facilitate social-ecological transformation when necessary. She earned MA and PhD degrees in Geography from the University of Colorado in 2000, and a BA in American Civilization from Brown University in 1988.

**Laura Hurwitz** is a white settler and has resided in the Karuk Ancestral Territory, in Humboldt County, California, for the past 19 years. She is a master's student in the Environment and Community program at Humboldt State University. Her research interests primarily address food justice, decolonization, settler colonialism, and the dismantling of white supremacy. She lives a life of contradiction as she simultaneously builds a homestead with her partner and three daughters and works for a decolonized world.

**Erin Kelly** is an assistant professor in Forest Policy, Economics, and Administration at Humboldt State University. Her work focuses on the impacts of federal and state policies on forest management and landowners. Her PhD was in Forest Resources at Oregon State University and her post-doctoral work was in Newfoundland and Labrador, Canada.

**Peter Laufer** is an award-winning author, broadcaster, documentarian, and journalist. He has studied and taught throughout the world, including stints in Europe, the Americas, Africa, and Asia. He sent home reports on the Soviet invasion of Afghanistan and the wars in Central America for NBC, reported for CBS as the Berlin Wall fell, and chased butterflies in Nicaragua for his book *The Dangerous World of Butterflies*. An accomplished author of over a dozen well-reviewed books, Laufer writes on borders, migration, and identity along with animal rights. He also reported, wrote, and produced several documentaries while an NBC News correspondent, ranging in topics from the crises facing Vietnam War veterans to illiteracy and hunger in America, and a study of Americans incarcerated overseas for which he won the George Polk Award. His latest book is *Organic: A Journalist's Quest to Discover the Truth behind Food Labeling*.

**Ed Madison** has built a multifaceted career in media and journalism that began as a high school intern at the *Washington Post*-owned CBS television affiliate in Washington, DC, during the height of the Watergate scandal. Shortly after graduating from Emerson College in Boston he was recruited by CNN to join its management team as a founding producer. His own subsequent companies have produced projects for CBS, ABC, and Discovery. Madison holds a PhD from the School of Journalism and Communication at University of Oregon, where he is an assistant professor.

**Kerry McNamee** graduated from Humboldt State University in May 2013 where she earned a bachelor's of science degree in Environmental Management and Protection with an emphasis in Natural Resources Planning. Kerry focused her studies on water politics/quality and geospatial analysis. Since graduating Kerry has worked for Northcoast Regional Land Trust and is currently a field scientist with Americorps Watershed Stewards Project at the California Department of Fish and Wildlife office in Yreka, California.

**Kari Marie Norgaard** is an associate professor of Sociology and Environmental Studies at the University of Oregon. Her research on tribal environmental justice, gender and risk, and climate denial has been published in *Sociological Forum*, *Gender and Society*, *Sociological Inquiry*, *Organization and Environment*, *Rural Sociology*, *Race, Gender & Class*, and other journals, as well as by the World Bank. Her research has also been featured in the *Washington Post*, *National Geographic*, *High Country News*, and on National Public Radio's "All Things Considered." Her first book, *Living in Denial: Climate Change, Emotions and Everyday Life*, was published by MIT Press in 2011. Norgaard is recipient of the Pacific Sociological Association's Distinguished Practice Award for 2005.

**Andrew Nugent** graduated from Humboldt State University in May 2014 where he earned his bachelor's of science degree in Environmental Management and Protection with an emphasis in Natural Resources Planning. Andrew focused his studies on coastal policy and hopes to work with the California Coastal Commission in the future. He is also a black belt in *jiu jitsu*.

**Laurie Richmond** is an assistant professor of Environmental Planning at Humboldt State University. Richmond's research focuses on developing collaborative relationships with natural resource-dependent communities to examine how they navigate both political and ecological changes in their resource systems. She has conducted research in Alaska and Hawaii, and is currently researching with a variety of HSU affiliates on local northern California matters.

**Gordon H. Stillman** is an artist living and working in Philadelphia. He primarily works with photography, video, and installation. He received his BA from the College of William and Mary and graduated in May 2014 from the MFA program at the University of Pennsylvania. He is interested in exploring themes relating to cities, ecology, and ways of seeing and finding meaning in the world (his current work can be found at <http://www.gordonstillman.com>).

**Peter G. Stillman** is a professor at Vassar College, where he teaches modern political theory and environmental studies. He has published articles and book chapters on Hegel, Marx, and utopias as well as environmental issues. Responding to the Vassar art gallery's displaying of Eirik Johnson's *Sawdust Mountain*, he taught a course on the exhibit (student comments on some photographs can be found at <http://pages.vassar.edu/fllaceducation/photography-environment-and-politics-sawdust-mountain/>). He is currently working on a book on green utopias and, with Adelaide H. Villmoare, on post-Katrina New Orleans.

**Christopher Weinstein** graduated from Humboldt State University in May 2013 where he earned a bachelor's of science degree in Environmental Management and Protection with an emphasis in Natural Resources Planning. Christopher focused his studies on community sustainability and geospatial analysis. Christopher is currently a project coordinator at the environmental consulting firm Greenway located in Arcata, California.

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