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Cultivating Trust in the Face of Crisis: Science as Moderator in Collaborative Forest Management

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Abstract. How is conflict over resources managed in the context of ecological, economic, and political crisis? Trust is noted by scholars as fundamental for collaborative forest management (CFM), a shared governance tool that brings together different stakeholders. This paper extends the literature on trust by foregrounding the use of science to lead decision making processes in the face of crisis. Through a case study of a CFM partnership in the American west, the analysis examines a once feuding group of political adversaries who decided to work together and “let the science lead.” The study examines how the partnership navigated economic crisis and historic wildfires against the backdrop of longstanding regional conflict termed the timber wars. The science-led governance model described includes science-led decision making, ongoing research on forest treatments, and communication of scientific findings to partners. The partnership’s approach, undergirded by relational and procedural trust, highlights the socio-political and relational dimensions of science-informed, sustainable resource management. The findings of this study have implications beyond CFM as they point to the importance of relational trust building in civic science. Generating buy-in and collaboration, especially among those with little to no formal science background, is especially pertinent given the polarization of science more broadly.

Keywords: civic science, collaborative forest management, collective action, environmentalism, political sociology.

1. INTRODUCTION

Rural communities in the American west confront an increasingly complex socio-political ecosystem – assaulted by biblical wildfires, the impacts of climate change, and political polarization (Billings *et al.* 2021; Reilly *et al.* 2022). Collaborative forest management (CFM), a set of shared forest management practices involving governments and other stakeholders, has emerged as a dominant approach in the American west (Petheram *et al.* 2004). Research on CFM foregrounds the importance of trust for reaching an agreement on contentious topics and in times of crisis (Anderson *et al.* 2018; Davis *et al.* 2018). Though trust generates the social cohesion necessary to respond to pressing challenges, it is also inherently precarious. This paper advances the literature on trust in CFM by foregrounding science as a resource for moderating conflict and leading decision making.

Through a case study of CFM in Oregon, the analysis examines a once polarized group of political adversaries working together using a science as moderator collective decision-making process. Their science-informed decision model, undergirded by relational and procedural trust, points to the socio-political and relational dimensions of science-informed, sustainable resource management. Generating buy-in and collaboration, especially among those with little to no formal science background, is especially pertinent given the polarization of science more broadly (Gauchat 2012; Helmuth *et al.* 2016; Krause *et al.* 2019).

The paper proceeds by offering an overview of the literature on the role of trust in CFM. The importance of and challenges to science-informed decision making are then highlighted. The methods section provides an overview of the case selected and details the qualitative case study approach. The case study begins by offering a synthesis of the socio-historical context of the region, highlighting the emergence of the “timber wars” in the 1990s as a conflictual backdrop to the origins of the partnership. The case study then examines the partnership’s response to two major crisis points – the last mill in the region being threatened with closure and later, one of the worst forest fires in Oregon’s history. The sections that follow distill the structural and cultural aspects of their work. Their science-led governance model is described including science-led decision making, ongoing research on forest treatments, and communicating scientific findings back to partners. The promise and challenges of civic science and using science-as-moderator are then discussed. The paper closes by highlighting the implications of the study for understanding how science facilitates trust in CFM and the polarization of science more broadly.

1.1. The importance of trust in collaborative forest management

CFM aims to produce win-win situations for human and ecological systems and to empower citizens to actively engage in resource management (Flitcroft *et al.* 2017). CFM facilitates a process that addresses ecological and socio-economic needs through shared governance models that allow a range of stakeholders to engage in collective decision making (Flitcroft *et al.* 2017). Practiced for centuries, it is currently used on every continent on Earth (Colfer *et al.* 2022; Petheram *et al.* 2004). The increased popularity of such models is rooted in an understanding that shared, large-scale problems are beyond the scope of a single stakeholder, political actor, or landowners such as floods, forest fires, climate change, disease, and invasive species (Flitcroft *et al.*

2017). Though promising, CFM often requires the collaboration of political enemies and stakeholders whose interests and worldviews are diametrically opposed. How then is conflict managed in the presence of both ecological necessity and political polarization?

Trust is a central component of successful CFM due to the complex nature of resource management in settings with a diverse range of stakeholders (Stern and Coleman 2014). Trust is defined by both relationship and mutual vulnerability as, «it involves an individual making herself vulnerable to another individual, group, or institution that has the capacity to do her harm or to betray her» (Levi & Stoker 2000: 476). Trust, then, is inherently conditional and precarious. More broadly, social and political trust have been in long-term retreat (Citrin and Stoker 2018; Levi and Stoker 2000).

Davis *et al.* sum up the literature on trust in collaborative forest management as, «multiple stakeholders participate in a dialogue that builds trust, which allows them to reframe their respective values and interests into collective agreement» (2018: 212). Thus, participation through dialogue is understood to build trust over time if certain conditional features are present. Davis *et al.*’s research on how trust grows or recedes affirms that «process features such as ground rules, facilitation, and field trips, as well as informal interactions, can successfully build a generalized sense of trust» (2018: 224). CFM is by its nature ongoing, not simply reactive in times of crisis (Anderson *et al.* 2018). As such, when crisis points inevitably arise, they are met with the scientific and civic capacity they demand. For example, given the necessity of fire planning in the American west, trust that facilitates timely response is paramount (LaChapelle and McCool 2011). The presence of trust during times of crisis is of heightened importance and can present moments of payoff for the mundane, long-term work of CFM.

1.2. The need for and challenges to science-informed action in collaborative forest management

Scientific legitimacy and its commitment to objectivity are «crucial social resources for building consensus in ideologically polarized policy arenas» (Gauchat 2012: 168). The application of science in CFM is necessary for forest restoration, though how collaboratives access science and science-informed approaches vary (Colavito 2017; Esch *et al.* 2018). The need for scientific capacity to assess conditions and inform action has gained increased urgency in the face of accelerating climate change (Keenan 2015). Though science is an indispensable asset in this context, it currently faces a «polarization problem» (Gauchat 2023: 264).

To the polarization problem, trust in science among American conservatives has declined since the late 1970s – a trend that has accelerated in the last decade (Gauchat 2012; Helmuth *et al.* 2016; Kozlowski 2022). This is not limited to the United States; as anti-science views are part of the contemporary populist backlash globally (Zapp 2022). The partisan divide on science, when examined closely, shows conservatives remain sympathetic to scientific research as a process but are distrustful of the scientific community and of scientists (Mann and Schleifer 2020). Distrust of scientists on the part of conservatives impacts CFM given most work takes place in rural communities, which on the whole lean conservative (Gimpel *et al.* 2020; Hibbard *et al.* 2011). Researchers concerned with the loss of faith in science among conservatives argue that promoting science as a legitimate epistemological tool is unlikely to reverse this trend. Rather, efforts «humanizing the scientific community» (Mann and Schleifer 2020: 325) may prove more effective.

2. METHODS

The case study examines the work of the Blue Mountain Forest Partners (BMFP) of the Malheur Forest in Oregon, USA. The partnership self-describes as a “diverse group of stakeholder”, engaging in a process that is, “locally-supported, incentives-driven and that relies on the power of solutions that integrate the environmental, economic and social needs of communities” (Blue Mountain Forest Partners 2011, 2023). BMFP is comprised of over thirty organizations – coming from the ranching, forestry, and restoration industries, public natural resource management, the US Forest Service, environmental conservation groups, research entities, and local, regional, tribal, and state governments. The BMFP has been successful over a long period of time and has navigated multiple crises.

The BMFP was chosen as an exemplary case of collaboration in the face of conflict after a comprehensive national review. The qualitative case study draws on semi-structured interviews with 16 people and a rapid ethnographic site visit conducted in spring 2023. Case studies have the empirical advantage of illuminating how a social process unfolds and can be theory-generative (Small 2009; Yin 2009). Interviews allow one to uncover the meaning-making processes of participants (Cho 2017). This allows for increased «validity of fine-grained, in-depth inquiry in naturalistic settings» (Crouch and McKenzie 2006: 493). In the context of this study, the literature on scientific legitimacy points to the

need for «qualitative examinations of the conservative scientific repertoire» (Mann and Schleifer 2020: 323).

A rapid ethnographic field visit was done to John Day, Oregon in May 2023. Rapid ethnography was selected as a favorable methodology given the BMFP only convene in person a few times a year for intensive, multi day meetings. Rapid ethnography is characterized by short field visits, time intensity, and background knowledge. Rapid ethnography, sometimes referred to as focused ethnography, is narrower in scope in that it seeks to solve a more tightly defined empirical puzzle rather than traditional, long-term, grounded theory ethnography (Knoblauch 2005; Vindrola-Padros 2021).

In-depth semi-structured interviews ranged from 45 minutes to two hours in duration and were conducted with BMFP members (12), one member of the US Forest Service, and three concerned citizens. Leaders of the partnership were interviewed multiple times for a total of 12 hours. Interviews were done in person and over the phone, determined by interviewee preference and pragmatic constraints. For recruitment, all BMFP board members were contacted directly by email and asked for an interview. Other interviewees, including concerned citizens and a member of the US Forest Service, were recruited in person at BMFP events. All BMFP members preferred to go on the record and are quoted directly. Others are referred to in more general terms, for example, “concerned citizen”. Key interviews conducted prior to the ethnographic visit allowed the researcher to gain insights before the fieldwork. A review of internal and publicly available documents was conducted as well.

The week spent in John Day featured observation of both formal and informal gatherings offering a dynamic view of the working culture of the partnership. This included attendance of three days of intensive meetings, public presentations, a field visit to a work site in the forest with members, and corollary social events. Informal social time, occurring during coffee breaks, happy hours, barbeques, dinners, and in transit to the forest, facilitated conversations with members of the partnership, the Forest Service, their scientific collaborators, and members of the public in attendance at open meetings. Interviews and the rapid ethnography amounted to 68 hours of exposure, defined as total time spent in the setting and with research participants (Small and Calarco 2022). The research was approved by the Internal Review Board (IRB), an independent ethics committee for research on human subjects, in February 2023¹.

¹ “Strengthening Democracy by Strengthening the Agora” was approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board Office in February 2023 (IRB No. 00023010).

3. COLLABORATION THROUGH CRISIS

3.1. *Backdrop to the Partnership*

The Malheur National Forest of Eastern Oregon is a sprawling 1.7 million acres of mountains, high desert grasslands, canyons, alpine lakes, and meadows. Climbing, grazing, and inhabiting the forest are deer, elk, cougars, antelope, black bears, badgers, big horn sheep, and mountain goats. The rivers are home to a range of trout and the skies host more than 70 species of birds. Human use of the forest dates back ten millennia (Aikens and Greenspan 1988). The American history of the region includes aggressive European-American settler expansion, the displacement, near-genocide, and ongoing persecution of the Northern Paiute and Bannock people, a mining rush for gold that drew Chinese and Europeans to Oregon, and the eventual establishment of a more industrialized approach to the forest (Gu 2020; Wilson 2022). Since the 1880s the timber industry, its mills, and logging systems brought laborers, and in turn economic vitality and growth to the rural towns. The Malheur National Forest was established in 1908 by conservationist US President Theodore Roosevelt (Dorsey 1995). Fire suppression was central to the work of the Forest Service along with the management of timber harvest and livestock grazing.

By the 1970s, deindustrialization brought a downturn to logging and economic strain to logging-dependent communities (Clucas *et al.* 2005; Langston 2003). An ascendant environmental movement also pushed new, contentious questions to the fore: Was timber a crop to be harvested or was the forest a complex and majestic ecosystem to be protected? As the environmental movement gained momentum activists across the American west were willing to put their bodies on the line—at times chaining themselves to trees or famously, camping out inside them (Fitzgerald 2002; Lee 1995). Direct actions generated standoffs between loggers and environmentalists popularly referred to as the “timber wars”. And outside the forest, another field of conflict grew: the courtroom. The Endangered Species Act of 1990 created an opportunity for environmentalists who wanted to slow logging: the old-growth forests were home to the northern spotted owl, an endangered species (Carroll 2019; Langston 1995).

Protection of the spotted owl facilitated the closing of large swaths of forest to loggers. In 1994, the Northwest Forest Plan expanded protections by including the necessity to survey and manage before an area could be logged, increasing the stringency of requirements. For loggers, in effect, this meant facing litigation each time they proposed a timber sale. Mills closed and the

loss of jobs was dubbed the “owl effect” by those sympathetic to struggling, logging-dependent rural communities already hobbled by slowing demand and automation (Carroll *et al.* 1999; Carroll 2019; Sitton 2015). The conflict resonated with broader tensions over a widening socio-cultural urban-rural divide in Oregon and the US (Hibbard *et al.* 2011; Nelson *et al.* 2017).

In logging towns, sentiment grew that their way of life was under attack by the urban majority who supported the environmental regulations (Walker and Hurley 2011). Media portrayals that depicted loggers as simple, backward, and responsible for their own demise fueled resentment (Carroll *et al.* 1999). By the early 2000’s litigation had slowed logging, leading the industry and its workers to feel increasingly under threat as jobs and federal tax revenue from logging the national forests declined. Though logging slowed, environmentalists grew frustrated as forest restoration work was incapacitated by the standstill (Sitton 2015). The Malheur is a fire-adapted landscape meaning that fire has been part of the ecosystem for millennia and that it is an integral part of the forest’s health. Indigenous forest stewardship included controlled burns for this purpose. European settlement put an end to this indigenous practice, embracing a fire-mitigation paradigm that viewed fire as a threat – a stance at odds with the ecological needs of the forest (Steen-Adams *et al.* 2019). The long-term consequences of fire-mitigation have been an ecological disaster resulting in fires that burn too hot – destroying the habitat and leaving little chance for regrowth. Restoration work through forest thinning and controlled logging has been shown to support the health of the forest (Johnston *et al.* 2021).

The partnership began with informal meetings between Grant County Commissioner Boyd Britton and Susan Jane Brown, a successful environmental lawyer based in Portland, who’d been instrumental in shutting down logging in Oregon since the 1990s. Brown described the first meetings as, “very difficult” and having “a lot of anger and baggage” on both sides. Brown (Interview, March 8, 2023) explained why she agreed to participate,

The reason folks like me came to the table was because we were starting to see an increase in the extent and severity of wildfires, and those fires were burning up a lot of that habitat that we managed to save in the late nineties.

Informal talks lasted three years, while they worked to understand if there were shared interests and a path forward. Executive Director Mark Webb (written communication, Aug. 3 2023) summarized the early years as such:

It took several years of hard, painful work to begin to work together productively as diverse stakeholders to understand each other, our landscape, what ecologically informed active management across it should look like, and how stakeholders' values and expectations needed to change to accommodate that.

3.2. The last mill threatened with closure

A crisis point came in 2012, when the last mill in John Day was threatened with imminent closure. This drew more people into the Partnership. Zack Williams (phone interview, 2023), BMFP board member, reflected on why he joined, quipping directly, “Desperation.” A fifth-generation Grant County resident, Williams comes from a long family tradition of ranching and lumber. And, as the father of a young family, the mill closing would have ended his livelihood, forcing a move out of Grant County. He explained, “It would’ve decimated the economy and just killed the community.” For environmentalists, the closure of the mill would end needed forest restoration work as the removal of dead, dying, or deteriorating trees, requires a mill to process the lumber (Antuma *et al.* 2014). The Partnership worked to keep the mill open with the advocacy of Susan Jane Brown. Her role facilitated newfound trust and a hard-won sense that working together did have its payoffs. Though not apparent at first—their economic and ecological futures were inextricably interwoven.

The successful collaboration resulted in winning federal funding through Congress’s Collaborative Forest Landscape Restorations Program (CFLRP) in 2012 along with a ten-year stewardship contract for accelerated restoration. In its first decade as a CFLRP, 150,000 acres or approximately 60,700 hectares of forest were restored. An authorized extension was signed in 2023, allocating monies for 200,000 more acres of treatments over the next decade. It is one of the largest and most ambitious CFLRP’s in the US. Economically, keeping the mill open saved 70 jobs and the restoration effort brought 35-50 more Forest Service employees to the Malheur. Contracting work for forest restoration also grew twofold. For rural communities – Grant County has 7,233 residents – these numbers are significant (US Census 2020). CFLRP projects move faster than traditional timber sales, resulting in higher industry wages.

3.3. Out of the ashes: A fire, a study, a way forward

The Canyon Creek Complex Fire ignited on August 12, 2015, when a dozen lightning strikes hit the forest. Fueled by strong winds, the fire took until November to

get under control, in the process destroying 43 homes and burning 110,000 acres, or approximately 44,515 hectares, of forest (Gunderson and Sickinger 2016). At its hottest, temperatures exceeded 2,000 degrees Fahrenheit or approximately 1093 degrees Celsius. Local journalists described it as a “wildfire catastrophe” (*Ibidem*).

In the wake of the fire, the timber industry and the local community wanted complete post-fire salvage logging, a practice that involves collecting timber that isn’t totally burnt. Environmentalists were opposed, concerned with how the practice would impact the vitality of local wildlife. At an impasse, the Partnership decided to study it. They gained funding for a four-year study in collaboration with the Forest Service, another forest collaborative, and a team of scientists, led by wildlife biologist Victoria Saab, to test a monitoring tool for maintaining woodpecker habitats during post-fire salvage logging (Latif *et al.* 2019; Watts 2019). Industry signed on, completing the salvage in a way that respected the needs of the scientific study, sacrificing a more cost-effective approach for what aimed to be a wildlife-neutral salvage.

Susan Jane Brown (Interview, March 24, 2023) explained the salvage logging and study:

We remove some economic value, but not so much that it compromises wildlife populations. And that was a stretch for us [the environmentalists] as well, because the community wanted to log it all, and many in the environmental community didn’t want to log anything at all. And so, finding that middle ground was a challenge, but also really important for building trust and using science to help address socioeconomic and socioecological questions and concerns.

Study findings were published by the United States Department of Agriculture and the model developed by Saab’s team has since been adopted in multiple regions of the American west (Watts 2019). The findings of the four-year study were also, in part, memorialized in the “Wildlife Habitat Zones of Agreement” voted unanimously in favor, at the May 2023 meeting. Prior to voting, a detailed, hour-long research presentation was offered by Trent Seager, Director of Science at Sustainable Northwest². The “Wildlife Zones of Agreement,” a highly technical 148-page document, explains wildlife’s needs on the Malheur and crystalizes a set of best practices for wildlife-sensitive forest restoration and management to be followed by the Partnership moving forward (Blue Mountain Forest Partners 2023). The May 2023 field trip, attended by members of the forest service, scientists, and the Partnership, was to one of the sites of the salvage logging study. Reflecting on the approach,

² Fieldnote, May 18, 2023.



Figure 1. BMFP members visit a site of the Canyon Creek Complex Fire and discuss the results of their study on the impact of post-fire salvage logging on wildlife, May 18, 2023. *Source:* Author.

Executive Director Mark Webb asked reflexively, «what can we do that meets everybody’s needs?»³.

4. GOVERNANCE THROUGH SCIENCE

The Partnership is led by eight Board Members and one full-time staff person, the Executive Director. Monthly meetings are open to the public and attended by voting and non-voting members of the Partnership. During late spring and early summer months – when the snow has thawed and the fires are not yet raging – BMFP convenes for three days of intensive meetings. The days are dedicated to public meetings, presentations, board meetings, socialization, bringing items to a vote, and a one-day field trip to a forest site to monitor and discuss ongoing projects. Their work is guided by a number of ratified bylaws and operations procedures publicly available on their website.⁴ Guiding all processes is an ethos of mutual respect, civil communication, transparency, and openness to other’s perspectives with the aim of innovating mutually beneficial solutions (Blue Mountain Forest Partners 2011, 2017).

BMFP votes using a consensus minus one model that allows the group to move forward in times of deep disagreement. Though full consensus is ideal, it risks one dissident wielding veto power (Flitcroft *et al.* 2017). To remedy this, the model ensures one person cannot block the motion. Voting members also have the option to “stand aside” and not block the motion. When voting

in favor, the system allows members to express degrees of support including: “I agree with this decision and will publicly support it” to “I agree with this decision but will refrain from publicly supporting it” to “I can live with this decision (and will not disparage it in public)”. To become a voting member, one must sign the Declaration of Commitment that promises to honor established agreements and to advance the BMFP mission in addition to attending a minimum of three meetings prior to joining (Blue Mountain Forest Partners 2011, 2017).

The BMFP uses a “science-based zones of agreement” approach to forest restoration that is issue-based rather than project-based, allowing for efficacy that impacts much larger areas of the forest than a single grove of old-growth pines (McLain *et al.* 2014)⁵. In function, zones of agreement empower decision making at scale – impacting thousands of acres of forest. They “memorialize the best available science” and provide detailed knowledge on the forest, wildlife, and forest treatments (phone interview, March 2023). The partnership has zones of agreement for riparian zones, Aspen, and Mountain Mahogany restoration, among others.

5. CULTIVATING TRUST

5.1. Facilitating trust in a science-led process

The collaborative has agreed to “let the science lead.” In practice using science-as-moderator to inform decision making. Long-term science collaboration allows for a science-knowledge-action feedback loop that includes science-informed decision making, voting on zones of agreement, ongoing research and monitoring of forest treatments, and reporting impacts of treatments and forest health to the group.

To make science accessible, presentations are a regular feature. For example, during the May 2023 convening of the Partnership in John Day, one full day was devoted to scientific presentations about the Malheur and forest management issues.⁶ Speaking to the value of learning from the scientists, Dave Hannibal (2023), BMFP Board Member and Base Manager of Grayback Forestry, Inc. offered,

So, when they sit and listen to the science itself, it helps move them to the middle. If you’re just told, ‘Well, you’re going to now do it the opposite way you’ve always done it before because we decided that,’ versus hearing the science

³ Fieldnote, May 19, 2023.

⁴ See (11/24): bluemountainsforestpartners.org

⁵ <https://bluemountainsforestpartners.org/work/zones-of-agreement/>.

⁶ Fieldnote, May 17, 2023.

behind it. Once you hear the science behind it, it makes more sense.

James Johnston (Phone interview, March 20 2023), scientist and Assistant Professor of Forestry at Oregon State University explained, “The field trip I always report my findings, do presentations. I’m deeply embedded as a member so a lot of this happens via informal interactions as well.”

5.2. A civic science?

The BMFP’s science-heavy approach allows for rigorous, ecologically sound decision making, but presents unique challenges in terms of accessibility for those with limited science background. The collaborative has learned to speak a shared language, and trust must sometimes fill the gaps when shared technical expertise is incongruent. Nonetheless, highly specialized language is, inevitably, alienating to ‘outsiders’ or non-specialists, and has the effect whether intentional or not of creating a small group of highly specialized insiders⁷.

As a collaborative, decisions that challenge orthodoxies have been met with criticism. Criticism has come from the broader environmental community with some questioning the science used and characterizing scientists engaged with the partnership as sell-outs. Other community members distrustful of federal overreach through the Forest Service have accused scientists in the region of falsifying data for political and economic ends⁸. Though it is outside the scope of this study to determine the veracity of the allegations, such challenges point to the hard path scientists walk in highly polarized settings. Further equipping scientists with skills and resources for translational, civic science for the broader public may foster legitimacy in the face of heightened polarization and distrust.

5.3. Relational trust

Relational trust cultivated through informal socialization allows goodwill to emerge. Referred to by one member as “the secret sauce” a significant amount of time is allocated for informal socialization. This includes eating lunch together during day-long meetings, taking shared snacks and coffee breaks, meeting for dinner and drinks at the local bar after the work is done, and

dinners hosted in members’ homes. Socialization allows for participants to relate to one another as people before position, bonding over shared interests be it humor, food, or family life. Glen Johnston (Phone interview, May 30 2023), BMFP Board President, lauded the long-term benefits of happy hour, «friendships were forged and it’s much easier to see the viewpoint of a friend than an enemy».

Informal time also allows creativity to emerge. And leaving spaces traditionally associated with conflict is beneficial. Field trips to monitor the progress and status of projects in the forest allow for informal discussions and a visceral reminder of their shared work (Antuma *et al* 2014). Glen Johnston highlighted the power of spending time in the forest together:

If we sit around a business table, [a] big old meeting table, and we’re all sitting here in our positions, we’re playing this game, where it’s like, ‘Okay, I’m a logger and I want to cut trees,’ and, ‘I’m an environmentalist and I want to save everything,’ we just get stuck in our positions. But when we’re in the forest, now... it’s green; the sun’s shining. We’re looking at the trees and forest, and it’s easier to come to the middle and it’s easier to see the other people as the good human beings that they are rather than vilify them.

The partnership is built on the mutual understanding that working together is the only path forward. As one Forest Service member quipped after a public meeting, “We either do something, or we do nothing, and it all burns”⁹.

6. CONCLUDING REMARKS

This case study examines the work of unlikely bedfellows, once feuding adversaries, environmentalists and loggers cultivation of trust in the face of multi-dimensional crises. The BMFP was able to respond to complex socio-economic and ecological needs through their science-led shared governance model. They moved through moments of crisis—economic, political, and ecological – with an approach built on shared trust in one another and in their science-led process. Since their founding, there has been less litigation than before, demonstrating conflict mitigation impacts (McLain *et al.* 2014). Their work has resulted in the restoration of 150,000 acres or approximately 60,700 hectares of forest while promoting job growth for local communities (Webb, written communication, Aug. 3 2023). Their science-led process has also resulted in knowledge production beneficial

⁷ The tension between fully participatory-democracy and specialized knowledge is a hallmark of organizations and a perennial concern. See Robert Michels “iron rule of oligarchy” (1911).

⁸ Phone interview, June 1, 2023.

⁹ Fieldnote, May 17, 2023.

to understanding best practices on the Malheur and in other regions of the American west (Johnston *et al.* 2021; Latif *et al.* 2019; Watts 2019).

This paper advances the literature on trust in CFM by foregrounding science as a resource for moderating conflict and leading decision making. The analysis confirms Gauchat's assertion that scientific legitimacy and its commitment to objectivity are «crucial social resources for building consensus in ideologically polarized policy arenas» (2012: 168). Literature on the polarization of science emphasizes conservatives declining trust in scientists, concluding that conservatives «love the science, hate the scientist» (Mann and Schleifer 2020: 305). This case study has shown that trust can be built through science-led collaboration, leading conservatives to not only love science and the scientist but also become enthusiastic partners in the implementation of science-led forest management. The science-rooted process of the BMFP model has allowed conservatives in this context to grow increasingly sympathetic to both science and scientists, counting scientists among their friends. This points to the value of communicating science as a process to community members and highlights the trust-building potential such activities can imbue.

There are, however, limitations. In interviews, members of BMFP openly pondered if the same model could have traction elsewhere, humbly acknowledging the unique blend of personality and circumstance that facilitated gains. More, though the partnership draws a diverse range of stakeholders, settings characterized by highly asymmetrical power relations could face further challenges. Those historically marginalized, disenfranchised, or with little power would potentially lack the critical leverage necessary to bring powerful players to the table in a resource conflict setting.

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