

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.

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 Tribes¹ (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

¹ 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.

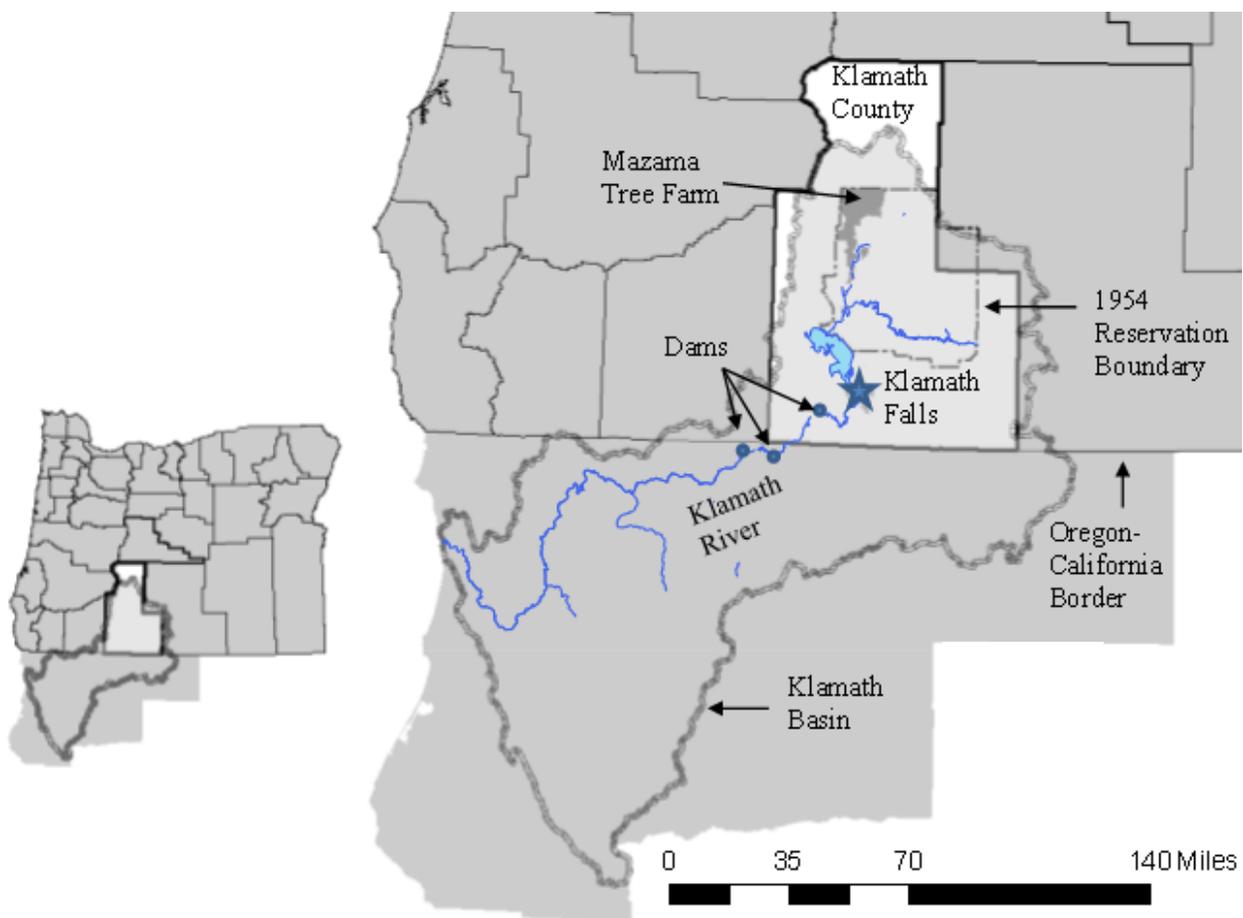


Figure 1. Map of the Klamath Reservation, with its 1954 boundaries, the Mazama Tree Farm, and the Klamath Basin. The reservation was located within Klamath County, one of several counties in Oregon and California in the Klamath River Basin (boundary data from the Klamath Tribes; map by Erin Kelly).

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 each² in 1961 as a result of the sale of their

² 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.³ 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).

³ 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.

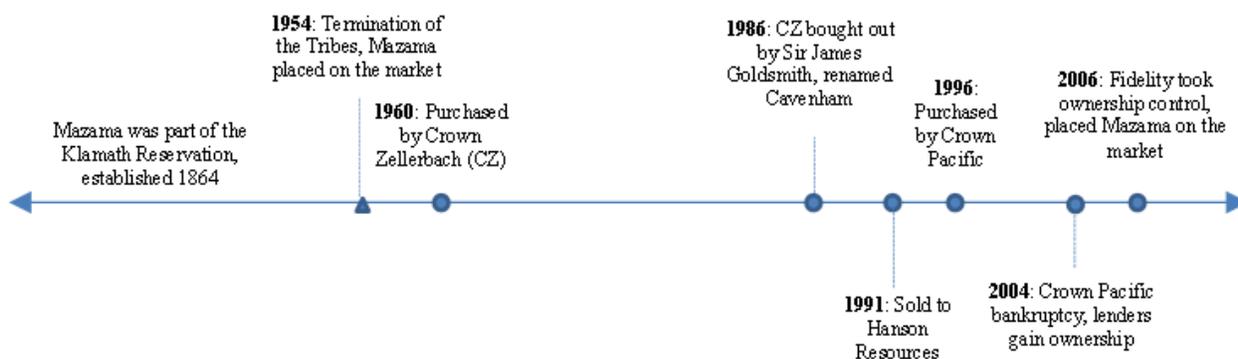


Figure 2. The ownership history of the Mazama Tree Farm from establishment in 1864 as part of the Klamath Tribes Reservation through industrial ownership and timberland investor ownership.

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 20th century, a complex and bitter water conflict in the Klamath River Basin created the conditions for possible tribal land reacquisition. For most of the 20th 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 20th 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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