Cooperation across ownership boundaries is critical to most conservation efforts in mixed ownership landscapes. Where owner objectives vary widely, as at public-private landownership boundaries, cooperation can be especially challenging. This research explores the opportunities and challenges for cooperative fire management among public and private forest managers in the John Day Valley of Eastern Oregon, an arid and fire-dependent region dominated by large federal ownerships and private ranches. Project objectives are to: (1) describe and analyze the historical context of fire management, and (2) describe and analyze current perspectives toward cooperative fire management among land managers. Field methods include in-depth interviews, participant observation, and participatory action research activities. Methods of data analysis consist of theoretical coding and document analysis. This research suggests that building the trusting relationships that are required for cross-boundary cooperation it made difficult by the existence of a complex web of land tenure considerations, differential ideologies, power inequities, and a sense of uncertainty produced by social change.
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Conflict and Cooperation at the Public-Private Interface: A Case Study of Fire Management in Eastern Oregon

by

Stefan Andrew Bergmann

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DEDICATION

This thesis is dedicated to my loving parents.
Conflict and Cooperation at the Public-Private Interface: A Case Study of Fire Management in Eastern Oregon

1.0 INTRODUCTION

Cooperation across ownership boundaries is critical to most conservation efforts in mixed ownership landscapes. Ecological processes fall on a quilt of landownership boundaries and administrative lines that reflect an array of management objectives. Where owner objectives vary widely, as at public-private boundaries, cooperation may be especially challenging. As the severe fire season of 2000 has illustrated, fire remains a dominant ecological force in the West that regularly crosses between public and private land (Landres et al. 1998). This research examines cooperation at this interface, with fire management as an example.

In eastern Oregon, cross-boundary fire management is playing an increasingly important role in forest management (Mutch et al. 1993). Since European settlement in the mid-1800s the combination of suppressing wildfire, replacing ponderosa pine (Pinus ponderosa) with fire-intolerant species of fir, and extended periods of drought have resulted in dying forests (Langston 1995). Declining forest productivity, expanding insect epidemics, and persistent tinder dry conditions in the woods have linked fire management to debates over ecological stewardship and the restoration of public and private forests alike. Growing attention to the role of cooperation among public land managers and adjacent private landowners for forest management, as well as the cross-boundary nature of forest health and fire, has lead to interest in cooperative fire management. In particular, the U.S. Forest Service has been working to develop
partnerships with adjacent private landowners, in which prescribed burning occurs in cooperation with private forest managers. Partnerships can enable public land to be cost effectively burned and spread the ecological benefits of fire among public and private forests.

This research examines the complexity of cooperative fire management in the John Day Valley of Eastern Oregon, an arid and fire-dependent region dominated by large federal ownerships and private ranches. The project addresses the question: What are the opportunities and challenges for cooperative fire management among public and private forest managers in the John Day Valley?

1.1 Rationale

Prescribed fire has been proposed as a significant tool to address forest health concerns in and around the John Day Valley. The Malheur National Forest, which is the dominant landholder in Grant County, is faced with meeting the needs of local resource-dependent communities and a distant American public. The use of prescribed fire and other techniques to address forest health on federal land must balance local and national interests. In addition to political support in the form of institutional structures and funding, successful cooperation relies on productive interactions among individuals. Consequently, cooperative fire management must consider the relationships among local land managers as much as the political context in which they fall.

In the John Day Valley, many community members believe that addressing forest health through fire and other management techniques provides an opportunity to stabilize the local economy. Presently, the local timber industry is reorganizing in response to
reductions in allowable harvest from the Malheur National Forest, as well as industry-wide changes stemming from technology, consumer preference, and globalization. Some community members see logging, piling, and burning as saviors for the economically declining, resource-dependent communities in the Valley. Others fear the potential abuses that might come with such practices. Still, there appears to be general agreement that the health of the local economy is linked to the health of the forests. For example, timber can be essential to the long term survival of private ranches because wood can supplement income when beef prices are low. Understanding the opportunities and challenges facing cooperative fire management in the John Day Valley may have application to other ecosystem management issues in mixed ownership settings, help land managers structure effective fire management partnerships, and build the capacity for stakeholders to work through conflict.

1.2 Research Objectives

The goal of this research is to identify and describe factors that facilitate and constrain cooperative fire management among adjacent public and private forest managers in the John Day Valley. In this project, private forest managers include non-industrial and industrial and public forest managers are affiliated with federal and state governments, mostly the USDA Forest Service - Malheur National Forest. The research is composed of two objectives:
1.2.1 Objective 1: Historical Context

The purpose of this objective is to describe and analyze the historical context of cooperative fire management in the vicinity of the John Day Valley. Six research questions address the objective:

1. What have been the social and environmental effects of historic patterns of wildfire?
2. How has prescribed fire and wildfire historically been managed by the local public and private sectors?
3. What are the historic perspectives toward the use of prescribed fire in local forests?
4. What interaction, dialogue, and collaboration among local managers have occurred in the past?
5. What are the historic roots of the current efforts at cross-boundary fire management?
6. How might the historical context of fire management influence the current perspectives toward cooperation?

1.2.2 Objective 2: Current Perspectives

The purpose of this objective is to describe and analyze the current perspectives toward cooperative fire management among land managers in the vicinity of the John Day Valley. Four research questions address the objective:
1. What conflicts and cooperative efforts surround cross-boundary fire management in the area?

2. What are the current opportunities for interaction, dialogue, and collaboration among local managers?

3. What is the role, if any, of prescribed burning partnerships for forest management as envisioned by local managers?

4. How do the perspectives of cooperative fire management compare among local managers and other concerned parties?

1.3 Overview of Thesis

The thesis is divided into five remaining chapters: (1) Research Setting, (2) Literature Review, (3) Research Design, (4) Results, and (5) Discussion and Conclusion. Research Setting introduces the John Day Valley and the local context of fire management. Literature Review outlines important works that inform this project. Research Design details the conceptual framework and specific procedures used to address the research questions. Results details the themes emerging from the data in a narrative format. Discussion and Conclusion interprets the findings, places them within their social and political context, and suggests areas for further research.
2.0 RESEARCH SETTING

The John Day Valley is tucked in the dry southern end of the Blue Mountains of eastern Oregon (Figure 1). The Valley is named for the Upper Main Stem of the John Day River, which begins at the convergence of mountain streams near the Valley’s eastern flanks, flows east-west through fields of hay and alfalfa, and leaves the Valley at its western end at Picture Gorge, a narrow chasm created by millennia of flowing water. The river continues on to the northwest, eventually becoming a major tributary to the Columbia River and an important drainage for eastern Oregon. The bottomland of the

Figure 1. John Day Valley watershed, Oregon.
John Day Valley is home to large private cattle ranches and, increasingly, ranchettes and other private residences.

The history in the John Day area is a story of successive waves of people who each uniquely shaped the land. Prior to European settlement in the nineteenth century, Northern Paiute Indians were the principal occupants, but the Umatilla, Cayuse, Tenino, and Walla Walla ranged south into the John Day River Basin during their migrations in search of food (Mosgrove 1980). As an adaptation to the arid climate, the tribes in the Blue Mountains were nomadic; they created a network of trails and camps across the landscape that helped them follow the seasonal availability of plant and animal food sources (Langston 1995). As they moved, Indians used fire to shape the vegetation to their advantage, creating the “wilderness” later encountered by European explorers. “Indians burned different kinds of forests for different reasons, and their fires had different ecological effects depending on the type of forest and the timing, intensity, and frequency of the fires” (Langston 1995). The Indians’ extensive use of fire contrasted with the settlers’ fear of fire, and in doing so fueled the association of fire and Indians alike with wild and untamed wilderness in the eyes of settlers (Robbins 1997; Langston 1995). In the early 1800s, European fur trappers and explorers began to displace Indians as they opened the way for settlement. The discovery of gold in 1862 on Canyon Creek, near present day Canyon City, brought miners followed by cattle ranchers and timber companies (Grant County Oliver Museum 1983; Mosgrove 1980). Mining has diminished, and today the local economy is heavily dependent on cattle, timber, recreational hunting, and government agencies (Grant County Chamber of Commerce 1999; Yohannan 1998).
The John Day Valley is located in Grant County, one of Oregon’s most economically depressed and resource-dependent counties. Most of the county’s land base (60 percent) is publicly owned; the Malheur National Forest administers 90 percent of the 1.7 million acres of federal land in Grant County, and the BLM manages the remainder (Obermiller and Stringham 1993). While Grant County currently has only three forest product mills, all located in the John Day Valley, wood products manufacturing accounts for over 95 percent of the county’s manufacturing jobs compared to 21 percent statewide (Yohannan 1998). Mill worker layoffs at the Malheur Lumber Company in 2000 parallel the sharp reduction in timber harvest levels from federal land in the mid 1990s, when annual harvests from the Malheur National Forest were cut by two-thirds (Figure 2).

Reductions in timber harvest on federal forests, persistently low beef prices, and the seasonal nature of tourism have contributed to the area’s volatile unemployment.

![Figure 2. Timber removed from Malheur National Forest, 1909-1999. Based on data provide by Malheur National Forest.](image)
Jobless rates in Grant County are among the highest and most variable in the state (Yohannan 1998). In 1997, for example, the county’s monthly unemployment rate ranged from 6.7 to 23.9 percent, compared to the statewide range of 4.8 to 7.5 percent. The county’s average monthly unemployment rate for 1998 (13.6 percent) was the highest for all labor market regions in Oregon and substantially higher than the 1998 average statewide rate of 5.6 percent (Angle 1999). Unlike much of the rest of Oregon, Grant County’s population of around 8,000 has remained relatively stable (US Census Bureau 1999). A report released by the Oregon Employment Department states: “Since 1990, Oregon’s population has grown by 13 percent, whereas Grant County’s population has increased by merely one percent” (Yohannan 1998). The John Day Valley itself remains the most populated geographic area within Grant County. In 1998, the Valley was home to 4,445 people among its five incorporated towns (US Census Bureau 1998). A recent report issued by the Interior Columbia Basin Ecosystem Management Project (ICBEMP 1998) offers evidence suggesting the Valley’s economic isolation is associated with its dependence on wood products manufacturing, agriculture, and federal government agencies for employment in more than half of its towns. The reliance on natural resources from public land makes the Valley’s economy especially vulnerable to changes in federal land management policy (ICBEMP 1998; Obermiller and Stringham 1993). These include policy changes involving ecosystem management, cross-boundary cooperation, and fire management.
3.0 LITERATURE REVIEW

The purpose of this review is to describe key studies undergirding the topical and theoretical components of the project. The review is organized into five sections: (1) Fire Management, (2) Collaborative Resource Management, (3) Land Tenure, (4) Power Relations, and (5) Resource Dependency. Fire Management describes the influence of fire in northeast Oregon ecosystems, including the culture of fire and the use of prescribed fire for forest management. Collaborative Resource Management describes the increasing interest in collaborative, place-based approaches to natural resource management such as public-private partnerships. Land Tenure details issues related to the fundamental rights associated with landownership. Power Relations is concerned with power as a social phenomena, especially how the distribution of power can shape social relations, the structure of political institutions, and the relationship between bureaucracies and resource-dependent communities. Resource Dependency sets the economic context for the project, which takes place in a community that has been highly dependent on timber and ranching for some time.

3.1 Fire Management

In the Pacific Northwest, fire has historically played a major role in shaping forests (Agee 1993; Mutch et al. 1993). The region’s diverse forest types have evolved with an assortment of fire regimes (Agee 1993). Over the past few centuries, average fire return intervals in Oregon are believed to have ranged from 15 years in ponderosa pine and lodgepole pine (Pinus contorta) forests to as much as 800 years in subalpine
ecosystems (*Tsuga mertensiana*; *Abies lasiocarpa*) (Agee 1993). In the Blue Mountains of eastern Oregon, forests historically burned in a mosaic pattern in which fire regimes ranged from low to high severity (Agee 1990). Low severity regimes were characterized by frequent intervals (1 to 25 years) of low intensity fires that mostly burned undergrowth (Agee 1990); this created the low elevation open forests of large pine that nineteenth century pioneers described as “park-like” (Robbins 1999; Robbins 1997; Langston 1995). High severity regimes burned at infrequent intervals (100 or more years) and were characterized by high intensity stand replacement fires (Agee 1990), regimes typical of today’s high elevation wilderness areas. Still other areas burned with moderate severity, in which fire return intervals ranged 25 to 100 years and often included partial stand replacement (Agee 1990).

Fire has always been a cultural as much as an ecological issue (Pyne 1982). For example, although pre-colonial North America was shaped significantly by fire, colonists misunderstood its role in shaping the landscape of the New World they encountered (Cronon 1983). In viewing fire as an agent of destruction, colonists failed to understand that frequent fires set by Indians helped to create the very landscape that attracted them: “because the enlarged edge areas [produced by fire] actually raised the total herbivorous food supply, they not merely attracted game but helped create much larger populations of it. Indian burning promoted the increase of exactly those species whose abundance so impressed English colonists” (Cronon 1983: 51). As settlers pushed into the frontier they carried with them “stories” (Kittredge 1996) that portrayed fire as a bane to civility, something to be tamed along with the Indians (Robbins 1997; Langston 1995; Cronon 1983). Even as far west as Oregon settlers often viewed conflagrations as threatening the
land they loved, even though it was fire that most shaped it (Langston 1995). The Blue Mountains of eastern Oregon that the settlers encountered was shaped by culture at least as much as much as by fire (Robbins 1999; Robbins 1997; Langston 1995). While lightning has always been a major source of ignition in the region and remains so today, regular burning by Indians was a significant factor in setting afire grassland and forest (Boyd 1999; Robbins 1997; Agee 1993). “Both culture and nature were responsible for shaping the ecology of the intermontane region, yet the preponderance of evidence suggests that culture was the major cause of fire” (Robbins 1999: 224).

In the Blue Mountains, a century of fire suppression and intensive forestry has converted a landscape coveted for its widely spaced ponderosa to one characterized by thick and decadent timber (Langston 1995; Mutch et al. 1993). Early federal foresters adhered to stories that described fire and forests as natural phenomena that were to be controlled (Langston 1995: 12). It did not matter that the idyllic image of a high yielding productive forest was not achievable in the Blues without dire consequences (Langston 1995): foresters applied eastern forestry techniques that decimated the ash soils, fought fires which, in turn, contributed to a buildup of debris, and over cut timber because they overestimated the rate of tree growth in the unfamiliar aridity. Management of the area’s national forests focused on converting slow growing ponderosa pine to high yielding species of fir (Langston 1995). Combined with natural cycles of insects, disease, and drought, the practices have produced the volatile forest conditions and corollary issues of forest health that are prevalent today (Finneran 1995; Langston 1995; Mutch et al. 1993).

Increasingly, current foresters view the reintroduction of fire as one tool to benefit the health of forest and rangeland ecosystems (Norris 1990). Prescribed fire is used to
lower wildfire hazards, control insects and disease, reduce competition from undesirable vegetation, prepare sites for tree planting, and improve forage for cattle and wildlife (Finneran 1995; Koehler 1993; Norris 1990). *Prescribed fire* refers to the intentional setting of fire to adhere to specific silvicultural or other objectives, while *prescribed natural fire* pertains to wildfires that are started by lighting or other non-human means and allowed to burn. Although many foresters support the judicious use of prescribed fire or prescribed natural fire, the practices only exist because society allows them (Wade 1993).

Prescribed burning is a social as well as technical and ecological issue (Martin 1995; Wade 1993). Prescribed fire involves issues of public health such as air quality (e.g., smoke emissions) and water quality (e.g., soil erosion and sedimentation), in addition to concerns about the impact on aesthetics and the risk to forest resources and homes (Beebe and Omi 1993; Norris 1990; Daniel 1988). Fire managers also face regulatory constraints and constantly changing forest conditions that alter how a prescribed fire is designed and implemented (Murphy and Cole 1995; Daniel 1988). In general, public acceptability for prescribed fire has been increasing across the U.S., especially among those people most knowledgeable about wildfire, prescribed fire, and forest ecosystems (Bright 1995; Shelby and Speaker 1990). In the Blue Mountains, the general public is strongly supportive of both the use of prescribed fire and mechanical thinning to reduce fuel loads (Shindler et al. 1996). While the increase in acceptability has been attributed to effective education programs, it has been suggested that fire managers need to go a step further by developing dialogue with communities that fosters
relationship-building and trust in order to reduce future conflicts over fire management (Chambers 1993; Wade 1993).

3.2 Collaborative Resource Management

Collaborative resource management encompasses an array of increasingly discussed approaches for managing conflict and for addressing ecosystem issues. A new and confusing terminology is accompanying this trend; collaborative groups have been called partnerships, consensus groups, community-based collaboratives, watershed efforts, and alternative problem solving efforts (Conley and Moote 2000). The approaches are considered part of broader movements toward the local management of natural resources including collaborative conservation, community forestry, community-based conservation, grassroots ecosystem management, and co-management (Conley and Moote 2000). Regardless of the terminology, collaborative resource management is typically place-based and involves multiple stakeholders who make decisions through consensus (Conley and Moote 2000; Wondolleck and Yaffee 2000). Collaboration may be defined as one form of cooperative behavior (Yaffee 1998), and in this project the terms are nearly synonymous. Collaboration generally occurs among parties who need the assistance of others in order to meet their own interests; it involves "the pooling of appreciations and/or tangible resources, e.g., information, money, labor, etc., by two or more stakeholders to solve a set of problems which neither can solve individually" (Gray 1989: 912). Cooperation is broader, referring more generally to people who work together toward a common purpose (Webster's New World Dictionary of the American Language 1984). The act of collaborating or cooperating may be described as a form of
collective action, in which the sharing of power and responsibility is essential (Selin and Chavez 1995: 190): "Collaboration implies a joint decision-making approach to problem resolution where power is shared, and stakeholders take collective responsibility for their actions and subsequent outcomes from those actions." Within natural resources management, interest in collaborative approaches to decision-making has been sparked by the high transaction costs associated with litigation and other traditional modes of protecting one's interests (Weber 1998).

Collaborative resource management is viewed as one avenue to address conflicts over natural resources. A conflict usually involves disagreement over tightly held values and centers around the perception of incompatible goals among interdependent parties (Daniels and Walker In press). People deal with conflicts in different ways; some passively engage in them through accommodation or avoidance, while others actively pursue their goals competitively or collaboratively (Daniels and Walker In press). As a form of active engagement, collaboration is a strategy distinguished by its assertiveness and "a willingness to cooperate and collaborate while remaining principled about your goals" (Daniels and Walker In press). Collaborative problem solving falls on a continuum of alternative dispute resolution processes that range from unassisted to assisted, depending on the extent to which factions are able to work together without the aid of a third party (Manring 1998). For example, collaboration and negotiation are normally unassisted forms of alternative dispute resolution, while facilitation and mediation typically require an outside party. As an approach for conflict management, the emphasis of collaboration is typically on achieving a mutually acceptable agreement through some form of consensus (Conley and Moote 2000).
Collaborative resource management is also touted as a way to address ecosystem issues. At the core of this approach is ecosystem management, in which management goals are directed at sustaining ecosystem functions over time and across administrative and ownership boundaries (Landres et al. 1998; Yaffee 1996). Ecosystem management emphasizes the interdependence of social and ecological systems. Recent conceptions suggest that social science can help to achieve greater public involvement using collaborative approaches (Endter-Wada et al. 1998; Force and Machlis 1997; Machlis, Force, and Burch 1997). Unlike its use in conflict management, the emphasis of collaboration for ecosystem management is typically on "developing a common vision for a landscape and then undertaking projects and policy changes that implement that vision" (Conley and Moote 2000: 3). Indeed, in the last decade numerous community-based plans have been developed for the management of mixed ownership landscapes including the Greater Yellowstone Ecosystem (Goldstein 1992), Applegate Partnership (Sturtevant and Lange 1996), Oregon Plan for Salmon and Watersheds (State of Oregon 2001), and federal Resource Advisory Councils.

Along with the increasing interest in collaborative resource management, there has been criticism. Much of the skepticism comes from national environmental groups and centers around the place- and consensus-based nature of collaboration. In his 1995 report to the Sierra Club board of directors, chairman Michael McCloskey argues that collaborative, consensus-based efforts to address natural resource issues devolves power to local stakeholders at the expense of national interests (McCloskey 1995). By geographically shifting decision-making to local communities, collaboration among stakeholders removes power from the Sierra Club's primarily urban constituency: "It is
curious that these ideas would have the effect of transferring influence to the very communities where we are least organized and potent" (McCloskey 1995: 5). He suggests that industry and community leaders are strategic in supporting local collaborations, arguing that industry sees the approaches as means of gaining a competitive advantage over national environmental groups and federal agencies, and community leaders see them as ways of creating more acceptable solutions. In addition, the consensus upon which collaboration typically relies can discredits differences in values: “small local minorities are given effective veto over positive action...only the lowest common denominator ideas survive the process” (McCloskey 1995: 7). Others view collaborative decision-making as fundamentally flawed because the approach runs counter to the system of checks and balances upon which American democracy is based (Coggins 1998). Interest groups have become the enforcement mechanism for environmental statutes, and settling disputes in the legal system remains a critical facet of American governance: “the law and its processes, imperfect as they are, are still far preferable to local negotiation as means for resolving public resource issues” (Coggins 1998: 27). For some critics, the dangers of collaboration are too great to chance; formal legal processes should be used for resolving public resource issues (Coggins 1998).

Collaborative resource management needs to be assessed for its effectiveness at implementing positive solutions on the ground (Conley and Moote 2000; Kenney 2000).

The conception of social capital is central to understanding collaboration and cooperation. Social capital can be used to describe the social norms, trust, values, and institutions that affect interactions among people (Feldman and Assaf 1999; Putnam 1993; Coleman 1988). The metaphor implies that, like economic capital, social capital
can accumulate, it can be converted from one form to another (Bourdieu 1986), and if ignored it can depreciate over time (Robison and Hanson 1995). Unlike economic capital, however, social capital can accumulate with use (Evans 1996). The metaphor may be useful for understanding cooperation because social capital presumably influences the capacity of individuals to work through conflict and the potential for cooperation (Molinas 1998; Brown and Ashman 1996; Robison and Hanson 1995). Social capital can also be thought of as representing assurance mechanisms. According to Weber (1998), people will collaborate only if they are confident that doing so will be productive. “Without assurance that agreements will be binding and that everyone’s stake in policy outcomes will be protected, each player has an incentive to avoid the unknown dynamics of collaboration and stick with the known costs of the command-and-control-dominated conflict game” (Weber 1998: 20). In analyzing innovative approaches toward environmental regulation, Weber (1998) describes the “new game of collaboration” as an opportunity to avoid the high transaction costs of litigation, stalemate, and gridlock typifying resource conflicts.

### 3.3 Land Tenure

Land tenure refers to the rights and resources associated with owning or controlling land. It consists of “the diverse strategies by which humans exert claims on their resource base” (Geisler and Salamon 1993: 529). In doing so, land tenure reflects the societal and individual values about the purpose of land and institutions of ownership (Fortmann 1996; Wunderlich 1993), a sort of “social purpose of land” (Bromley 1998).
Social relationships, identity, ideology, and culture influence how property is perceived and how control to land is distributed (Fortmann 1996; Salamon 1993).

The tradition in the U.S. of separating landownership into public and private fails to capture the fluidity of tenure categories. Recent societal changes in the U.S. and an exploration of international connotations of property have combined to challenge the division of ownership into public and private (Fortmann 1996; Geisler 1993). Today additional tenure categories or “new property” are emerging because of shifting values, an increasing and aging population, a shrinking usable land base, and occupational restructuring (Geisler 1993). Both in the States and abroad, a range of tenure systems exist that blur the distinction between public and private ownership (Geisler 2000a; Fortmann 1996; Geisler 1993; Geisler and Salamon 1993).

Perhaps nowhere is the blending of public and private ownership more apparent than in the management of natural resources, where ecosystem goods and services such as clean water and air are increasingly being sought from all ownership types. One tenure system, the ecoregional estate (Geisler 2000a), is a new property system that is particularly relevant at this interface. The ecoregional estate is considered transboundary and has emerged from the current trend toward ecosystem management and conservation biology. It is a tenure system “both public and private, yet in many ways neither” (Geisler 2000a: 78). “More than being a bundle of rights residing in a single owner, contemporary property is a series of separable rights often held by a bundle of owners” (Geisler 2000b: xiii). The “bundle of owners” makes the ecoregional estate neither exclusively public nor private. To bring order to such blending of public and private tenure systems, Geisler (2000a) conceptualizes today’s public lands as being composed
of horizontal and vertical rights; horizontal rights include those arrangements such as permits, leases, and rights of way that allow for private access to public goods, while vertical rights refer to public goods and services that occur on public land such as air space and "viewsheds." Geisler (2000a) claims that private land is influenced by the public sector as much as public land is by private interests.

Landownership has long been considered a surrogate for social, economic, and political power. "Absolute ownership is usually a prescription for concentrated ownership and centralized management of a valuable resource by a relatively small group of super-enfranchised interests" (Geisler and Daneker 2000). When the owner has primary responsibility for establishing management practices on his or her property, the land itself becomes indicative of power and wealth.

Ownership establishes the right to decide how a piece of land will be used and fixes responsibility for that use. The benefits arising from land ownership are closely related to the size and value of land holdings and to the type of ownership interests. Land not only produces income but serves as a store of wealth and power (Lewis 1980).

Similarly, changes in ownership can have far reaching effects. Evidence suggests that in the U.S. ownership concentration is increasing along with the number of absentee landowners (Geisler 1993). In rural communities, consolidation has been implicated in reduced social and economic well-being (Bliss, Sisock, and Birch 1998; Sisock 1998). Ownership consolidation and increases in absentee landowners may also limit a community's capacity for economic diversification and negatively affect the local quality of life and ability to make a living (Fortmann 1996; Gaventa and Horton 1984). Cross-boundary cooperation among public land managers and private landowners further
challenges the traditional polarity of public and private tenure categories by involving the
sharing of power among managers of small and large ownerships. An exploration of
cooperation at the public-private landownership interface demands that land tenure be
understood as a dynamic, complex, and value laden social process.

3.4 Power Relations

Power is a key sociological concept used to explain a broad set of social
phenomena, including the structure of social groups, relationships, and institutions. As
such, the concept has multiple definitions. Webster’s New World Dictionary of the
American Language (1984) captures its ranging uses and defines power as “the ability to
do, act, or produce.” Within the sociological literature, notions of power center on the
ability to control others or dominate social settings to produce desired results. This thesis
utilizes a contemporary and pragmatic conception of power, which centers around the
ability to achieve preferred outcomes: “[Power is] a mutual interaction between the
characteristics of a person and the characteristics of a situation, where the person has
access to valued resources and uses them to achieve personal, relational, or
environmental goals” (Coleman 2000: 113). Inherent in Coleman’s conception is the
division of power into personal components (including cognition, ideology, and
motivation) and situational components (including history, norms, and culture). While
Coleman’s definition is geared toward understanding the role of power in interpersonal
conflict, his model is useful for explaining the influence of institutions.

The distribution of power between government bureaucracies and their
constituents is particularly relevant to the management of natural resources. Any
interactions between a government agency and the public it serves can potentially influence power relations between the two, but the traditional medium for relationships between constituents and bureaucracies is through interest groups (Lunch 1987). There are two main schools of thought regarding the power relations between an agency and its constituents: society-centered theorists believe that constituents tend to dominate agencies, while state-centered theorists see agencies as having the distinct advantage because of their ability to exert pressure through command and control regulations (Hooks 1990).

The degree to which a government bureaucracy or its constituents dominates the relationship has important implications. Unlike power, domination “implies a more consistent, patterned structure of control” (West 1994: 415). Several mechanisms of domination between bureaucracies and constituents have been described including power-based domination, domination through constellation of interests, and cooperative domination. The Rural Sociological Society (RSS) Task Force on Persistent Rural Poverty explains that power-based domination “involves the exertion of external power resources by a constituency...leading to the control of internal social relations within a bureaucracy” (RSS Task Force on Persistent Rural Poverty 1993: 148) They point to the example of how, in the 1930s, the Forest Service dismantled the allotment rights that protected small grazers, after large ranches threatened to support moving the agency from the U.S. Department of Agriculture to the U.S. Department of Interior. Domination has also been described as occurring through a constellation of interests, in which “a constituency dominates an agency because it has some resource or capacity which the agency needs, so the agency acts on behalf of the constituent” (RSS Task Force on
Persistent Rural Poverty 1993: 149). In the 1950s, for instance, the Forest Service increased the number of grazing permits for large ranches on the national forest system in order to meet a growing demand for beef nationwide, a move conceivably stemming from the agency’s connection to the Department of Agriculture. West (1994) equates this form of domination with monopoly power. Finally, cooperative domination predicts that social dynamics within a bureaucracy and between the agency and its constituents can produce similar ideologies, resulting in a “voluntary coalition between the state and other private or public groups” (RSS Task Force on Persistent Rural Poverty 1993: 150).

Across the country there are myriad examples of how the distribution of power among agencies, companies, and constituents can affect resource-dependent communities. In the rural South, evidence suggests that landownership consolidation by pulp and paper mills increases their economic dominance in local communities and negatively affects local well-being (Bliss, Sisock, and Birch 1998). In Appalachia, increasingly concentrated ownerships and absenteeism have shifted the majority of power toward corporations, effectively limiting local economic diversification (Gaventa and Horton 1984). In one valley in Central Appalachia, for example, the domination of local resources by a single mining company has perpetuated the inequality and quiescence of the locally oppressed (Gaventa 1980). In Plumas County, California, residents blame the control of local natural resources by outside interests on their inability to live off the natural richness that surrounds them (Kusel and Fortmann 1991). In addition, unequal power distributions between the Forest Service and local constituents have been blamed for rural poverty (West 1994; RSS Task Force on Persistent Rural Poverty 1993). The relative distribution of power in such communities appears to have far reaching effects.
3.5 Resource Dependency

Resource dependency refers to conditions in which communities or regions are heavily reliant on the exploitation of a single natural resource for a substantial portion of total employment and income (Joshi et al. 2000; Machlis and Force 1988; Peluso, Humphrey, and Fortmann 1994; Humphrey 1990). The economies of natural resource-dependent areas may be characterized as extractive (e.g., timber-based) or non-consumptive (e.g., tourism-based). Alternatively, natural resources may serve as local “aesthetic backdrops” that attract residents who make their money elsewhere (Peluso, Humphrey, and Fortmann 1994). In each of these cases, resource dependency is typified by limited economic opportunity for local communities.

Several general social forces are believed to contribute to resource dependency including rural deindustrialization, the political and economic power of firms, bureaucratic domination, and segmented labor markets (RSS Task Force on Persistent Rural Poverty 1993). *Rural deindustrialization* refers to plant closings, layoffs, and wage concessions in resource-dependent communities. Automation within the U.S. timber industry, for example, has produced in a more efficient wood products industry at the expense of forest workers and their families, who experience low income levels and reduced opportunities for local employment (Humphrey 1990). In turn, the limited economic opportunity in resource-dependent communities makes local people vulnerable to the desires of powerful resource extraction firms and government bureaucracies. A recent study details how a tax abatement policy used to recruit the pulp and paper industry to rural Alabama disinvested in public education (Joshi et al. 2000); the presence of large pulp and paper companies generated little tax revenue for public investment.
Similarly, the shift within the U.S. Forest Service from an extraction to a multiple-use directive which might, in part, stem from *bureaucratic domination* has helped lead the “residents of American timber dependent communities [to] face an increasingly uncertain and stressful existence” (Humphrey 1990: 35). Finally, rural labor markets tend to become segmented from larger markets as a result of the economic relationship between regional economic centers and resource-dependent communities at the periphery; *segmented labor markets* often result in lower pay and fewer benefits for rural employees (RSS Task Force on Persistent Rural Poverty 1993).

“Dependicia” or dependency theory is a useful concept for understanding the economic dominance of natural resources in communities. The theory is concerned with the economic relationship between urban centers and resource-dependent communities in the hinterland (Smith and Steel 1995; Humphrey 1990; Swinth and Alexander 1990). The theory contends that resource dependency is a product of the disproportionate political and economic power between “core” areas, dominated by politically powerful urban people, and “peripheral” rural communities. Humphrey (1990) attributes declines in timber towns to the differential power relations between corporate offices in urban centers, where company decisions are made, and the communities around which timber is extracted. He refers to timber towns as “corporate satellites.”

A substantial portion of timber production today involves capital owned and managed in large metropolitan centers such as New York City, Seattle, Toronto, and San Francisco. Whatever managerial or white collar class resides in a timber dependent community, therefore, is directly or indirectly tied to corporate activities far removed from a forested area, and the corporate elite serves as a critical communication node between a metropolitan-based wood or paper production company and the local and regional harvesting of wood and its derivatives (Humphrey 1990: 37).
The disparity between the need for economic stability in rural communities and that of a profit-motivated industry driven by market conditions is at the heart of dependicia theory. Indeed, the common conception that the market rules confronting the core and periphery are equivalent may be a fallacy (Swinth and Alexander 1990). A core area generally has a far greater ability to absorb rapid changes in prices and has more influence on policies guiding land management than do individuals living in corporate satellites. Furthermore, companies may be able to absorb changes in the market to a greater extent than can family forestland owners.

Resource dependency sets the context for the rural issues involved in this research. The longtime reliance on timber coming from federal land affects social and economic conditions in eastern Oregon communities such as those in the John Day Valley. By limiting the opportunities for economic diversification, resource dependency has contributed to a host of social ills in rural communities, including rural poverty and other measures of reduced well-being (Cook 1995; Peluso, Humphrey, and Fortmann 1994; RSS Task Force on Persistent Rural Poverty 1993). Current attempts to implement cross-boundary cooperation in such communities are going to have to address the resource-dependent context of these areas.
4.0 RESEARCH DESIGN

The purpose of this chapter is to detail the research design used to address the research questions. The chapter is divided into two sections: Conceptual Framework and Methodological Procedures. Conceptual Framework details the main assumptions underlying the design. Methodological Procedures outlines the specific procedures used to collect and analyze the data. The chapter closes with a brief description of the reasons that I chose this particular design.

4.1 Conceptual Framework

The conceptual framework includes the research approach and strategies of inquiry. Research approach is equivalent to research paradigm, which may be defined as "the basic belief system or worldview that guides the investigator" (Guba and Lincoln 1994: 105). An approach helps the researcher to identify the topic of study, chose appropriate methods, and interpret the meaning of collected data. Strategies of inquiry, a term borrowed from Denzin and Lincoln (1994), refer to those sets of methods that allow the researcher to move from a research approach to the empirical world. The strategies define "the skills, assumptions, and practices used by the researcher" (Denzin and Lincoln 1994: 202). They delineate the relative importance of data and define how it is interpreted. Together, the research approach and strategies of inquiry inform the procedures used to collect and analyze data. In this section, I begin by describing the research approach that most closely underlies the chosen methods. Next, I clarify the
specific strategies that inform the methods. Finally, I address the issue of trustworthiness.

4.1.1 Research Approach

I draw the research approach primarily from naturalistic inquiry. Also known as constructivism, a naturalistic approach presumes that reality is constructed in the minds of individuals (Schwandt 1994; Lincoln and Guba 1985). Naturalistic inquiry is an exercise in fluidity; knowledge is interpreted, and each of us assigns meaning to phenomena based on our perception, experience, and epistemology. In contrasting the approach with positivism, Lincoln and Guba (1985: 37) describe five axioms of naturalistic inquiry: (1) realities are multiple, constructed, and holistic; (2) knower and known are interactive and inseparable; (3) working hypotheses are time- and context-dependent; (4) it is impossible to distinguish causes from effects; (5) inquiry is value-bound. Naturalistic inquiry assumes social processes are most completely described when research emphasizes the natural setting or context, intuitive knowledge, and qualitative methods. It is supported by an adaptive research process emphasizing reflexivity, an emergent design, inductive data analysis, and grounded theory. The strategies and methods used in this research reflect a naturalistic approach.

4.1.2 Strategies of Inquiry

As is typical of qualitative research, this project draws from an array of research strategies including case study, ethnography, grounded theory, historical social science,

1 However, naturalistic inquiry is not limited to qualitative methods (Erlandson et al. 1993).
and participatory action research. A case study is a research strategy that assumes social phenomena cannot be disassociated from the "real-life context" (Yin 1994: 13). It follows that a case study has two broad components: the phenomenon of interest and its context. This project is a case study of cooperative fire management among public and private land managers in the John Day Valley of eastern Oregon. The phenomenon of interest is cooperative fire management, and the context is the public-private landownership interface in the vicinity of the John Day Valley. The definition of the case has important implications for the unit of analysis and thus the extent to which the results can be generalized.

The unit of analysis is equivalent to what or whom is being studied (Babbie 1998). In the narrowest sense, the unit of analysis in this study is the individual; I attempt to understand the perspectives of individuals and groups of individuals regarding cooperative fire management in the John Day Valley. From the gathered viewpoints, I develop themes that can be extrapolated to the John Day community, which is delineated by the context. In a broader sense, when comparing the themes from this study to other research the case corresponds to the unit of analysis. I collected no data outside of the Valley, and therefore I cannot generalize beyond the case. Still, the research may have application to other issues and communities falling within similar contexts. For instance, the research may inform cross-boundary management in other mixed ownership settings by serving as an example for practitioners to consider when trying to implement cooperation in their area.

Grounded theory is a research strategy that supports the understanding of social phenomena through inductive reasoning (Strauss and Corbin 1994; Glaser and Strauss
Rather than testing hypotheses, grounded theory calls for a combination of deriving inferences from the data and comparing them with additional data. In the present study, the research questions themselves were drawn from conversations I had with local landowners in the summer of 1999 (see 4.2.1 Preliminary Work). Throughout the project I have strived to use patterns emerging from the data to drive the questions and results.

*Ethnography* is a research strategy that emphasizes holism, adaptability, and reflexivity (Flick 1998; Atkinson and Hammersley 1994; Robson 1993). The intention of ethnography is to provide a “thick description” (Geertz 1973: 14) of a single group of people rather than to generalize to a larger population. Multiple sources of relatively unstructured data, such as interviews and participant observation, characterize the data used in ethnographies. The approach necessitates an adaptive research process that is open to new data sources. In an ethnography, data collection and analysis stress researcher reflexivity through an interpretive writing style because its ultimate goal is to understand the experiences and perceptions of people from their own perspectives as closely as possible. The purpose of this research is not to write an ethnography; however, I strive for the adaptability and self-reflexivity characteristic of the strategy to augment our understanding of cooperative fire management in the Valley.

*Historical social science* encompasses the assumptions that social phenomena are grounded in a historical context, and that history can only be understood through interpretation (Tuchman 1994). The strategy maintains that history is a story of lived experience (Tuchman 1994: 313): “We all live history...we live out the assumptions of our *époque* in the most mundane aspects of our daily lives.” The historical context of a
situation cannot be understood as separate from the historian's interpretation, whose point of view shapes the gathering, reading, and analyzing of documents and other historical data. In this project, I elucidate the historical context of fire management in the John Day Valley in an attempt to provide insight into the complexity of cooperative fire management.

*Participatory action research* (PAR) expands upon the traditional mode of scientific inquiry by involving research subjects in the research process. PAR challenges the researcher's knowledge and control of the process, as well as the validity of scientific knowledge, objectivity, and deduced hypotheses (Greenwood, Whyte, and Harkavy 1993). PAR is characterized by the use of: (1) local knowledge, (2) multiple data sources, (3) case studies, (4) emergent research process, (5) linking scientific understanding to social action, (6) co-learning, and (7) self-reflexivity. In addition to contributing to a larger body of knowledge through research, PAR strives for participation and action. Generally, participation occurs through an interactive research process in which the researcher and local participants are involved in mutual learning through collaboration (Greenwood, Whyte, and Harkavy 1993; Ellis 1990). In doing so, PAR entails an unorthodox relationship between the researcher and the research subjects.

The researcher discards the scholar's arrogance, learns from discourse, assumes humility, and serves as a facilitative role. Knowledge emerges from practical knowledge, adds scientific data and structural analysis, and returns to the community for response, generating further understanding and empowerment (Sturtevant no date given: 8).

In PAR, action refers to collective action facilitated by the research process; action can potentially result in situational improvements or capacity-building (Ellis 1990). Action
may also come about from the ability of PAR to provide information through education, political action by identifying and advocating for change, and devolving power by encouraging local ownership of knowledge (Sturtevant no date given). In addition to deriving the research questions from conversations with community members, this study uses discussions with key informants to identify stakeholder groups and interviewees and assess the validity of claims.

4.1.3 Trustworthiness

In qualitative research, trustworthiness deals with the validity of data and results (Lincoln and Guba 1985). The concept is most important for the consumers of research, those who may apply research findings on the ground. Conventional components of trustworthiness include internal and external validity, reliability, and objectivity. Internal validity refers to the accuracy of measurements. External validity refers to the extent to which results can be generalized. Reliability pertains to the consistency of the results, such as the ability to replicate. Objectivity is said to occur when independent observers are in agreement: "if multiple observers can agree on a phenomenon their collective judgment can be said to be objective" (Lincoln and Guba 1985: 292).

Lincoln and Guba (1985) acknowledge that these criteria for trustworthiness are as equally important for naturalistic inquiry as for more conventional research paradigms. They argue that each criterion cannot be applied in the same way within naturalistic and conventional research paradigms: "Criteria defined from one perspective may not be appropriate for judging actions taken from another perspective, just as, for example, it is not appropriate to judge Catholic dogma as wrong from the perspective of say, Lutheran
presuppositions” (Lincoln and Guba 1985: 293). The authors modify each of the conventional measures of trustworthiness to make them more consistent with the naturalistic paradigm and propose how naturalistic researchers can meet the criteria. In this research, I use several of their suggested techniques to address trustworthiness for naturalistic inquiry including triangulation, prolonged engagement, persistent observation, member checking, and a reflexive journal.

*Triangulation* refers to the use of different data sources, methods, investigators, and theories to examine the same phenomenon (Denzin 1978). The practice is based on the assumption that approaching the same phenomenon from different angles can serve as a validity check, potentially strengthening research conclusions. While triangulation can be achieved in a variety of ways, the basic concept is the same.

Data source triangulation involves the comparison of data relating to the same phenomenon but deriving from different phases of the field-work, different points in the temporal cycles occurring in the setting, or, as in respondent validation, the accounts of different participants (including the ethnographer) differentially located in the setting (Hammersley and Atkinson 1995: 230).

This research triangulates among methods and data sources. The combination of methods (interviews, archival analysis, participant observation, and participatory activities) utilizes several data sources (interview transcriptions, historical documents, observations, and notes; see 4.2 Methodological Procedures). Throughout the research process conversations with key informants, my major professor, and colleagues also served to validate strong themes and identify tenuous ones.

*Prolonged engagement* is the investment of time in a study community in order to broaden the scope the research. Lincoln and Guba (1985) suggest that living within a
study community helps the researcher to learn the local culture, test information, and build trust with informants. Even my short stay in John Day enabled me to develop relationships with key informants who provided insight about the community that as a passing observer I might have overlooked.

Persistent observation involves maintaining an open perspective and testing tentative conclusions, both in an attempt to gain a deeper understanding of a local situation. In this project, I tried to maintain the openness of an ethnographer throughout the research process, and frequently discussed emerging themes with key informants and others.

Member checking is when data or interpretations are tested with members of stakeholder groups from which the data had been collected. While in the field, I often asked informants to assess the claims of others. I found that the process of member checking was especially helpful in identifying radical assertions.

A reflexive journal has broad application to the criteria for trustworthiness. Most importantly, it serves as a way to trace the researcher’s thought processes as data is collected and analyzed (Flick 1998). Over the course of the fieldwork, I maintained a reflexive journal in which I commented about the research process including observations, thoughts about methods, and comments regarding the development of my own ideas. The journal served to identify my own biases and document the changing nature of the project.
4.2 Methodological Procedures

In summer 2000 (early July through mid October) I resided in John Day, Oregon, where I conducted the fieldwork. Data collection consisted of interviewing, participant observation, and examining historical archives. Data analysis involved generating themes based on interviews, observations, and ongoing conversations with key informants. This section details the specific methods used for collecting and analyzing the data. Following a brief description of the preliminary work from which the project developed, the specific tasks undertaken for the two objectives are outlined.

4.2.1 Preliminary Work

This research developed out of a series of scoping trips I made in the summer of 1999 to determine the feasibility of conducting a place-based case study dealing with private forest issues. I also wanted to find out how accessible community members would be, and whether I would be able to develop working relationships for such a study. To learn about local concerns, I talked with about ten people in and around the John Day Valley (ranchers, industry representatives, public agency personnel, and other community members).

During these initial conversations, community members mentioned that conflicts over forest management at the interface between public and private land was one of their primary concerns. They helped me establish a list of specific issues at this interface and the role that cooperation might play in solutions. With the help of my graduate committee and several key informants, I focused the research on fire management.
because of the increasing attention that the topic was getting from federal land
management policy-makers. I did not anticipate that the topic would be as timely as it
ended up being in the summer of 2000, one of the most severe fire seasons on record in
the West.

4.2.2 Objective 1: Historical Context

This objective entails describing and analyzing the historical context of
cooporative fire management in the vicinity of the John Day Valley. The six research
questions for this objective (see 1.2.1 Objective 1: Historical Context) are addressed with
three tasks:

4.2.2.1 Pursue participation of community members

In examining the historical context of cooperation, I looked for opportunities to
involve community members in the collection and analysis of data. Key informants
helped to identify data sources and assess the validity of historical information. One
informant (a local history buff) directed me to historic newspaper articles, photos, books,
and other data relevant to the local history.

4.2.2.2 Conduct and analyze interviews

Using the interview and analysis procedures described for Objective 2 (see 4.2.3.2
Conduct and analyze interviews), I documented aspects of the local history that are
important to the historical context of cooperative fire management.
4.2.2.3 Examine historical records

In order to get a sense for the local historical context, I have perused historical records relevant to cooperative fire management. Records include historic newspaper articles, writings by local historians, and photos. With the help of informants, I identified components of the historical context that appear to illustrate the deeply rooted relationships between public and private land managers. I used this information to describe the context of fire management in the John Day Valley, and to critically examine the emerging themes.

4.2.3 Objective 2: Current Perspectives

This objective involves describing and analyzing the current perspectives toward cooperative fire management among land managers in the vicinity of the John Day Valley. The four research questions for this objective (see 1.2.2 Objective 2: Current Perspectives) are addressed with three tasks:

4.2.3.1 Pursue participation of community members

In examining the current perspectives toward cooperation, I looked for opportunities to involve community members in the collection and analysis of data. Research subjects identified informants, reviewed transcriptions, and assessed emerging

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2 Originally, I proposed to use qualitative content analysis to analyze records. Unlike procedures for analyzing transcriptions where the goal is to create abstractions, the purpose of qualitative content analysis is to reduce the material (Flick 1998). I conducted an informal analysis of the historical data because the intention of getting a sense for the history was to gain a greater understanding of the community and people, not to conduct a historical account of the Valley.
themes. Following the transcription of the interviews (see 4.2.3.2 Conduct and analyze interviews), I asked each interviewee to read and comment on the transcription(s) of the interview(s) that I had with them. Indeed, all appreciated the opportunity to review their own words. The greatest level of community member participation occurred through my conversations with key informants. Ongoing discussions with two informants, in particular, have served to evaluate ideas emerging from the interviews. Their longtime personal experience in John Day have helped to identify strong themes and dispel tenuous ones.

One community leader has developed an intense interest in some of the ideas related to the thesis. In October 2000, she and I presented the project at the Ford Foundation Community Forestry Research Fellowship workshop in New Mexico. Since the workshop she has integrated notions of community forestry into her campaign for Grant County commissioner. In January 2001, she made the front page of the county newspaper because of her speech about community forestry at a meeting sponsored by the U.S. Forest Service. In addition, she was selected to participate in a panel discussion on community forestry at the 2001 annual meeting of the Rural Sociological Society. She continues to be interested in integrating the results of this project in local efforts to create open dialogue between the Forest Service and the community regarding fire management, forest management, and community change.

4.2.3.2 Conduct and analyze interviews

This task was the focus of the fieldwork. Through conversations with community members, I selected interviewees who were either knowledgeable about the history of the
Valley or were involved with cooperative fire management. Since I wanted to document the perspectives of the main stakeholders, I identified informants in each stakeholder group: public land managers, private landowners, timber industry representatives, environmental activists, and community leaders and others. These stakeholder groups were defined a priori. As I became apprised of informants, I ranked them in terms of interview priority. Interviewees with the highest priority fell in stakeholder groups where the theoretical saturation was weakest. Among the five stakeholder groups, I conducted 38 interviews with 46 informants (number of interviews/number of informants):  

- **Public land managers** (13/14): Forest Service (8/9); Bureau of Land Management (2/2); Oregon Department of Forestry (2/2); Oregon Department of Fish and Wildlife (1/1).

- **Private landowners** (11/14): Ranchers (6/7); non-industrial private forest (NIPF) owners (5/7). Although the line between ranchers and NIPF owners is nebulous, I define ranchers as those who graze cattle on their land and grow trees for harvest (either incidentally or through active management). I define NIPF owners as those who do not graze; all of the NIPF owners I interviewed actively managed their timber for harvest.

- **Timber industry representatives** (5/7): Malheur Lumber Company and Prairie Wood Products (3/5); private forest industry consultants (2/2). The Valley has

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3 Sampling was *purposive* because I searched for informants with certain characteristics (Flick 1998). By the end of the summer, I had amassed a list of over 150 people who fell into the sampling categories.

4 There were also two interviews that were repeated with the same informants. In addition to the 38 interviews, I had conversations with a number of other community members that were considered during data analysis and interpretation, but are not included in this summary.
three industrial mills, and I interviewed representatives from the two largest employers.

- *Environmental activists (5/6):* In the John Day area, there are few individuals who openly pursue "environmentalist" agendas. I was consistently directed to these key people, probably because they are the most vocal in the community. Indeed, a number of interviewees within the other stakeholder categories display attitudes consistent with these vocal environmental activists.

- *Community leaders and others (4/5):* I also had interviews with community leaders and other community members. I give few details about these informants in order to protect their identify.

The interview experiences varied. All were semi-structured, ranging from under an hour to several hours in length, and occurred in casual settings such as homes or offices. Most of the interviews with private landowners involved tours of their property. It often took time to develop rapport with the informant, and I approached each interview with an open mind and at least a few free hours. In fact, I learned almost as much about cattle as I learned about fire management. With the consent of the interviewee(s), each interview was tape recorded; I always took notes. All interviewees agreed to sign an informed consent form approved by the Oregon State University Institutional Review Board, which assured them confidentiality (Appendix). Following the interviews, tapes and notes were transcribed. The bulk of each interview was transcribed verbatim, but those segments that were unrelated to the research question were summarized. In this thesis, pseudonyms are used in order to ensure confidentiality. Any similarities between the pseudonyms and actual names of people are purely accidental.
Faced with having to draw meaning from hundreds of pages of transcriptions was a forbidding task, but it was accomplished through a systematic and iterative process of coding, categorizing, and sorting called theoretical coding (Flick 1998; Strauss and Corbin 1990; Glaser and Strauss 1967). The process of theoretical coding involves progressing through several levels of increasing abstraction (Figure 3). Conventionally, the levels are termed open coding, axial coding, and selective coding. However, I

Figure 3. Process of theoretical coding and analysis.
generally prefer the terminology used by the makers of Atlas.ti (version 4.2), a qualitative research computer program that I used to organize the interview data throughout the analysis. First, I open coded the interviews; open coding is a process of drawing meaning from text, a technique common for qualitative research that compares perspectives across pre-defined groups. When open coding, I tried to capture the essence of each interviewee's words; this resulted in a list of 288 codes across all interviews. Second, I grouped the codes into topical categories or families. This reduced the code list down to a more manageable 63 families. Finally, I distilled the 63 families into five major networks or themes. Throughout the analysis, the guiding research questions directed and focused the emerging themes. The analysis was further informed by the literature, entries in the reflexive journal, and ongoing conversations with key informants, my major professor, and other colleagues.

4.2.3.3 Conduct and analyze participant observation

Participant observation is an attempt to observe local phenomena from the perspectives of community members. There are different levels of participation and observation such as complete participant, participant as observer, observer as participant, and complete observer (Gold 1958). Over the course of the fieldwork, I used the various levels of participation and observation to my advantage in order to gather the information most relevant to the research questions. Through the scoping trips in 1999, I identified the North Fork John Day Watershed Council, Grant County Soil and Water Conservation District, and public hearing and comment meetings as potential avenues for participant observation. Unfortunately, during the 2000 field season several of these were inactive.
I was, however, able to take advantage of some community events that proved useful including fairs, concerts, and club gatherings. One of the most productive modes for participant observation was merely “hanging out”—walking around town and dining in restaurants. I was invited to several meetings by a local birding organization, which in turn lead me to one key informant and two additional interviewees. Notes from participant observation were used to inform the analysis process.

4.3 Rationale for Design

This project is a first step toward understanding cross-boundary cooperation and fire management in the John Day Valley. The exploratory nature of the project lead me to develop a design based on an adaptive and interpretive approach that utilized research strategies conducive to qualitative field methods. The focus on local stakeholders does place limitations on the data; results can only be carefully generalized to other situations falling within similar contexts. In many ways, the purpose of the project is to identify the categories and issues for exploration in further research. My own interest in pursuing a topic relevant to real people in a real place fueled my desire to involve community members in the process. Of course, I was most interested in developing this project because of my attraction to the John Day area and my appreciation for the people who live there.
5.0 RESULTS

Five themes have emerged from the data analysis: (1) land tenure, (2) ideology, (3) power, (4) change, and (5) trust. The first theme, *land tenure*, is based on the perception that public and private land managers have distinct rights and responsibilities. Stakeholders note differences in the level of personal investment, accountability, and efficiency exhibited by public and private land managers. Differences in land tenure seem to influence how managers view fire and cooperation, as illustrated through their management objectives.

The second theme is *ideology*, the basic values and beliefs that influence attitudes toward cooperative fire management. Ideologies are organized around the human-nature relationship, social mores, fire management, and cooperation. The human-nature ideology refers to what informants define as "natural" and as the "proper" relationship with the land. Social mores are embedded in myths or stories, and serve as strong cultural components of cooperation. Ideologies about fire management indicate fundamental disagreement about the role of fire in the woods, a factor that is sure to affect the willingness of a manager to use fire as a tool. Finally, the theme addresses the advantages and disadvantages of cooperation as expressed through informants.

The third theme, *power*, reflects the distribution of political control among the stakeholders. Perceptions of differential power between urban and rural Oregon, the Forest Service and community, and within the agency can limit prospects for cooperation by putting stakeholders on an unequal footing. The theme also considers the role that knowledge plays in maintaining these power inequities.
The fourth theme is change. It refers to the context of transition within which cooperative fire management occurs in the John Day Valley. Both the Forest Service and the John Day community appear to be facing shifts in demographics, attitudes, and culture. All stakeholder groups indicate resistance to these changes. To some, cooperation is viewed as a threatening new idea that is bringing uncertainty to the Valley. To others, the notion of public and private land managers working together is appealing, and offers hope for the future of the local forests and community.

The last theme, trust, is rooted in the observation that cooperation relies on trusting relationships. The theme stems from the widespread distrust and resentment expressed in the interviews including a distrust of government, as well as trust between the community and Forest Service, within the agency, and among other local stakeholders. The act of working together or collaborating can offer an opportunity to address ecosystem issues, while building the trust among managers that may be important to future cooperation.

5.1 Land Tenure

It's kind of hard to have a cooperative agreement with a landowner on timber management because when they initiate a project they'll do it that year, right now. When they decide they want to thin out their timber stand in April, they can finish by July. We got all these environmental restrictions [and] hoops to go through...[Our] timeframe is just way out of whack with their timeframe.

—Richard Lehman, BLM, John Day

Stakeholders distinguish between what it means to own private land and to manage public land. The public and private sectors are viewed as having different levels
of personal investment and accountability in the resources they manage, which is reflected in their management objectives. In turn, these distinctions influence the perceived efficiency of management and the ability to subsume the high risk of using prescribed fire. Although the topic of has been inadequately covered in the collaborative resource management literature, land tenure is critical to power inequities and working relationships among managers. Differences in land tenure present obstacles for managers to work together to develop, design, and implement cooperative agreements. The challenge for cross-boundary cooperation is managing these very different reasons for owning land, while working towards a common goal.

5.1.1 Personal Investment

Public land managers and private landowners have different levels of personal investment in the resources they manage. Outside the agency, informants claim that Forest Service employees do not have the familial connection to the land nor the financial need to produce a product. In contrasting his livelihood with that of the agency, community member Glen Feldman epitomizes this perception.

I don’t take a paycheck home if I don’t produce a product. If I’m not doin’ projects, I don’t have money coming into this office [and] I don’t get a paycheck. With cattlemen, [if] they’re not producing pounds of beef, they don’t get a paycheck, they’re out of business. And the federal agency, you get a paycheck when you go home regardless of what you’ve done. You don’t have to produce x-number of anything. You still get paid.

Logger Neal Richards reaffirms this attitude when he associates environmental regulations with the difficulty of finding timber to cut. “They continue to get their
paychecks regardless of how much they put out,” he explains, referring to the Forest Service. “They don’t understand the urgency of it. They don’t have the wolf at their door.” In another interview, woodland owner Robert Donaldson points his finger at the Malheur National Forest bordering his place and says, “It doesn’t matter what these people over here do because they’re not personally responsible. They have no liability.” Indeed, Forest Service employees agree that they have a different relationship with the land than do landowners. One employee, Kevin Baker, says that the distinctions between public and private ownership foster resentment toward the agency.

Another thing people don’t like out here is the fact that federal government employees are still getting their paycheck. Yea, my quality of life is pretty high...And that’s another form of resentment for the federal government from the locals...I don’t want to say it’s invalid. That observation is accurate.

Differences in personal investment reflect differences in public and private tenure categories. They present hefty obstacles for public-private cooperation by distancing the goals of adjacent owners. Differential land tenure, in turn, impacts the sense of ownership and common ground among stakeholders, two factors that have been found to improve the effectiveness of partnerships or other collaborations.

5.1.2 Accountability

Outside the agency, informants believe Forest Service employees lack personal responsibility or accountability to the local community. This attitude stems from the fact that public land managers are tied to the politics of forest management, rather than to the local forest or community. The attitude is directed less at individual employees, and
more at the agency as a whole. Benjamin Lynch, who owns a family ranch outside of Prairie City, typifies the perspective when he explains his dissatisfaction with the way the Malheur National Forest had handled the nearby Wildcat Fire in 1996. The fire was started by a lightning strike in the Strawberry Mountain Wilderness; the Forest Service allowed it to burn until it started to grow, eventually crossing onto private land. According to Mr. Lynch, if the agency had been in the habit of holding their employees accountable for decisions, then the Malheur Forest would never have let Wildcat burn.

There's no accountability. Nobody's responsible...This thing would come to an end if there was some accountability put into it, and somebody lost their retirement. I think they'd really take a look at it. The next person in line would really take a look at how he thought about what to do based on the events of the past.

He implies that, unlike public employees, private landowners must live with the consequences of their decisions. In fact, Forest Service employees have less personal responsibility because they don't own the land. It can be difficult to share power, develop ownership in a problem, and communicate effectively when stakeholders have such disparate systems of responsibility.

One specific issue related to accountability is that of agency turnover. According to private sector informants, turnover within the agency reduces the personal responsibility of Forest Service employees. Public and private land managers concur that the agency does not encourage its employees to stay in one place for any extensive period of time. According to the Forest Service, the best way to climb the ladder is to gain experience serving on different districts and forests. Landowner Robert Donaldson describes his frustration with the turnover of Forest Service and Oregon Department of...
Forestry (ODF) employees, adding: "They move these people around all the time. State and federal people do not last very long." In another interview, Bear Valley rancher Victor Friedman says that he wishes federal land managers would stick around longer than they do now.

[The manager] should know there's a tie between the land and the economies and societies. Right now there's no follow up, there's no accountability. If you're working for the Forest Service and you're on any track at all, you're on a different district [or forest] every 6 to 10 years. So you're not in an area to learn what works and what doesn't. So all you do is inherit things—other people's actions. And whose fault is it? Well, it just kind of disappears into this gooey mess of an office.

Informants claim that the relatively short duration of public employees contributes to their failure to understand the suitability of forest management techniques. Mr. Friedman exemplifies this attitude when he connects the relative levels of employee turnover and accountability among public and private land managers: "If I make a mistake on this ranch I'm not fired, but I see that I've screwed up. No one stays around in the Forest Service long enough to see that they screwed up."

The local Forest Service is well aware of these concerns about accountability, but its take on the notion is slightly different. According the agency, the increasingly complex regulatory processes demand that the agency actually be more accountable today than in the past. Employee Jay Harper explains that the agency's planning processes require that they respond to the diverse attitudes held by the American public. He believes that the lack of accountability of which most locals complain revolves around the extent that the forest meets its targeted timber harvest levels. Drawing from his long career with the agency extending over three decades and five national forests,
Mr. Harper says that in the 1960s, 1970s, and 1980s each forest had pressure from within the agency to meet their harvest targets. "When I was...over there on the west side [of Oregon] and my cut was 119 million [board feet] a year, if I didn't make 119 million a year I was settin' inside somebody's office [who was] reamin' me out. And if you did that a couple years in a row, you were doin' somethin' different. That doesn't happen today." Nowadays, the agency must provide more than commodities; they must manage for a range of values including timber, wildlife, and recreation. "We are probably being held more accountable now than historically, but more accountable for a whole broad range of things." The wide ranging values encompassed by public land complicates efforts to cooperate with adjacent landowners, who each have their own set of beliefs about forests and forestry.

5.1.3 Management Objectives

Differences in land tenure are also expressed and maintained through management objectives. As a federal agency, the Forest Service is faced with the challenge of balancing the needs of local and national interests. As with all national forests today, the Malheur Forest is required to produce timber and recreational opportunities, as well as maintain the environmental integrity of ecosystems. Consequently, there are multiple management objectives for the Malheur, some potentially competing and all constantly changing. Private landowners represent at least an equally diverse array of objectives. Some are driven by production, in which the bottom line is of utmost importance; others pursue virtually complete preservation, wherein returning the forest to historic conditions tends to be their focus. The main
management objectives for the interviewed landowners include producing timber, sustaining family ownerships, and mimicking historic conditions. These categories are not mutually exclusive nor complete, but they may help to elucidate the complications they introduce for cross-boundary cooperation.

The production of timber is the main objective commonly held by industry, and directly influences how they utilize prescribed fire and think about cooperation. Industry representative Mike Reeves explains that his company burns piles, but doesn’t like to broadcast burn; they need the certainty of a chainsaw and not the imprecision of fire. "It takes a long time to grow a tree over here, and we want to make darn sure that when we go in and do a thinning that we’ve chosen the trees that are going to grow for the next 60 or 80 years become a crop tree." Representing the other main timber company in the Valley, David Roth describes the difficulty of using fire to achieve dissimilar management objectives among adjacent landowners when he says of the Forest Service, "They’re trying to kill the reprod, and we are trying to grow it." Industry is trying to produce younger, faster growing tree farms. They rely on natural regeneration to reduce planting costs, and running a burn through the under story of their stands would eliminate the very trees they are trying to grow. Conversely, the Malheur National Forest usually uses prescribed fire on a broadcast basis in order to eliminate undergrowth and produce conditions characteristic of older forests. The Forest Service is trying to return much of its federal ownership to pre-settlement fire regimes, explain agency employees. "[Fire] is the basis for a lot of the planning we’re doing right now for resource management [and] restoration across the landscape out there," says Jonathan Whyte, who deals with fire planning on the forest. He explains that the upcoming forest plan due in
2002 will reflect the fire-dependent nature of the landscape more so than does the current plan. "The prior forest plan was driven more by a commodity production, and now we're moving to restoration of healthy ecosystems...rather than a strictly commodity driven planning process...It's just a shift of philosophy of what we're trying to accomplish."

Prescribed fire partnerships are going to be difficult when adjacent owners have such distinct objectives.

Some woodland owners and ranchers also view the timber on their place as a way to pay the bills, especially when times get tough. Dale Warren, who owns and manages a small tract in Bear Valley, explains that economics are the main driving forces for those landowners who cut their timber as soon as marketable. "If folks have a problem with cash flow, there's the solution," he says, pointing to a yellow bellied pine. He and other landowners agree that over cutting on one private ownership can have unintended consequences for the management objectives of other landowners. He explains that people who have little knowledge about forestry often see the aftermath of cut and run logging and subsequently do not want to harvest at all, even when it might be the best for their stands. Among woodland owners in the John Day area, Mr. Warren explains, the two most common management objectives are those at the extremes. "It seems like folks either do almost nothing or just hire a logger to cut whatever the logger wants." He postulates that over cutting scares off a lot of people who otherwise would do some good management, such as fuels reduction.

To other landowners personal connections underlie their objectives, and they make it clear that keeping the ownership in the family name is of top priority. "We're in it for the duration, not just for buy and sell," asserts Benjamin Lynch, who typifies the
sentiment. "We're out here to survive and keep this land in the family name and go on from generation to generation." Don Wicker, a nearby rancher, has been thinning to rid his stands of mistletoe, a common forest blight in the Blue Mountains. His objective is to get his forest in good enough shape so that eventually a sustainable amount of timber can be pulled off annually. "My main goal is this isn't just my future, this is my children's future, this is my grandchildren's future." The family connection to the land highlights the differential levels of personal investment between public and private land managers.

Other woodland owners and ranchers explain that they are trying to create "historic conditions" in order to increase the resiliency of their trees. Aside from their personal desire for large timber, much of this seems to be motivated by the fire, insects, and other forest health concerns that threaten to move from adjacent ownerships. In Bear Valley, Robert Donaldson regularly prunes, piles, and burns on his place in order to create the open and "park-like" conditions typical of the area's historic ponderosa forests: "I'm trying to get back to [historic conditions] without burning all the place down." His philosophy is that large trees that are properly spaced are more resistant to the insects prevalent on the adjoining national forest and private land. Despite his efforts, he recently lost a few trees to beetles that crossed from the Malheur National Forest. In another interview, Mr. Warren explains that the long term goal for his timber is "to return it to an old growth stand." He believes that big and widely spaced ponderosa are just "supposed to be there." Although Mr. Warren has a personal desire to create historic conditions, he notes that his efforts are inhibited by the forest conditions on adjacent ownerships. At several points during a tour of his place, he demonstrates how he is forced to change his own objectives for various parts of his woodland based on the
microclimates produced by the conditions on adjacent ownerships. In his case, formulating common management objectives with neighbors could benefit himself and, if organized properly, address larger ecosystem goals.

5.1.4 Management Efficiency

The relative efficiencies of designing and implementing forest management on public and private land present yet another challenge for cross-boundary management that reflect differences in land tenure. Among the interviewees, a common attitude is that public ownership is inherently inefficient, while private landowners should be lauded for their efficiency. Differential efficiencies influence the willingness of landowners to cooperate because even though they might be interested in using fire on their place, landowners often do not want to be under the same constraints as the Forest Service. Industry representative Mark Stanley maintains that the private sector more efficiently conducts forest management than does the public sector.

We can do it better for the land because when we see the management strategy that we need to apply we can go out and do it. We don’t have to wait for 2 or 3 years to go through the hoops and process getting everything filled out before we do it, and we don’t have to go through an appeals process. I think we have the ability to do much better management on the private lands than what the Forest Service has at this point.

Agency employees do feel the constraints of regulation; they agree that slow regulatory processes can discourage private landowners from becoming involved in partnerships. “The landowner obviously wants to see results,” says Forest Service employee Craig Brown. He points out that private folks are not accustomed to having to wait before
doing management. "If we go one to two years without seeing any results, they don’t understand that part of it.” Even out of the handful of prescribed fire partnerships that have taken place in the Valley, he has seen a couple of them falter when landowners became fed up with lengthy federal timelines.

One of the most emotive examples of perceived Forest Service inefficiencies pertains to the agency’s firefighting program, an attitude that translates to more general frustrations with how the agency operates. Industry is especially appalled at what it sees as the blatant waste of taxpayer money through fire suppression; Mike Reeves contrasts the Forest Service with the timber company for whom he works.

I guess the biggest difference in our philosophy and the Forest Service’s philosophy is the Forest Service will spend any amount of money to work on a wildfire once it’s started...Once its gotten to be 50 or 100 thousand acres, they throw all the resources they can at it to put it out. We put all of our money upfront in tending our forest before it burns up because we want to have something that we can control and we can carry to a rotation age. So we invest our money in good management practices before it burns. The Forest Service invests their money once the fire has started and they’re trying to put it out.

Both public and private managers agree that the current budgetary system for wildfire doesn’t encourage efficient fire management. Benjamin Lynch, who had watched the Wildcat Fire from its inception, argues that the Forest Service should have actively suppressed the fire instead of let it burn.

They have the equipment to do that. One plane at the right time would put these big fires out. But no, they got to wait. They got to watch it. They got to wait. They got to see what’s going to happen. They got to wait and see. Oh, put it out! Before they have to spend millions and millions [of] taxpayers’ dollars! They may think, ‘That’s Forest Service money, they get that for fire.’ Where’s that money come from? Taxpayers!
A few informants outside the agency suggest that national forests may actually use wildfires to build their budgets. They claim that the way the budgetary system is designed to move resources to forests that demonstrate the need actually creates an economic incentive to let a wildfire become project status. One rancher points out that not only do Forest Service employees get overtime and hazard pay from working on a large fire, but people in the community benefit. He explains that during the Summit and Wildcat Fires of 1996 he made $25,000 standing by on his Cat for two weeks, which included only three days of work.

These attitudes may reflect the different management objectives and purpose of public and private land. "We as industry have got a totally different focus," asserts Mike Reeves. "If we're given money to spend to get something accomplished, we have to show some outcome." Some informants say that the solution is privatization. Referring to the Forest Service, businessperson and woodland owner Robert Donaldson explains, "It's a very inefficient system, and it is so because it's not a business." In the same interview he argues, "Run it like a business, and make sure you bring in as much money as you send out, and don't do anything that's stupid or inefficient. God, if I could only run my business like the way the government runs their business and not worry about money."

Forest Service employees are well aware of this sentiment, and in many cases share the viewpoint. Kevin Baker, for example, explains that the inefficiencies of government are prevalent and often get in the way of productive management. "Private landowners certainly have a lot more flexibility...to do something on the ground that is ecologically productive." Craig Brown illustrates these differences in efficiency when he
describes a dilemma with using money from a private organization to fund a prescribed fire: “They give me their funds, and they expect a product. If I don’t get the product done this year, they want their money back.” Another employee exclaims, “We see the inefficiencies, and we feel them. And boy, we hear about them from the publics, too. It’s rough! All we can say is the local level’s doing our best.”

5.1.5 Subsuming Risk

Prescribed fire illustrates the differential ability to take on or subsume risk in forest management, another reflection of differential land tenure. The personal investment in the land that comes with ownership means that the private landowner has more at stake than does the public land manager. On the private side, the ability to absorb risk runs the gamut; some are willing to use fire despite its imprecision and relatively high risk, while others don’t want anything to do with it. According to Mike Reeves, the uncertainty of prescribed fire is one of the main reasons that his timber company does not use it. “We don’t use widespread fire management as a tool on our private lands...because we feel that we would prefer to make the decision on crop trees based on our personal choice, rather than to let fire make the choice.” As might be expected of a production oriented manager, Mr. Reeves does not want to take on the added financial cost of prescribed fire that could cut into his company’s bottom line, neither the cost of conducting it nor the incidental loss of timber value that might accrue. A few woodland owners and ranchers share this perspective, including Victor Friedman. He believes that the risk of prescribed fire can be avoided by mimicking the process with
chainsaws and cattle. “Fire is hard to control. I want precision in the management of our trees.”

One issue facing cooperative fire management is that fire can financially hurt private folks more than public agencies. When it comes to prescribed fire partnerships, non-agency informants are primarily concerned with the threat of liability; landowners fear they might be held legally and financially responsible for a burn that goes awry. Forest Service employees are believed to be able to take on more risk in their management efforts because, along with the agency’s limited accountability and stake in the resource, the agency has a greater ability to cope with possible pecuniary repercussions. Many landowners explain that they would be more interested in using prescribed fire on their own land or entering a partnership if there wasn’t the threat of financial liability for fires that cross onto neighboring ownerships. “It’s the cost and liability, that’s our biggest thing. That’s what’s turned us off,” says rancher Alan Cox. Although he and his wife use prescribed fire on their rangeland, they are hesitant to use it in the timbered portions of their ranch because of the financial burden if it were to take out some valuable trees or cross onto neighboring property. They explain that oftentimes locals see controlled fires become uncontrolled, hear about the amount of money involved with damages, and subsequently get leery of burning or agreeing to a partnership. Mr. Friedman concurs: “I’ve studied a lot about fire, but it just always comes down to the fact that the potential liability is so enormous it scares me to death.”

However, other private landowners regularly burn despite the risk, including Prairie City rancher Don Wicker, who looks forward to burning every year. “I just love seeing those needle smokes coming up everywhere in the spring.”
One advantage of public-private partnerships is that they might lower the risk and liability associated with prescribed fire. "It seems like nobody in the private really wants to do fire just on their own because it's too much liability," explains environmentalist Paul Boyd, who supports partnerships. "If you get the government involved...then you can cover your ass that way." Mr. Boyd's hope is that cooperative burns can encourage the use of fire by alleviating the economic burden placed on private landowners. Mt. Vernon rancher Henry Lewis explains that he and other landowners would use fire more frequently if they "wouldn't get burned for burning across the fence and burning 20 or 50 acres." Other informants agree, including Gregg Burke: "There's a lot of [landowners] that probably never think 'fire' because they're afraid something's going to get burned up that they don't want burned up, but that's where cooperation and equipment and control would do it." During a cooperative burn, the expertise of the Forest Service and the local knowledge of private landowners, in addition to the greater land base available to burn, accessibility of equipment, and number of people conducting it can lower the risk taken on by any one manager. Other research finds that the desire to avoid being exposed to significant risk discourages landowners from becoming involved in such agreements (Hough 1988). Cooperative fire management may be an opportunity to deal with the differential ability to subsume risk, which further differentiates public and private land tenure systems.

5.2 Ideology

This kind of area with its relative seclusion kind of breeds that independence that you see around here. We don't have much interaction with the metropolitan area that have a...more government tolerant concept
of how you deal with each other. Definitely the pioneering spirit is still strong here. 'By God my granddaddy’s granddaddy…was doing it this way, and so I’m going to keep doing it this way.’

—Kevin Baker, Forest Service, Prairie City

This theme encompasses the ideologies, values, and beliefs that underlie attitudes toward cooperative fire management. Ideologies may be defined as “the doctrines, opinions, or way of thinking of an individual, class, etc.” (Webster’s New World Dictionary of the American Language 1984). This research finds that some ideologies and belief systems directly support cooperation, while others discourage managers from working together. Informants hold a breadth of ideologies, which affect how easily managers are able to identify common ground and opportunities for moving beyond conflict. In the John Day Valley, important ideologies influencing collaboration surround the human-nature relationship, individualism and collectivism, fire management, and cooperation.

5.2.1 Human-Nature Relationship

Ideologies regarding the human-nature relationship define the purpose of forests and the role of humans in shaping the land. Among the informants, the purpose of forests vary from extraction to preservation. At one extreme, extraction-based ideologies insist that forests are for growing fiber for use by people; industry typifies this perspective because it views forests in terms of commodities. Conversely, preservation-based ideologies maintain that forests are to be protected from the influence of humans, an attitude commonly advocated by environmentalists. Most public land managers and small woodland owners fall between the two extremes, where there is tremendous
variability. Differences in fundamental values about the purpose of forests and the role of humans may influence the likelihood for cooperators to establish a common goal.

Extraction-based ideologies embrace the notion that as a society we need to utilize timber resources. Industry representative Mike Reeves, for example, who openly criticizes the Forest Service for the screen rule and their use of prescribed fire, wishes that his company could harvest the downed wood that is left to lay following prescribed burns on the Malheur National Forest. The “screen rule” refers to the policy that no tree over 21 inches can be cut on the Malheur Forest.

We can’t go in and harvest and salvage those trees even though they’ve been burned because they’re over 21 inches. To us that’s a waste of a valuable resource, which we as timber growers—we just can’t imagine doing that! But it’s exactly what’s happening when they do all of their burning on the national forest, and we can’t buy into that.

He believes that wood left to rot on the ground is considered poor management because it brings no economic benefit. Rancher Curtis Smith reaffirms this perspective, describing what he sees as the wanton waste of timber that occurred when the Forest Service did not promptly salvage following the Summit Fire of 1996, a large fire that occurred in a roadless area at the north end of the Malheur Forest. “I think the sad part was they didn’t salvage the fiber. They let it rot. By the time they finally got through all the litigation and cut a little bit of it, it wasn’t worth anything. So all that fiber went to waste.”

Those holding extraction perspectives argue that the connection between the people, economies, and the land needs to be maintained. “That’s one of the things that really bothers us,” says one industry representative, referring to layoffs at the Malheur Lumber Company mill in the summer of 2000. “We drive around the national forest and
we see all this volume and stuff going to waste, and we have to lay off a shift of people when we know that we can improve forest health by cleaning this stuff up.” Public land managers agree that the economic link to the land is important; money drawn from the sale of timber brings funding to local land management offices. One Bureau of Land Management (BLM) employee explains that his agency’s budget and hence its ability to manage is dictated, in part, by the products they draw from the land: “The only way we’re gonna get that money is by having commodities come off those public lands so we can manage those public lands.”

On the other hand, preservation ideologies maintain that management often does more harm than good, and thus the influence of humans must be reduced or entirely removed from ecosystems. “A preservationist believes that mother nature knows best,” says community leader Rick Andrews. One of the underlying beliefs of informants with this perspective is that if nature is protected from humans, then ecosystem processes will be restored. Using this logic, environmentalist Paul Boyd describes his organization’s reasons for trying to reduce the harvest levels on the Malheur Forest and other national forests in the region: “Our whole goal is to maintain the natural ecosystems as much as possible or do restoration to return to the more natural ecosystem...It seems like if we really want to have water, wildlife, recreation—all these different things—it seems like that system worked pretty well before we got here.” Despite widespread criticism of the preservation perspective, some informants recognize that such ideas do play a productive role in the dialogue over forest and fire management in the John Day Valley. After criticizing environmentalists, for example, retired Forest Service employee Martin Wells
admits, "The timber organizations need to answer to doing correct things out there. Even the little shrew has a right to live on this earth."

Ideologies regarding the role of humans vary from anthropocentric to biocentric. **Anthropocentrism** is characterized as human-centered; it is the belief that society should be valued over nature and that humans are of benefit to ecosystems (Ehrenfeld 1976). Conversely, **biocentrism** values biological systems over people and maintains that humans must have little or no influence on ecosystems. Informants with anthropocentric ideologies claim that active management can save the forest from its own demise. As applied to fire management, anthropocentric ideologies maintain that by reducing fuel loads through thinning and other harvest, humans can decrease the chance of stand replacement fires. "Forests are going to be harvested regardless," says industry consultant Ronald Moore; he explains that if forests are not utilized by people, then nature will destroy them through wildfires. Community leader Rick Andrews agrees: "If we do nothing, it'll continue to deteriorate." Mr. Andrews attributes the current forest health problems on national forests in the Blues to the lack of management over the last decade. "If we start treating the acres, then we can mimic mother nature to the benefit of mankind." Others use similar language when advocating for intensive forest management. "Mother nature operates in boom, bust. Grow it up, kill it off. Grow it up, kill it off," says industry representative Mark Stanley, in reference to the natural occurrence of wildfire. "By managing we can keep any stand we choose in a given condition much longer for whatever reason... We can beat mother nature through management." Mr. Stanley is obviously confident in his abilities as a forester.
Most managers share in his assurance that forestry professionals can create the forest conditions that society desires, while producing wood products and benefiting the forest itself. They are certain that they can identify what needs to be done in order to achieve management objectives and design silvicultural treatments to meet those goals. “You look at the watershed to see what’s broke, what needs to be fixed, what’s already functioning well,” explains Forest Service employee Nancy Horton. Other agency employees explain that the forest would look very different if it were left to nature. Craig Brown states, “We take care of what mother nature wouldn’t... It’s a little easier for me to manage [fire] when I do it than when mother nature does it.” Likewise, small woodland owner Dale Warren explains that he believes it does his forest good to practice continuous, low intensity management such as prescribed fire and individual tree selection. “We are always looking around and saying, ‘This needs to come out. That needs to come out. This one’s firewood. That one’s a saw log.’” The confidence in management is a human centered viewpoint of forests in which people are seen as shaping forests through active management.

At the other end of the spectrum, biocentric ideologies typically favor no or very little management. “We start off on a different basis,” says environmentalist Tye Cooper, contrasting his ideas about forest sustainability with those who stress timber production. “We start off with a different point of view.” He explains that unlike industry, he does not see forests as economic assets. Others who hold similar ideas claim that by valuing something as complex as nature, a biocentric ideology requires a bit of humility. Paul Boyd notes, “There’s still this tendency that... ‘We can do it better than nature. It’s like a cornfield. We just have to tend it right, and all this kind of stuff.’ Well, it ain’t no
In emphasizing nature over society, biocentric ideologies often stress how forest management is unnatural. This notion that nature is separate from society has been criticized as undermining the mission of the very environmental movement that has been its biggest proponent (Cronon 1995). "Nature" and "wilderness" are human constructs that reflect "our own unexamined longings and desires...we mistake ourselves when we suppose that wilderness can be the solution to our culture's problematic relationships with the nonhuman world" (Cronon 1995: 69). Indeed, Mr. Warren does not like the way environmentalists tell him that he is doing "unnatural" things on his land just because he cuts trees. "I'm just not so sure we can divide it out that way, what's natural and what's [unnatural]...I see my role as an attempt to figure out how a human can be a beneficial organism to this forest...I don't know if we're on the right track or not."

Of course, it is difficult and in fact inaccurate to associate any one person with a specific ideology. For example, the biocentric rhetoric used by environmentalists and industry alike regarding forest restoration may mask their fundamentally different viewpoints about the purpose of forests. Similarly, those who hold extraction ideologies also exemplify real concern about the long term persistence of forests. Logger Neal Richards is one who believes that the current trend toward forest protection on federal land does more harm than good. "We're kind of goin' about that backwards. It seems like to me that we're not interested in the best thing for the forest." He maintains that a healthy forest requires logging. Rancher Don Wicker expresses similar ideas about the health of forests in relation to fire.

We should be cutting more than we are with more emphasis on the health of the forest. I think there's a reasonable yield that keeps us healthy, that reduces the catastrophic fire...Any fire, even a low laying fire, can take a
home. So homes are always going to take a risk, but the forest doesn’t have to be at risk.

Ideologies surrounding the human-nature relationship represent differences in basic values that influence how adjacent land managers view the role that humans play in manipulating fires and forests. When basic ideas about the relationship with the land are extremely dissimilar, as demonstrated by the extraction-preservation and anthropocentric-biocentric continua, finding common ground upon which relationships can be built is a tenuous proposition.

5.2.2 Individualism and Collectivism

The social mores of individualism and collectivism also influence cooperation. According to Webster’s New World Dictionary of the American Language (1984: 926), mores is derived from the Latin mos or custom, and is defined as “folkways that are considered conducive to the welfare of society and so, through general observance, develop the force of law, often becoming legal code.” Mores are embedded within myths, which author William Kittredge describes as the stories that dictate how best to live one’s life and offer explanations for events present and past: “A mythology can be understood as a story that contains a set of implicit instructions from a society to its members, telling them what is valuable and how to conduct themselves if they are to preserve the things that they value” (Kittredge 1987: 62). In the John Day Valley, the culture is dominated by the myth of “rugged individualism,” a term coined by Wallace Stegner (1969). The image of a proud rancher riding atop a well crafted wagon, busy fending off Indians and securing his homestead, sits well with many locals. However, it
is an identity that has a specific context. The same mythic character, who in one scene is independent and self reliant, is transformed into a follower as he joins the circling wagons to help battle invaders. Individualism and collectivism, while not mutually exclusive, are two important social mores that seem to influence the solidarity of the John Day community and ultimately influence prospects for cooperation.

Most of the private landowners view themselves as independent. They believe in their capability to persevere without the involvement of other people. "We pretty much take care of ourselves," says rancher Curtis Smith, who makes it a point to note that he doesn't rely on the state, county, or Forest Service to put out wildfires that spark up in and around his ranch. "In our immediate area, we probably put out 80 percent of the fire ourselves. If it's a fire on [adjacent Forest Service land] we'll be the first ones there. So we take care of ourselves." Among private landowners this sense of individualism and self reliance may be reflected in their diverse management objectives. For instance, Mr. Warren explains that at one end of his 40 acre parcel he has a neighbor who doesn't do any management, and at the other end is a neighbor who cuts trees as soon as they are merchantable. "There's a lot of variety of opinions on what you should or ought to do," he says, "varying from you ought to just really go after it, to you ought to just leave it the hell alone." The disparate management objectives often found among adjoining landowners may reflect their sense of independence, and restrict their willingness to develop complementary management goals.

In the same way, most public agency informants view themselves as independent. Generally, they believe that they should be able to make management decisions without having to deal with competing interests. Thomas Olson, who works for ODF and
regularly interacts with private landowners, recalls a recent situation in which the Maiheur Forest allegedly burned the national forest side of a fence line without informing adjacent landowners, who had previously agreed to a partnership with the agency. Mr. Olson believes that the fire management staff on the forest resist getting involved with adjacent landowners.

The fire people don’t really want to get involved with private landowners. They want to do their own thing on their own land. They don’t want to try to coordinate burns with private landowners. It’s too much work. They’re not used to doing it. Whatever may be their reason…they don’t want to do it. Whereas their higher ups are saying, ‘You will do it,’ the lower downs are saying, ‘…We’re not doing it.’ And they don’t! They just want to do their own thing. They’re used to doing it this way. They don’t want to change.

Others believe that the agency’s independence is engendered in an aversion to public involvement processes. “You’re certainly not getting the influence of the general public,” observes environmentalist Paul Boyd. “Most of the polls and all this stuff are saying, ‘Hey, wait a minute! These forests are not just a standing log deck, and they’re not just a pasture to be grazed.’” The purported resistance to working with adjacent landowners and incorporating public opinion into decision-making may reflect a sense of individualism within the agency itself, and certainly influences the relationship with the community.

This individualistic behavior found among both public and private land managers hinders effective cooperation. Individualism has far reaching consequences, pervading every aspect of public life: “To the extent that our language of individualism keeps us from naming and building upon what we have in common, we are impoverished, not only in language, but in many other ways as well” (Kemmis 1990: 66). The local ranching
and logging lifestyle is characterized by deep seated mores, traditions, and customs that energize a local culture valuing individualism and self-reliance. To a degree, the independent mindset of individual managers may shape attitudes toward cooperation. To a far greater extent, a common sense of individualism giving rise to social identity may drive the local discourse and dictate the success of cross-boundary cooperation.

A shared sense of independence shapes the identity and social dynamics of the John Day community. Locals certainly value autonomy, but do so with an air of conformity. When controversy arises, for example, there are key leaders to whom the community looks for guidance. When attacks are launched from outside the community or between community members, locals form alliances to protect their own interests. These collective efforts are supported by social mores that simultaneously value the independent pioneer and the common identity of the community.

The value of collectivism is illustrated through the way the community amasses support to fend off threats. For example, concerns over forest health came to a head during the controversial Summit Fire salvage sales, sparking local leaders to get the attention of Congress. In July 1999, the Chairperson of the Congressional Subcommittee on Forests and Forest Health, Helen Chenowith, and Oregon Representative Greg Walden held a hearing in John Day regarding forest management on the Malheur National Forest. Community leaders, agency officials, businesspeople, and others testified about forest health issues and their connection to the economic stability of the community. The hearing demonstrates how locals, who are generally ardent supporters of individual landowner rights, have come together to work toward a common goal. In
this case, the testimonies sought to increase active timber management on the Malheur Forest in the name of benefiting the local economy as well as the forest.

Conflicts that arise between interests within the community itself also pit local groups against each other. For instance, Forest Service employee Kevin Baker describes the group mentality that he frequently sees displayed by ranchers with Forest Service or BLM grazing allotments.

It’s very interesting to watch these large groups—these permitees—around here function. They have definitely learned to shore themselves up and get themselves in a large, massive group whenever one individual is confronted. If we have one permitee that is having some problems on his allotment...[and] they’re called in to discuss with the Range Con and Ranger, usually there’s 3 or 4 other permitees there with him. If we go to the field to talk about doing a restoration project...all of a sudden 10 other permitees are there because they want to know what’s going on, and want to throw their weight around as far as decisions being made.

He and others in the Forest Service explain that conversations with individual ranchers are generally very productive, but when several ranchers are involved the social dynamics change and dialogue becomes more difficult. “When the quorum of permitees get together and decide that that may not be in the best interest of all,” says Mr. Baker, “you’re going to have a harder time getting certain things changed or do certain things.”

Collective action in the community has been demonstrated in other ways, as well. Forest Service employee Grace Corwin points out that a few years ago drugs among the local youth were a common enemy. She explains that in response, parents and others built a community sports field at the north end of the city of John Day.

They built that soccer field, and that was a community effort—all donated time and effort. The community has the ability to have a common vision or a common enemy. There’s a lot of people who believe that if you have
a common enemy, then people will come to action. Well, 3 or 4 years ago
the Forest Service was the common enemy. We're still a little bit of a
common enemy, but not as much as we were. There is the ability for
people to pull together. It's just finding the enemy or the desire.

The forest hearing, permit holders, and soccer field demonstrates how community
members have the capacity to work together to confront local issues. Cross-boundary
cooperation or other efforts at local resource management may be able to make use of
this social capital in relationship-building. The social mores of individualism and
collectivism shape discussions about fire management and cooperation by influencing the
shared identity, culture, and social dynamics of the community and agency.

5.2.3 Fire Management

Another important set of ideologies surrounds fire management. Informants
overwhelmingly agree that in rangeland systems, where juniper and bunchgrass
predominate, prescribed fire and wildfire are of benefit to the overall health of the
ecosystem. For forestland, the perceived role of fire is more complicated. Stakeholders
are in agreement that fire historically shaped forests in and around the John Day Valley,
but they express wide ranging viewpoints about the role of fire in the management of
today's forests. These alternate ideas about fire reflect different notions about the
purpose of fire and the use of fire as a tool, and therefore shape local discussions
regarding cooperative fire management.

At one end of the spectrum, a minority of informants view fire as a "natural"
process that should be allowed to run its course. A few public land managers, private
landowners, and environmentalists fall in this ideological category. From this
perspective, wildfires should be allowed to burn wherever they don’t threaten communities, such as in federally designated wilderness areas. They believe that stand replacement fires in these high elevation forests are as important as low intensity under burns because fire is a disturbance with which such ecosystems have evolved. High elevation forests are “designed to be burned,” says Forest Service employee William Brown. He advocates for introducing fire to the landscape in the mosaic pattern that occurred historically, where some stands were characterized by low intensity burns and others by high intensity ones.

At the other end of the continuum, informants caution that fire may have more costs than benefits. Most of the industry representatives and a few public and private land managers hold this perspective. They argue that fire must not be heralded as a savior for forests. For example, Neal Richards sees let burn policies and prescribed burning as encouraging the thoughtless use of fire in the woods. He questions the benefits of large forest fires, such as the Summit Fire, which he says could have been avoided through intensive forest management.

“No management” is not a good tool, whether you believe in logging or not. If you don’t do some type of fuel load reduction [or] some type of management you’re going to end up with large scale burns, and for the life of me I can’t understand how people think those are good...The loss of habitat and the damage to riparian areas—and it’s long term! And they say, ‘Well, it’s only a lifetime.’ It’s a long time to me, and that’s what matters...To me it’s the most damaging thing you can do to a landscape and a watershed and an ecosystem. But they seem to think it’s okay because it’s “natural.”

Many of those who share his viewpoint believe that human actions can replace the role of fire. “I think a chainsaw can mimic a lot of what a fire does as far as removal of smaller
trees," proclaims rancher Victor Friedman. "Just because we evolved with fires does not mean that fire is necessary. Maybe there's ways to mimic fire that have more positive benefits to society and the environment." He questions the ecological benefits of prescribed burns and suggests that cattle grazing might replace fire.

Eastern Oregon needs nutrient cycling. It needs protection from evaporation...I think when we use fire we're burning up a lot of nutrients...There's a loss of minerals due to fire at high temperatures. And secondly, you remove all the duff that could help control all the evaporation loss. So if we can have an open enough stand and combine grazing with trees, I think we can get nutrient cycling using a cow. We can turn grass into manure and get some disturbance on the floor of the forest [so] that we don't get these buildups of duff.

Several other private ranchers and all of the industry informants agree that a combination of grazing and logging can help to reduce fuel loads without putting the economic value of timber at risk with fire.

However, the majority of informants fall between these extremes and believe that reintroducing fire can benefit forest ecosystems, but only following thinning and other management that reduces the fuel loading. "To use fire correct...you need to go in and do a harvest activity and reduce your fuel loading," explains one person with ODF, who echoes the sentiment of the majority of informants. Among informants, there is widespread recognition that the combination of suppressing fire and allowing fuels to accumulate has lead to volatile conditions. Gregg Burke explains that danger looms when forests are thick with debris and logging slash.

Boy you talk about a hazard for insect infestation, fire hazard, the whole thing. One lightnin' strike...[and] you just well light a barrel of gas in there 'cause that's just what's gonna happen. It's gonna run, and it's gonna be hot, and it's gonna kill more trees than you want to kill. It's
gonna fry the ground. It’s gonna take 2 to 3 years for the vegetation to come back.

It follows that by first reducing the amount of woody debris and opening up stands, prescribed fires and wildfires may not explode into stand replacement ones. “There’s millions of acres out there right now that you can burn... in Eastern Oregon. They’re in the condition where you can still burn it,” explains environmentalist Paul Boyd, who advocates for reintroducing fire. “There’s millions of other acres that you’re gonna have to do somethin’ first.” Perspectives toward fire are critical to cooperative fire management. In some cases, attitudes may be too distinct to blend in a partnership. In other situations, ideologies regarding fire management may be complementary so that a cooperative burn makes sense.

5.2.4 Cooperation

Ideologies also surround cooperation itself. Some informants support the notion of working together, while others have reservations. To some, cross-boundary cooperation is viewed as having ecological, economic, and social benefits. Ecologically, cooperation is seen as an opportunity to address goals for ecosystem management, as well as the objectives of individual landowners. “Those boundaries are transparent,” says one informant. Forest health issues such as mistletoe, bark beetles, and invasive plants do not adhere to property boundaries, and efforts to effectively address these issues often involve multiple ownerships. ODF employee Thomas Olson sees cooperation as the only way to address some of these common forest health problems.
Things don’t stop at the fence line. The wildlife don’t stop at the fence line, they jump the fence all the time. And wildfire jumps the fence all the time, it doesn’t stop. And so landowners—whether they’re public or private—have got to realize that they’re not a kingdom of their own...It all affects each other...We’re all in it together, and why not work together to improve things rather than one side doing something that might be hurting the other side of the fence.

He frequently sees forest management (and lack of management) on one side of a property boundary affecting forest conditions on the other side.

I see this go on a lot: one side of the fence hurts the other side. One side maybe isn’t managing their timber very well, and they’re getting all kinds of mistletoe or insect and disease problems on their side of the fence. And the guy on the other side of the fence is really trying to do a good job to eradicate the disease and control the problems on his side, but the problems come right back across the fence onto him, and he can’t stop it.

Given the cross-boundary nature of such problems, land managers may need the assistance of adjacent owners to meet their own management objectives. Dale Warren points out that on his small parcel it is impossible for him to achieve everything that he wants without the help of his neighbors: “Forty acres is too small to support the management [it needs], especially in relationship to fire.”

Most informants believe that managers can more efficiently use prescribed fire in a partnership rather than on their own. “It’s pretty difficult to do some prescribed burning and stop at a fence line,” explains Forest Service manager Jay Harper. “There’s a lot of things that make a lot more sense than a fence line or a property boundary. The landowners and us, we both realize that, and we’ve been workin’ pretty hard with folks trying to come up with agreements.” Agency personnel explain that prescribed fire partnerships can be designed so that the land is more cost efficiently burned by saving
time and money for both public and private managers. For example, partnerships often enable the crew conducting a burn to use topography to their advantage and roads as fire lines. “It’s a lot easier to use an existing road or a ridge top as a fire break,” says employee Craig Brown.

Economic incentives to burn cooperatively include increased management efficiency and decreased risk and cost, say informants. Mr. Harper explains that partnerships reduce the risk of escape and lower the liability for any one landowner, thereby decreasing the chance of negative economic ramifications. “You don’t have that little cloud hanging over your head that we’re gonna trespass over somebody else’s land with a fire or we’re gonna do them harm. You’re a full partner with them when you go into this operation.” Others explain that most private landowners cannot afford to burn or conduct other forest management without the cost share assistance that comes through the state or through a partnership with the federal government. Incentive-based approaches to cross-boundary cooperation may be an effective non-regulatory mechanism for achieving ecosystem management in mixed ownership settings (Sample 1994). Incentives could take the form of cost sharing funds and reducing or offsetting federal income tax and local property tax. “It takes money,” explains Dale Warren, who says that more often than not restorative work is costly. “We’ve carried on our restoration forestry here over two decades, and we’ve paid for it out of our pocket [mostly].” He explains that ODF has helped them get a few funds through cost share programs. “As far as the landowners go, a lot of them can’t afford to do things on their own,” says one rancher, who believes that the cost of putting together and implementing a prescribed fire is one of the greatest hindrances to its widespread use. In another interview, rancher Don
Wicker explains that he wants to enter a partnership with the Forest Service adjoining his land in order to address the mistletoe that is allegedly moving onto his land from the national forest: “I think I could make more money and make the ranch more money if we had a partnership that said we could go in and do somethin’ about it, somethin’ that would benefit both of us.” While cooperation most immediately benefits the land managers involved, the advantages of cooperation may be more extensive.

Community-wide benefits may also stem from the relationship-building required of cooperation. Both public and private sector informants suggest that having a more productive relationship between the Malheur National Forest and the community may help to meet the direction of the national forest without compromising the needs of locals. The thinning and prescribed fire associated with forest restoration, for example, could provide local employment while reducing the prevalence of forest pests. Others see the process of building relationships among land managers as avenues for developing a broad dialogue regarding community issues and for establishing a community vision. Environmentalist Paul Boyd views such partnerships in the most far reaching terms; he is hopeful that cooperation will instigate a deep understanding of the human connection to the land. “I think it has to be a longer term cooperative agreement, almost like a land ethic or an easement with the land that goes, ‘Hey. We’re gonna not manage this area to degrade the ecosystem there.’” He asserts that no cooperative endeavor is going to be beneficial to forests until there is a respectful connection between the community and the land.

Differences in basic ideologies and values present a formidable challenge for cooperation because most are strongly held. Despite the ideological divisions, all
stakeholder groups support models for cooperation that make use of the expertise of local people. “I would actually like to have some input,” says Robert Donaldson, “if someone would value the opinion of somebody who lives here.”

5.3 Power

What you oftentimes find when 64 percent of the land base is managed by one entity, and that one entity’s hands are tied by the federal laws as to what they can do and what they can’t do, and complicate that by the fact that when they attempt to do something [it’s] brought into the litigated arena, you end up with a forest that is sagging sadly in its health. As its health deteriorates…it attracts the insects and other detrimental type activities: wildfires, insect infestations, wind throw damage, and as a result of that we’re seeing a substantial deterioration of the forest.

—Rick Andrews, community leader, John Day

The politics of cooperation can be thought of as an expression of power. Informants sketch cooperation not as the blending of disparate interests in an effort to work toward mutual goals, but as an activity that fundamentally involves the distribution of rights and access to resources. Stakeholder groups agree that cross-boundary management at the public-private interface is a form of control that has positive and negative elements. The main advantage of cooperation, informants explain, is that it can put power into the hands of private landowners by enabling them to have an impact on the management of adjacent federal land. However, informants also note that working with the government can threaten property rights by subjecting private land to scrutiny and slowing the implementation of management through extended timeframes. Other research also finds that power differences present obstacles for the development of effective cooperative relations (Deutsch 2000; Williams and Ellefson 1997; Schonewald-
Cox et al. 1992; Hough 1988). In this project, informants suggest that a more equitable distribution of political control can offer opportunities for effective cooperation among managers. This theme presents urban-rural and agency-community power disparities; it also considers the role that rigid federal policies and knowledge types play in maintaining power differentials.

5.3.1 Urban-Rural Power Differentials

Most stakeholders express frustration with what they perceive as the disproportionate political power of urban America. The image of uninformed city people, mislead by radical environmentalists who push their ideas on rural folk, are often conjured up by informants. They claim that people in urban areas lack accurate information, but have the power to pass policies that restrict forest management or in some other way threaten the character of the Valley. These claims influence the relationship among public and private managers.

Oregon is a prime example of the political divisions between urban and rural regions. In northwest Oregon, the Willamette Valley is home to the Portland metropolitan area and most of the urban and suburban communities in the state. As the state’s population center, the Willamette Valley has the majority of voters in the state and generally has the greatest voter turnout during statewide elections. Consequently, the west side of the state maintains the dominant voting power (Smith and Steel 1995). One John Day resident professes, "Those people are running the show over there…because that’s where all the votes are."
The political distinctions between urban and rural Oregon are striking. In fact, the longtime division of the state has been termed the “two Oregons” (Miller 1990). George Mayfield, who works for the Malheur National Forest in John Day, describes the implications of this political divisiveness on federal land management.

It’s kind of the urban culture versus rural culture. We’re very, very strong to the rural culture here, so that brings with it a different set of challenges. The urban cultures, generally speaking, tend to give you more of your progressive, environmentally oriented perspectives. Versus your rural culture is going to be looking more to your resource dependency type issues.

The demarcation between urban and rural ideas is strong. For example, informants in John Day blame west side voters for the ills of rural community life, including the rigidity of environmental and land use regulations and the local economic hardships. This is consistent with survey research which finds that that the state’s rural population views environmental regulations regarding land use, water quality, and pollution control as being forced on them by urban Oregon (Smith and Steel 1995). Since federal lands are managed through national policies that reflect the political power of urban centers, Portland may be serve as a surrogate scapegoat for the general influence of urban America on federal policy.

Among the interviewees, the greatest complaint about the urban-rural political divide revolves around the influence of the American urban population on Forest Service decisions. David Libby, with the Malheur National Forest Supervisor’s Office, believes that his agency’s direction is influenced most prominently by politically powerful urban centers. “I think it’s a real phenomenon in the country,” he explains. “Maybe it’s just where the population is based...All the political power has gone to the urban centers.” A
case in point is public involvement processes, which most informants see as being dominated by urban views. They argue that the general public does not understand the implications of its political decisions on rural communities, and thus should not have so much clout. Mark Stanley, who represents one of the local timber companies, illustrates this perspective reiterated by other stakeholders.

One of the things that I see is that the public thinks they know what we need to do on our national forests. The people of the Willamette Valley, the people of Chicago, the people in New York have a concept of what it ought to be, but when they get out here and look at it, it’s a whole different ball game.

He claims that local people (agency and non-agency alike) have a better understanding of the ecologic, economic, and social needs of John Day than do those living in population centers like Portland. He acknowledges that the Malheur Forest is part of the national forest system, and therefore all Americans should be able to influence its management to some degree. Still, he believes that local forests should be managed under a decision-making framework that gives more weight to the desires and knowledge of local communities. Outside the John Day Valley, those who share his attitude advocate for local control of national forests through collaboration among stakeholders (Blum 1998; Brick 1998).

Perceptions of urban-rural power differentials also stem from people who have recently moved from urban regions to John Day. Although Grant County is not attracting swarms of newcomers, those who move from cities are seen as avenues for threatening ideas. John Day maintains a strong rural character, but there is a local clashing of urban and rural cultures. “We’ve got a lot of old time thinking still here. They are very, very
adamant and very radical," explains Mt. Vernon rancher Henry Lewis, who was born and raised in the John Day Valley. "And then we’ve got a lot of new thinking and new blood here, too. So it’s a pretty good civil war." While most informants complain about newcomers, others believe that the new blood offers hope for progressive forest management and for the future of the community.

To some informants, people who have recently taken up residence in John Day provide an opportunity to dismantle the barriers between the Forest Service and the rest of the community. Forest Service employee George Mayfield explains that of the private landowners, small woodland and absentee owners tend to be the most interested in partnering with the agency. "Those people are generally more open to the Forest Service," he says, pointing out that many are also newcomers. He explains that small woodland owners are particularly open to working with the agency. This differs from other research that suggests owners of small tracts of land may be uninterested in participating in a partnership, fearing they will have to manage by the agendas of dominant landholders (Williams and Ellefson 1997). However, Mr. Mayfield surmises that the geographic location of small woodlands puts them in a unique situation. "They’re certainly open to ideas of cooperative management because they’re often surrounded by national forest, and they see and feel the risk that they might be at given the conditions of the surrounding landscape." He also guesses that the political views of newcomers are more consistent with those of urban areas, especially in relation to the government and environment.

I think there are definite differences in the way the public accepts or rejects the Forest Service in their area. I think it has to do with demographics in the area...[In urban areas] you have a lot more
collaboration because you've got a public that's probably a bit more open minded, more progressive in their thought processes. Some of them are probably not afraid to work with the Forest Service.

Mr. Mayfield explains that longtime John Day residents tend to be set in their ways and apprehensive about working with the agency; they usually own large parcels and so the cross-boundary effects of adjoining ownerships may not be immediately evident. Nevertheless, he and other informants note that there are several large historic ranches in the area that are quite progressive and environmentally sensitive in their grazing and logging practices.

For cross-boundary cooperation, the perception of differential power between urban and rural regions may be more influential than actual levels of power. This distinction parallels the economic relationship between core urban areas and rural peripheral ones as described by dependencia theory. For example, despite the criticism of the powerful urban centers in Oregon by rural people, the economic connections between business centers like Portland and communities such as John Day have simultaneously benefited urban and rural parts of the state (Smith and Steel 1995; Miller 1990).

The problem comes from the feeling of differential power. The resources extracted [from rural areas] go to enhance the well-being of an urban community in which further value is added by manufacture into finished goods. Thus, while both communities may benefit, the resource-based community sees its benefit coming with the loss of decision-making power about the use of resources. Even if both urban and rural communities benefit, the resource-based community at the periphery perceives itself as less powerful (Smith and Steel 1995: 58).

Applying this idea to the management of national forests, a policy perceived to be coming from urban areas may be resisted because of its link to urban locales, rather than
opposed based on its merits. Cross-boundary management and the larger trend toward ecosystem management might be highly resisted in John Day because of its connection to a decision-making framework dominated by distant stakeholders. This perceived distribution of power between urban and rural America presents a formidable and deeply-rooted challenge for cross-boundary cooperation.

5.3.2 Agency-Community Power Differentials

Stakeholder groups also believe that the Forest Service has a disproportionate amount of power relative to the rest of the community. Other studies confirm that the awareness of power differentials reduces the willingness of local communities to enter into a dialogue with dominant landholders (Williams and Ellefson 1997; Hough 1988). In addition, the sharing of power is important for effective collaboration among stakeholders (Wondolleck and Yaffee 2000; Selin and Chavez 1995).

At the heart of these power differentials is the connection between the agency and the national political system. In the eyes of most informants within and outside the agency, the Forest Service is an enormous bureaucracy in which most policies directing management on the ground can be traced to top officials. The Malheur National Forest is the lowest rung on the agency ladder; it is expected to implement management that is consistent with the agency's national direction, which may not be congruent with the local needs. "As an agency, we're following our national [direction]," explains Jonathan Whyte. "We're a federal agency." Another employee, David Libby, describes the challenge of adapting national policies to local conditions. He and others in the
Supervisor's Office are faced with the difficult task of distilling agency mandates for use by the ranger districts on the forest.

The oversight's really coming from way over our heads. We're kind of like a funnel. We take all the weird direction we're getting from the regional office, coming from the Washington office direct. We're trying to figure out, of all that gibberish, what's really relevant to managing down on the ground level and pass the right information down...And that filtering job is challenging.

Agency employees explain that this pecking order structure is not new; what is new are the constraints put on the agency in the form of declining budgets, a decreasing ability to adapt policies to local conditions, and the increasing complexity of regulations. Despite the power differentials, informants outside the agency view the local Forest Service employees as "good people;" they are doing what they can to meet their national mandates without compromising the needs of the local community. Nonetheless, the same informants also acknowledge that the hands of the Malheur are tied by forest policies and environmental regulations.

According to Forest Service employees, inadequate agency support reflects the political nature of forest management and is one obstacle for local management. They feel increasingly dominated by officials high in the agency chain of command. For example, the biennial budget cycles coupled with agency declines in allocated monies complicates the use of prescribed fire. Forest Service employee Craig Brown explains that although the Malheur's fire program is not currently limited by funding, implementing a prescribed burn faces the constraints of forest planning, environmental regulations, and weather.
Congress's answer to a problem is to throw money at it. That's Congress's answer to everything. So they come charging through the door with a big pot of money and say, 'Go out and burn it.' You can't. Because I've got all of these other things to contend with before I can light a match. They can give me all the money they want. If I can't get through the planning process, if I can't get it through the weather systems...It's a balancing act is what it is. It really is.

Despite apparent increases in the allocation of funding to fire, employees explain that the forest is experiencing budget cuts in other program areas, along with workforce declines and growing regulatory demands. Forest Service employee Nancy Horton describes the situation facing the agency as a Catch-22: “We have budget cuts, so we have fewer people workin’ for the local Forest Service, and yet the public has more and more [desires] out of public lands.” Institutional support for partnerships in the form of funding and political backing may make or break the ability for local managers to follow through with promises, thus affecting the success of cross-boundary cooperation. The political dominance of the Forest Service relative to the John Day community is evocative of other work which has attributed rural poverty to the political dominance of natural resource bureaucracies (West 1994; RSS Task Force on Persistent Rural Poverty 1993).

5.3.3 Rigidity of National Forest Policy

Within and outside the agency, informants depict the management of the Malheur National Forest as being constrained by policies that are inflexible, top-down, and arbitrary. They assert that there are not enough opportunities for forest planning and management which reflect the ecologic, economic, and social conditions in the area.
Even local environmentalist Sarah Johnson wishes that policies were more reasonable; in one interview, she expresses frustration with how the recent listing of the lynx as an endangered species is a one size fits all solution: “All right, let’s save some habitat for lynx just in case they come back, but we shouldn’t be managing all of our forests in the Blue Mountains for lynx when there’s no lynx here.” Similarly, in another interview Forest Service retiree Martin Wells says that the listing of the wolverine is unreasonable, and only provides fodder for people who want to stop timber sales. “When they can stop a timber sale because we haven’t done any wolverine assessments in an area where you know there’s no wolverines...that’s like saying, ‘There might be elephants in there.’” Indeed, command and control is the traditional model for the enforcement of environmental regulations, which usually results in extended conflict, adversarial relations, and high transaction costs (Weber 1998). As long as broad-based, inflexible policies dominate the regulation and management of natural resources, the success of cooperation will be limited.

According to Malheur employees, in recent years this top-down policy framework that fosters inflexibility has become strengthened. Jay Harper, who has worked with the agency for over three decades, explains that in the 1960s through 1980s the direction handed to the forest was “black and white;” it was more clear what management activities were tolerated by the agency and the public than it is today. What is certain nowadays, he says, is that timber sales and other proposed management actions will go to court, and the overall direction of the agency will change with a new presidential administration. The effects of administration change has led Schonewald-Cox et al. (1992) to advocate for legal mechanisms for local management which provide insurance against political
party turnover. Using the screen rule as an example, the policy that no trees over 21 inches in diameter are to be harvested on the Malheur National Forest, Mr. Harper explains that it’s hard to build cooperative relationships with landowners when management directives are constantly in flux.

What’s really happened so often is one day Congress says, ‘You don’t cut a tree over 21 inches.’ The next day they come out with a rule that says, ‘Go out and liquidate everything that is over 21 inches.’ That’s the kind of stuff that really hurts. It sets the environmentalists all off. It sets the private landowners all off... We can deal easily with the manager that does somethin’ dumb... [It is broad legislation] that suddenly makes everybody mad.

In another interview, David Libby claims that the non-local nature of his agency’s management decisions have “gotten worse in the last 20 to 30 years.” As the direction of the agency has changed along with the mainstream environmental attitudes of the American public, he explains, it has placed additional demands on the Malheur Forest. “Part of it is there is a lot more direction from up top... I think most of us in the agency do feel that we’re micromanaged. A lot of that is a good test... that the national forest here should be managed... extremely similar to one in a different part of the country.” He questions the benefit of restricting the ability of the forest to pursue place-based management and collaboration among local stakeholders. Mr. Libby suggests that cooperative fire management and similar local approaches can produce results that are better aligned with the ecology and economy of the John Day area. The inability to use a variety of management techniques remains an important challenge for ecosystem management (Agee and Johnson 1988).
Agency and non-agency informants agree that in order to change the management of the Malheur National Forest, things are going to have to be politically altered in the agency’s upper echelons. “I think it has to be changed at the top,” asserts community leader Rick Andrews. “I think these people right down here as low as the supervisor on this forest is controlled by the people in Washington, D.C.” Local industry consultant Ronald Moore complains about the lack of policy plasticity, too: “If we don’t get change at the top that allows for local management, then nothing will get done.” Others share the sentiment, but qualify that there need to be limitations placed on local management.

I put more trust in the people on the ground that’re losing [their livelihoods] and have been here awhile to make good decisions—and I think most of ‘em will—than somebody, a politician in Washington, D.C. or Salem [the state capital] that’s influenced by corporations...or special interest groups or whatever...I’m not sayin’ that the local managers should be given a blank check on it. There need to be some checks and balances, but we need to be able to have a lot more discretion, a lot more flexibility (Gary Reeves, BLM).

He and others suggest that appropriate forest management will only occur if the political power of the uppermost officials is relinquished to the local forests and communities. Not all informants share this perspective, though.

Environmentalists are most hesitant to embrace local control as a realistic option. Activist Paul Boyd notes that he doesn’t support the devolution of power to locals because of the tendency for rural communities like John Day to resist changing their ways. “The reason that I don’t just go all out for the local basis is because I don’t see it changing much...I think there’s a real danger there if you don’t have some kind of [ecological] sideboards...some strong sideboards.” Other environmentalists believe that some decentralized management could be beneficial, but too much local control at the
expense of adaptive management is a common qualm. This view is shared by many national environmental groups and others who believe that decisions regarding the public good should be made through traditional governmental processes that give weight to the voting American public (Coggins 1998; McCloskey 1995).

Despite such concerns about collaboration, most local informants point out that applying policies rather than adapting them to local conditions negatively influences the relationship between the Malheur National Forest and the rest of the community. Mr. Harper believes that increased policy flexibility and greater agency faith put in the decisions of local Forest Service workers would help managers implement more appropriate management, while strengthening their relationship with adjacent landowners and enhancing prospects for cross-boundary management. He explains that without greater discretion at the local level, the Forest Service will continue to be viewed as the enemy, always caught between the needs of the local community, the demands of the agency, and the desires of the national public. He describes how he is simultaneously attacked by local environmentalists and the timber industry.

I get it both ways. If I talk to an environmentalist...they probably [think] that we’re pro-industry. If you talk to industry folks, they think we’re pro-environmentalists. And it’s just like, ‘Well actually we’re pro-national forest.’ And that’s where we need to be workin’. And my primary charge is to manage the resource the way my boss tells me. My boss is the public, and that’s where the dilemma comes. We’ve got this diverse public that’s our boss...That’s what give people the perception that we’re in bed with the industry or we’re in bed with the environmentalists [because] we’re not meetin’ either one of those peoples’ objectives.
It may be difficult for the Forest Service to be viewed as a trustworthy partner when they are caught between managing for commodities, while providing for ecosystem values as mandated by regulations.

For cooperative fire management, the most influential form of Forest Service dominance comes through regulatory processes. As with all federal land management, cooperative burns involving national forest require that all partners heed federal environmental regulations. The regulatory stumbling block most frequently mentioned by informants is the National Environmental Policy Act (NEPA), which includes either an Environmental Assessment or an extensive Environmental Impact Statement, in addition to a public review process. According to Dayville rancher Tracy Cox, a cooperative burn with the Forest Service means that “we have to go by their rules.” He fears that the lengthy timelines and increased scrutiny that accompany federal regulations might reduce his own ability to manage how he sees fit: “On us, we don’t have to go by anybody’s rules but what we say.” Industry representative Mark Stanley agrees; he is afraid that by cooperating with the Malheur National Forest, his company’s capability to manage their private forests would be stymied by the same rules and regulations that constrain the agency.

I am almost total against any tying in with federal government…just because I don’t want to be involved in their regulations. I want the ability to manage our ground out. When I see something’s wrong, I want the ability to fix it. I want the ability to take care of it. I don’t want to have to go through a NEPA process, all this stuff.

Viewed in this manner, the regulations associated with federal land management—as necessary as they are for meeting national standards—may be disincentives for
landowners to cooperate with the Forest Service. For example, most NEPA processes on
the Malheur are two years in length, barring court battles; this extended timeline is
guaranteed to slow the implementation of a burn or even halt it. Consequently, any
public or private land manager interested in pursuing a cooperative fire partnership must
be patient. Forest Service employee George Mayfield remarks, “All these things that
make our ability to do anything on the ground difficult is what’s preventing us from
being good partners with others like landowners.” Other researchers argue that an
agency’s ability to concede to local demands demonstrates a commitment to compromise,
which can strengthen the relationship between the agency and community (Hough 1988).

Cooperation among public and private land managers faces strong political
constraints. Many agency informants, including Forest Service employee Kevin Baker,
remain cynical about the capability of the agency to be a meaningful partner. He laments
that “if it were just us, and we could make the decision and implement it, life would be
wonderful.” The slew of challenges facing the agency, he says, makes it “almost a
miracle” for them to effectively cooperate with an adjacent landowner. “We have to
basically damned near get every star lined up just perfectly…I guess I just don’t have
much faith in our agency because it is so big [and] because it is so politically driven.”
The political complexity of cooperation is viewed as an enormous hurdle for public-
private partnerships by influencing a manager’s attitude toward cooperation and whether
or not the practice is more trouble than it’s worth.
5.3.4 Knowledge as Power

In the John Day Valley, power differentials may also be influenced by knowledge. Informants hold a range of beliefs about scientific knowledge, expert opinion, and local knowledge. These different knowledge types might indirectly maintain power relations between the public and private sectors by shaping how easily managers find common ground, effectively communicate, and identify with one another, which are three factors that Williams and Ellefson (1997) identify as important to effective partnerships.

Informants resoundingly view scientific knowledge positively. Many indicate that they would like to see federal land management be dictated by science rather than politics. “The direction [the Forest Service is] getting is a political thing, versus something that’s good, sound science and management,” says Thomas Olson, who works for ODF. The value of scientific knowledge is echoed by other interviewees. In discussing prescribed fire, Mt. Vernon rancher Henry Lewis argues, “If they can prove it’s going to be a good thing, then they should do it. If science and proof—science and statistics—show that it is good management, then do it.” Even those who are doubtful about the practice of prescribed fire acknowledge that if science supports the practice, then it should have a role in forest management.

Science and politics intersect at the management of federal forests. Malheur National Forest employee Craig Brown explains, for example, that even when the forest tries to implement restoration forestry, as advocated by scientific experts, there are environmentalists who stop them. “If it looks like a timber sale, it’s an uphill fight to a lot of folks, regardless of what science says.” In a similar vein, Sherri Ferguson, who owns a small piece of forestland outside Canyon City, notes her trepidation about the
politics and legal battles involved with managing national forests today. “That’s not a good balance to me. It’s not a scientific balance, it’s a legal balance. And I think we need to get back to more of scientific.” Many informants lament the politics of forest management. For instance, in describing the difficulty of implementing the salvage sales following the Summit Fire of 1996, community leader Rick Andrews attributes politics to the agency’s inability to quickly implement the sales. “The problem of it is, is that the wisdom of the science was there but the political arena didn’t allow them to take action.”

Closely related to scientific knowledge is that of expert opinion. Many informants argue that the people who understand the local conditions and are educated in forestry should be the primary decision-makers regarding forest management. Some Forest Service employees express frustration about their inability to use their expertise to affect conditions on the ground; policy always seems to get in the way of proper forest management, they explain. Retired employee Martin Wells asserts, “You’ve got professionals that know what they’re doing—don’t meddle with them!” Outside the agency, informants acknowledge that the knowledge and education that Forest Service employees have is important. “They have foresters. They have silviculturists,” says industry representative Mark Stanley. “When they look at the stand, they know what it needs. They have some good people.” He reiterates that local foresters and not politicians should be making decisions about forest management: “The surgeon on the ground, forester or whoever, should be the guy who makes the decision.” In another interview, rancher Victor Friedman expresses similar sentiment when he tells me that politics, regulations, and litigation hamper the ability for agency employees to use their formal forestry education to address issues of forest management.
People that graduated from the same school that you went to that are trained in forest management don’t manage a damn thing! It’s judges that manage the public lands, and every time you stick your head up and make a decision it’s chopped off in a lawsuit! So I have a lot of empathy for people that work in these public land agencies…I’m tired of people that are well educated with 20 or 30 years experience in the Forest Service sitting at their desk and doing nothing.

While many informants view the knowledge of the Forest Service and other experts in a positive light, not all share this perspective.

Some believe that the expert knowledge of a forester hinders cooperation. For example, Jay Harper attributes the problems the forest had with Environmental Impact Statements for the Summit Fire salvage sales to the expert attitude that other interviewees hold in high regard. “I think a lot of it was just the attitude that we as an agency have had for so long, that we know what’s right and we know how to do it. Instead of listening to the public, all the publics that we work for, we just got into that mindset.” Another retired public land manager describes some of the repercussions of the attitude: “Common sense will tell you what to do. Use good common sense and judgment, and you can just do one hell of a lot of good stuff. But if you just get unruly and do as you like, then you gonna get the public goin’ and you got a bees nest.”

In fact, locals have not historically viewed the knowledge of public land managers positively. For example, when the Blue Mountain Forest Reserve (later renamed the Malheur National Forest) was created near the beginning of the twentieth century, locals did not react positively to the forestry neophytes who were to manage it (Langston 1995). David Libby, with the Forest Service, explains that some of the attitudes expressed in local newspapers earlier in the century are still around today.
There's one [historical newspaper article] that specifically talks about the government sending these young, college educated kids out here to tell us how to manage the forest, when 'we've been doing that for years.' And remember, back in 1906 "years" would have been 20 to 30 years...Same attitude today.

Local environmentalist Walter May, who is retired from the Forest Service, alleges that the agency has always used its expert opinion to pursue its own agenda. He describes how the agency remains resistant to heeding the concerns of the public as required by NEPA: "It's still there. The old hands are still fighting with that process. They do not believe the public should be involved in planning timber sales." He and others claim that this expert opinion mindset is agency-wide.

Informants also suggest that local knowledge should be tapped in policy-making. Small woodland owner and logger Neal Richards complains that policy-makers do not utilize the knowledge that the community has about the ecological, economic, and social conditions in the area. "We can figure out how to do it if we're given an opportunity to do something, but when we're not given an opportunity to do anything it really makes it tough." Other informants suggest that cross-boundary cooperation with adjacent landowners may be one avenue by which the Forest Service can make use of the local knowledge of private landowners.

Several landowners demonstrate how a person's local knowledge and understanding of forestry can develop through living and working in the area. They describe how they have changed the management of their own forests based on experience. In one case, rancher Don Wicker explains how he transferred his knowledge of raising cattle to the practice of forestry.
My theory is, dealing with cattle all my life, I noticed that cattle that are kept nutritionally sound have a natural resistance to parasites. So therefore it stands to reason...timber also, properly managed, properly spaced, in proper health will have a natural resistance to parasites, and I really believe that.

Similarly, rancher Victor Friedman explains how his knowledge of ranching has changed how he views the timber on his ranch.

The historical use of timber [on our ranch] is whenever things got real bad in the cow business or where we got over our head in debt, we sold enough trees to make ourselves healthy again. For most of this last century, we would sell our best trees. Starting in the early '90s, I decided that that was no way to manage a tree stand. I didn’t know forestry, but you wouldn’t get very far by selling your best cows all the time.

Even relatively recent arrivals to John Day acknowledge that they use their own experience, often through trial and error, to learn how to best manage their forests. Dale Warren, a small woodland owner who has been in the area for about 20 years (a newcomer by local standards) regularly uses fire on his place to reduce competing vegetation and maintain an open under story. He explains how he had initially burned in the fall but found that with spring burning the fire is easier to control, pine needles decompose faster, and flame temperatures are lower. Years of annual burning have helped him to develop his own low tech method for running low intensity fires through his timber. “Basically, my tools are a backpack sprayer to control flare-ups, a six tine pitch fork, and a box of matches.” It is this local knowledge developed through the experience of living and working in the area that cooperation might capture and translate into ecosystem management across.
Among non-agency informants, Forest Service employees are for the most part seen as having limited experiential knowledge, which may influence how effectively the agency and landowners can work together. In comparing the ability to work with the Forest Service and the BLM, informants explain that BLM employees have a greater understanding of the challenges facing local ranchers. Unlike the Forest Service, the BLM managers know how to ride a horse and build a fence, say informants, because the BLM is forced to work closely with individual landowners as a result of their grazing system. Community member Glen Feldman claims that many Forest Service workers lack the understanding and experience of dealing with ranchers. “If you don’t understand how to build a fence, how are you gonna’ talk to a guy about buildin’ a fence? I mean, you don’t learn that from a book.”

These perspectives of informants suggest that a sensitivity to different knowledge types may play a subtle, although potentially critical role for the development of working relationships among public and private land managers in the John Day Valley. The relative value attached to scientific knowledge, local knowledge, and expert opinion influences the working relationships among managers, as well as the acceptance of cross-boundary cooperation. To most informants, these knowledge types are viewed as antithetical to the ideas that stimulate political decisions, the archenemy of proper forest management.

5.4 Change

I think one thing the community has to understand [is] that it no longer lives in a little world of its own...They’ve got to accept the change, and government involvement in their life is going to be more people, more
concerns, greater ability for outside people to know what’s going on here. And those things are all change.
—Walter May, Environmental Activist, John Day

This theme is about changes in the agency and community that set the context for relationships among land managers. In the John Day Valley, the Forest Service and community are facing new social and economic situations, including shifts in demographics, attitudes, and culture. This context of change fosters a sense of losing control, and an accompanying uneasiness and uncertainty that influences cross-boundary cooperation.

5.4.1 Agency Change

Informants explain that the Forest Service is amidst constant change. Its direction has broadened from one emphasizing commodity production to ecosystem management and forest stewardship. Accompanying this shift have been increasingly complex regulations, a strengthened top-down decision-making structure, and changes in agency personnel. Together, these have initiated a cultural shift within the agency. The Malheur National Forest is changing as much as the agency as a whole; the forest serves to illustrate the potential implications of these shifts for cooperation with adjacent landowners.

The local Forest Service employees feel the pressures brought by the agency’s broadened mission. “Thirty years ago the Forest Service direction was simple,” says employee Kevin Baker. He and others explain that prior to the 1990s the agency mainly produced timber, provided grazing, and fought fire. “It was pretty basic, and it was easy
to do a job,” he explains. “The forest produced timber and it produced cows...over the last 10 years there’s been a huge shift away from those commodities.” Today the organization is expected to provide for a broader range of values including healthy ecosystems, protection of biodiversity, and recreational opportunities. This shift in direction has been swift, say informants, stemming mostly from the changing values of the American public as the general awareness of environmental issues has increased. The Forest Service is changing faster than ever, observes Forest Service employee Grace Corwin: “It’s probably changed more quickly in the last 7 years than in my prior 20 years. Partly it’s the rate society’s values are changing.” The shift in philosophy appears to have impacted the relationship between local managers on the Malheur National Forest and others in the John Day community.

The changing direction of the agency has brought uncertainty to the John Day community. Across all stakeholder groups, informants agree that the management of federal forests is at the whim of those in political power. “Back in the Reagan era they were over cutting the forests in this area,” explains ODF employee Thomas Olson. “Everybody knew it. I even had loggers tell me that, ‘This forest is being over cut. We’re not going to have anything outta’ here over 20 inches in a few years.’” In part, the Clinton administration changed this; harvest levels were cut back as the agency became accountable for a broader range of values, say informants. These shifts within the agency have brought economic uncertainty to the local community that worries those who want to maintain an economic connection between the community and forests. Industry representative Mike Reeves believes that the reduced harvest levels of the last decade diverges from the original mission of the agency.
The statement of the Forest Service is the greatest good for the greatest number for the long run. Right now we’re not getting the greatest good out of our lands, and it’s a very short term approach. And I think that they’ve left the communities and the people that live in the communities and community stability completely out of the scenario. We don’t care about providing commodities for our industries. We don’t care about providing jobs for the local communities.

Others agree with Mr. Reeves that the inconsistent direction of the agency, which varies depending on the presidential administration, makes it tough on communities like John Day. “What they do changes with politics,” exclaims Robert Donaldson. His frustration with the top-down political climate is echoed by others, including community leader Sherri Ferguson: “What worries me is that every time we get a new president [the agency is] going to get a whole new philosophy. That’s not really good for [stability] in our economy.” The steep reductions in harvest levels during the 1990s, which occurred in a short span of years, does not provide the predictability desired by much of the community, say informants. “What a community needs is not feast or famine,” explains Rick Andrews. “What we need is some sense of certainty.” He believes that the community can adjust to lower levels of harvest by exploring other industries; for example, the county has plans to build a telecommunications building to attract additional business. However, he notes that the rate of the decline in the timber industry is worrisome because it brings too much uncertainty to people’s lives too fast.

Along with the philosophical changes in the Forest Service, explain informants, have come increasingly complex regulations falling within a top-down decision-making framework. Nowadays federal forest management involves specialists, public involvement processes, and oftentimes the courts. Informants within the agency suggest that the complexity of contemporary forest management has strengthened the
bureaucracy’s own internal constraints. “I don’t feel that there’s a common acceptance of
the mission, direction, [and] goals of the agency within the agency,” explains Forest
Service employee George Mayfield, who complains that he and his colleagues often
disagree on the basic purpose of national forests. As with all federal bureaucracies, the
Forest Service is characterized by numerous policies, regulations, and processes.

“There’s a rule or a ‘manual says’ for everything within the federal system,” explains
ODF employee Roger Pierce, who used to work for the Forest Service. One challenge
for Malheur National Forest employees who want to pursue cooperation with landowners
becomes building relationships with the local community, while heeding the demands of
policy and dealing with ongoing agency change.

This challenge has been complicated by recent downsizing at the forest level, say
agency informants. The combination of fewer employees on individual forests and
increasingly complex forest management makes the workload on Malheur employees
demanding. “We’re in a downsizing situation,” says Forest Service worker Nancy
Horton. “We’ve just got more and more work piled on fewer and fewer employees.”
Little time, she says, is left for actively pursuing partnerships with adjoining landowners.
While the workforce on national forests continues to decline, say employees, the number
of personnel in the agency’s upper echelons has increased. David Libby explains that
most of the downsizing on local forests has occurred under the Clinton administration.

The democrats have downsized government much more strongly than the
Reagan or Bush [administrations.] The number of Forest Service
employees has declined a lot. Interestingly, but not surprisingly, the
number of Forest Service employees at GS-14s and above—so, way up
over our heads—they have increased. But people on the ground have
decreased significantly.
Informants attribute the increase in upper level officials to the growing intensity of politics. The agency is being asked to answer to more diverse interests groups with connections to powerful lobbyists and lawyers. The level of detail required for management decisions must be more comprehensive than ever, explain informants. A couple of decades ago, say informants, Forest Service employees were expected to go out in the field. Today the priority of employees is put on completing paperwork in the office in order to produce sound and defensible management plans and actions.

Changes in Forest Service personnel seem to parallel the sharp cultural shifts within the agency, which began in the 1970s and continue to evolve today. A series of national environmental laws passed in the late 1960s and through the 1970s forced the agency to view forests as more that a source of revenue. In addition to NEPA, the National Forest Management Act, Endangered Species Act, and Clean Water Act demanded that the agency provide for values never before considered in forest planning and management, including endangered species, water quality, and public opinion (Vig and Kraft 1997). Martin Wells, who is retired from the Forest Service, explains what it was like in the late 1960s before the laws.

There was no such thing as NEPA. There was no wildlife biologist. There was no watershed people. There was silviculturists. And there was timber sale designers. And there was sale sellers. And there was timber sale administrators. Timber management assistant for the ranger. And there was a fire control officer, is what they called it then...So that tells you right there the kind of mindset that was going on in those years.

Following the passage of the 1970s era laws, new types of personnel with different backgrounds were hired to do new activities. Ms. Horton explains that this shifted the Forest Service from an “agency of generalists” to an “agency of specialists.”
The Forest Service used to be a bunch of—everybody was a generalist of sorts. Everybody was a jack of all trades...When one department needed help, people would all shift over there to help that department. So people were more generalists...And then we became an agency of specialists where [people] only worked in one department because there was so much work to do in those individual departments...So we became an agency of specialists.

The local timber industry views the specialists today as hindering proper timber management. Mike Reeves and Mark Stanley, who work for one of the mills in the Valley, allege that the management activities of specialists “offset” each other. As an example, they point out that it makes no sense to first require loggers to leave behind woody debris, and then send a fire crew out to burn up the debris. “We just think there’s too many specialists trying to get their nickels in the bin on a lot of these projects, and it doesn’t work out,” asserts Mr. Reeves. While their perception is important, they fail to recognize that both fire and course woody debris play integral roles for the maintenance of ecosystem processes. Indeed, their outlook is rooted in an extraction-oriented ideology, rather than in ecosystem science.

The emphasis on ecosystem management in the past decade, coupled with increasing criticism, have challenged the strong tradition of cutting trees and putting out fires. “The whole management process was more management oriented,” explains logger and woodland owner Neal Richards, speaking of the management of the Malheur Forest before the 1990s. “People on the ground had the ability to mark hazard trees or mark bug infested trees [and] add volume to sales that they just really don’t have the authority to do anymore.” Today, laws and court decisions limit what the agency can do on the ground, say agency employees. “The Forest Service has always been a ‘can do’ type of agency,” explains George Mayfield. “Now all of a sudden we’re put into a world where we can’t
do things... And that's a big shift. That's really hard.” Still, according to other Forest Service informants, there is resistance to these changes within the agency. “We have a lot of old silviculturists who are still trying to grow trees for crops,” states Craig Brown. “So we haven’t made the shift from a commodity producing agency to an agency managing a natural resource.”

5.4.2 Community Change

Communities in the John Day Valley are also facing change. Declines in the local timber industry in the past decade have brought economic hardships to mill workers, businesses, and others. At the same time, the community appears to be facing changing demographics as exurbanites, retirees, and wealthy landowners continue to move to the area. Absentee landowners may also be more prevalent. Such economic and demographic shifts could shape the future of the community and influence the course of cross-boundary cooperation.

Since the early 1990s, dramatic reductions in timber harvest from the Malheur National Forest have shifted the cutting pressure from public to private land, say informants. Until recently, the private timber on the fringe of ranches was rarely looked to as a source of income. “That timber has been sitting there, most of it, as long as these ranches have been in existence,” says rancher Henry Lewis. “It’s only been in the last 10 years that the timber industry has upped the ante as far as taking private timber out.” Mr. Lewis explains that the timber industry has had to harvest on private land “just to stay in existence.” Industry confirms this shift to private forests, noting that they keep hoping that federal land will be reopened for harvest to alleviate the pressure on private land.
“Long term, we’d like to see the forest kind of turn around and offer us something that we can use,” says industry representative Dwight Graham. “Private logs aren’t gonna last forever with the amount of mills that are here.” Neal Richards explains that in the last five years most of the large private tracts of land have been cut hard, to the point where “it’s just pretty hard to find any volume left on private.” He says that one of the local mills for whom he works harvested more volume on its company land than originally planned in order to feed their mill and keep people employed. He explains that it was a short term fix; they shortened the rotation age to get the volume, knowing that it extended the time period before the next harvest.

In response to these and other industry-wide challenges the local timber industry is downsizing. From the timber industry’s perspective, reductions in the workforce stem directly from Forest Service land “locked up” from harvest. Mike Reeves links forest health issues to the reduced workforces on the national forest and in the industry.

“We’ve seen a domino effect of losing Forest Service people, losing industry jobs, losing contract jobs, and now we’re facing head on into decades of having poor forest health.” He suggests that the only way for the community to get out of the tough economic times is to establish some sense of consistency or economic dependability. Others agree, including community leader Rick Andrews, who believes that the industry needs predictability in order to survive. “There’s no certainty out there anymore. [Industry employees] don’t know from week to week or month to month whether or not they’re gonna have a job. And that was different than it was in the ‘60s or ‘70s...Jobs were available, jobs were dependable, jobs paid well.” Yet others disagree that the timber industry is the savior for the community, and instead look upon the industry’s claims with
suspicion. For example, community leader Sherri Ferguson points out that while industry may complain about laying off employees because timber isn’t available, technology has contributed to the downsizing as it has done in other industries.

Since we moved here 30 years ago there’s been a tremendous change. Our ranches have gone from 15 employees to maybe none or maybe 2 or 3 because they’ve become mechanized. And the timber industry is screaming that we’ve lost all these jobs because we don’t have timber to harvest. But come on now, they’ve been computerized! So it isn’t all just the cut that has reduced our workforce. It’s a change in the technology.

Indeed, the shift away from timber dependence is not unique to the John Day Valley. Forest Service worker Grace Corwin explains that the community is facing the same economic changes that other timber towns in Oregon have already confronted. “[Small towns] have all seen shop windows empty, have all seen mills close, [and] shift with the times. There’s lots of experiences in this state. This community is choosing, in my opinion, choosing to go through all those things.” She explains that the community can create another route by developing a vision of its desired future. Cross-boundary cooperation and similar approaches to local management are viewed by several informants as a way to facilitate this larger community dialogue.

However, developing a community vision might be complicated by changing demographics. Although newcomers are not flocking to the John Day Valley, informants explain that retirees and exurbanites, some of whom are very wealthy, are trickling into the area. The newcomers create a demand for the partitioning of ranches, say informants, an activity that seems to be prevalent between Mt. Vernon and John Day. Other people of means purchase large ranches and operate them either as absentee or part time
residents. As Robert Donaldson sees it, wealth coming from outside the community will change the current resource-dependent economy.

Everybody in Bend and Portland and Boise and San Francisco and Seattle have found Eastern Oregon, and the retirees are coming in. And I think the future of this county is tourism and retirement money. It’s not logging. There’ll still be agriculture, but there won’t be any growth in agriculture because there is no more land to hay...John Day will probably end up not exploding...but being replaced by people with money from elsewhere.

Others claim that these changes are happening right now. Sherri Ferguson says that there are people in the community who are anticipating shifts in demographics. For example, the hospital is trying to update it’s services and technology to accommodate an older community. She says that in addition to retirees, who are generally middle class, the area is attracting some people with money.

You’re going to find up these canyons some highly sophisticated businesses run out of homes. They’re there now. We have multimillionaires moving in to build their 4,000 square foot homes to run their corporations down in California, and they’ve got the technology to do it. So this is going on here, but you don’t see it. You don’t see it.

New folks bring with them new ideas that influence the local culture, which in turn affects attitudes toward forest management and cooperation.

To some informants, those moving to the area offer an opportunity for initiating cooperation; to others, they present a hurdle. Viewed as an opportunity, informants explain that oftentimes newcomers are more open to ideas such as cooperative fire management. According to Forest Service employee George Mayfield, they tend to be more responsive to the agency. “Generally, the ones who are newer to the area are much
more open and willing to work with the Forest Service to solve problems rather than to be antagonistic about it." He suggests that the newer the resident, the less they are steeped in the local culture. He also points out that newcomers often arrive from urban areas, where people tend to be more progressive and open to government involvement in their lives. On the other hand, absentee landowners can be difficult to work with because they are often inaccessible and unresponsive. Rancher Benjamin Lynch suggests that since absentee landowners don’t live in the area, they probably do not “have a feel for the land...[or] for the way things should be done,” and so they may not have much local knowledge about how best to use fire or cooperate with neighbors.

While some informants welcome the changing economics and demographics, others view it with trepidation. Informants indicate that there is widespread resistance to change, especially among key community leaders and vocal bystanders. Neal Richards typifies this resistance; when asked how he would like to see the John Day Valley in the next 50 years he responds, “I’d like to see it like it’s been the last 50 years. I don’t want it to change.” Mr. Richards’ family homesteaded in the area, and he is afraid that if a new economy were to develop people like himself might lose their personal connection to the area. Others share this sentiment, including industry representative Mark Stanley.

As a long time resident here you look at some of this with mixed reservations. I remember what Bend [a rapidly growing city in nearby central Oregon] was when I was a young man: it was a wide spot in the road. The whole reason I live here is because of the quality of life, the small communities—you know almost everybody in town—an excellent place to raise your kids. I’d hate to see it develop into a Bend or something like that. I think you’d lose a lot of the things. Yes we do need to move forward, but we need to do it at a regulated pace.
Informants who view the current changes as positive declare that community change inevitable. Environmental activist Walter May says that it is impossible to stop the forces coming from outside. “I think that’s okay. That’s life. Things change... You can’t bemoan the loss of what you thought was perfect... If it was perfect it wouldn’t have changed.” Similarly, Sherri Ferguson suggests that the community should take a more proactive stance. She explains that some of the resistance to diversifying the economy, for instance, is promoted by other community leaders who deny the unavoidable declines in the timber industry.

This community has been very reluctant to face change. They’ve been so slow that we haven’t been able to shift our economic base in time to catch the fallout in the changes in the timber industry. There’s been this attitude that we’re not going to give up on the timber industry, and therefore we’re not going to prepare for a change because it’s not going to happen... But the change is here, it is taking place. If it hadn’t already begun to take place, there’d be no effort to put in an industrial site at the airport or any other place.

She argues that the local economy can no longer be dominated by a timber industry that cuts large logs. The industry, she says, is going to have to retool if they are going to be a player in the local economy. “We’re not going to have the kind of timber based economy that we’ve had in the past. We simply have to broaden our economic base in order to survive.”

She and others believe that forest restoration could be one way to alleviate the economic effects of harvest declines, while maintaining the timber-dependent identity of the community. “Forest restoration can help compensate for some of the jobs that are being lost to just plain logging,” asserts environmental activist Paul Boyd, who sees restoration as common ground between environmentalists and industry. Community
leader Rick Andrews agrees, noting that timber workers need predictable work, which is something, he claims, that restoration can provide. "There may not be necessarily board pullers on the green chain...But somebody's gonna plant the seedlings." Mr. Andrews says that what has been hardest on the timber industry is the rapid rate of declines in the harvest levels.

A community is terribly resilient if the change comes slowly. But if the change comes rapidly it's difficult for a community to retool, to reinvest, to reinvent, to change their direction. So you create an almost impossibility when the allowable sale quantity [on the Malheur National Forest] goes from 250 million board foot to 19 million board foot over a 5 year period.

It appears that the sense of uncertainty and uneasiness accompanying these community changes affect local attitudes toward cooperation.

A changing agency and community set the context for cooperative fire management. Within-agency challenges such as a broadening mission, increasing policy complexity, and changing culture affect the ease with which public and private land managers can develop working relationships. Economic and demographic changes in the community present equally important challenges. However, change itself may be an opportunity for cross-boundary cooperation to take root, as it prompts public and private land managers to participate in broader discussions about the future of the community and its connection to the forest.

5.5 Trust

The private landowners don't trust the Forest Service. They've had many opportunities to say, 'Hey, the Forest Service hasn't lived up to their
promises.'...And the environmentalists can go on and on and on about [how] they don’t trust the Forest Service...That trust factor is the biggest problem. Nobody trusts the Forest Service. Nobody trusts the federal government. A lot of people don’t trust the private landowners. So there’s no trust.

—Thomas Olson, ODF, John Day

Trust is at the core of working relationships. The importance of trust for relationship-building and ultimately collaboration is well established (Lewicki and Wiethoff 2000; Wondolleck and Yaffee 2000; Ostrom 1998; Moore 1995; Gambetta 1988; Hough 1988). Trust is defined as confidence in positive expectations regarding another’s conduct, while distrust is the confidence in negative expectations (Lewicki, McAllister, and Bies 1998). In the John Day Valley, pervasive distrust and resentment negatively affects the relationship between public and private land managers, in turn influencing prospects for cross-boundary management. Generally, the local community distrusts the government and the Forest Service, but distrust is also prevalent within the agency and among the local stakeholders themselves. Interviewees suggest that cooperation may be an avenue to build the credibility among stakeholders.

5.5.1 Distrust of Government

Distrust of government impacts prospects for public-private cooperation. In the John Day Valley, the sentiment is most frequently mentioned by private sector informants, although some public agency employees express similar beliefs. “It’s environmentalists, it’s the government, it’s the welfare people—it’s whatever,” says environmental activist Paul Boyd. He claims that community members rarely take the blame for the social, economic, and environmental issues in the area. Instead, he argues,
they tend to point their fingers at the government. As a example, when asked if he trusts the federal government rancher Benjamin Lynch responds, “Not at all. Not at all. They’ll send you down the river. I don’t trust ‘em. I don’t trust the federal government because they’ve got away from our Constitution. We don’t have any Constitutional rights anymore...It’s getting so bad.” Although Mr. Lynch’s feelings about Constitutional rights are mentioned by few others, his concerns about regulations are common.

One of the greatest sources for government distrust among landowners are land use regulations. Pointing to issues over water rights, Mr. Lynch claims that the federal government seems to push its regulations on private landowners; he is concerned that someday he might lose his water rights to the John Day River. In another interview, Neal Richards explains that it is more difficult than ever to find work because regulations restrict the amount of timber available for harvest. In turn, he says, this makes it difficult for him to support the agency’s efforts to work with neighboring landowners and the community. “It’s really hard for us to be supportive of the government when they’re trying to put us out of business.” These attitudes suggest that the potential loss of control from regulations contributes to a resentment toward the government that fuels resistance to working with the Forest Service.

Widespread distrust of government hampers cooperation between public and private managers. BLM employee Gary Reeves explains that a growing distrust of government, spurred by an increasing sense of losing control, is discouraging private landowners from collaborating with public agencies.
There is a growing distrust of involving themselves with the government... There's always been some to some extent, but... more regulations coming down [are instigating] a growing reluctance to become involved in anything with the government because they're concerned about losing control of what they can do on their land.

Private landowners fear that cooperating with a public agency such as the Forest Service might bring increased scrutiny that could impede their own ability to manage how they see fit. The enforcement of regulations, such as a recent series of surprise visits by Environmental Protection Agency (EPA) enforcement officers to ranches in the John Day Valley, creates harrowing situations that foster the fear of government control. In 2001, EPA used what Oregon Representative Peter DeFazio terms “a very heavy-handed manner” to enforce animal feeding operations at Oregon dairies and livestock operations (Carkhuff 2001). Oregon Governor John Kitzhaber also opposes the enforcement, arguing that the EPA is impeding the state’s own efforts to bring dairies and feedlots into compliance with the Clean Water Act. Such command and control enforcement mechanisms may add to already contentious situations, translating to increased government resentment and hesitation to become involved with federal land management agencies such as the Forest Service.

5.5.2 Community-Forest Service Trust

Among community members outside the agency, the Malheur National Forest and the Forest Service as a whole are viewed as difficult to work with and as lacking credibility. Private sector informants describe numerous problems dealing with the Malheur Forest, in particular. Environmentalist Sarah Johnson, for example, who works
on projects with several national forests in the region, finds the Malheur National Forest of the hardest to work with.

Our interactions on the Malheur Forest on everything is quite different than on the other forests...They are the most disorganized, most un-together, most unprofessional forest I deal with...Every other forest I deal with...it’s much easier to cooperate, people follow through. And on this forest nothing seems to work very well.

In another interview, rancher Don Wicker expresses similar sentiment when he describes how the local district ranger was unresponsive to his requests to discuss a mistletoe infestation that had allegedly crossed from the national forest to his ranch. It took a service forester from ODF to bring the ranger to the Wicker Ranch. In another case, rancher Curtis Smith claims that his attempts to become involved with a prescribed fire partnership are continually thwarted by the forest’s refusal to speak with him. He attributes the Malheur Forest’s lack of communication to the unwillingness of forest officials to pursue active management.

We’ve had a bit of an adversarial relationship with the forest because all of the stuff that we’ve got came from them. All the bugs, mistletoe, everything comes off the forest. And they obviously don’t manage...The Malheur has chosen to sit on their hands. They’re one forest that has gone through a series of managers who have basically chosen to set the fence between the environmentalists and the timber people, and so they don’t do anything. They don’t cut. They don’t treat. They clean trails and count rare plants. It’s pretty pathetic when you work with them.

Other landowners explain that interactions with the forest used to be more productive than today. For example, Neal Richards says that in the 1970s and 1980s agency employees and landowners knew each other on a first name basis. “Most of the private landowners would know the people they were dealing with.” He says that today
interactions with the forest tend to be more controversial. Woodland owner Robert Donaldson agrees, pointing out that nowadays landowners tend to step onto their soapbox when an opportunity avails itself. “There is so little communication between private landowners and government people, it’s not often we get to vent our frustrations.”

Relatively poor communication between the Forest Service and community, coupled with the forest’s severe political constraints, seems to have caused many in the community to lose faith in the agency. Rick Andrews points out that as long as the forest doesn’t actively manage, the community will not trust it. “You can’t dictate trust. Trust has to be earned. And to do that you’ve got to do something for somebody to review whether or not they want to trust you. So as long as you continue to do nothing there’s never gonna be any developed trust.” Others agree, including Glen Feldman, who doesn’t have much confidence in the ability of the Malheur Forest to follow through with promises or produce meaningful projects. “Now they just suffer from such a lack of credibility. Even when they propose something which on face looks pretty decent, one, you can almost assume that there’s something sneaky behind it, and two, you can always assume that they can screw it up.”

Forest Service employees respond by attributing the community’s distrust in the agency to administrators higher in the organization. Policies that are inconsistent with the needs of the local community are being handed down from above, they explain. Grace Corwin, who works for the Malheur Supervisor’s Office, believes that the community generally trusts local Forest Service personnel but not the agency as a whole.

I think they trust the local Forest Service, but they don’t trust the administration. They don’t trust the Forest Service above us, above our level. They see that we live here in the community, we work for the
community, but the perception is we don’t make the decisions. So they don’t trust the people that make the decisions...The distrust is higher up.

Forest Service employees face similar questions about the level of confidence that they can put in adjacent owners, which seems to vary from landowner to landowner. The agency expresses positive attitudes toward landowners who are the least combative. As a whole, these include small woodland owners and the several large ranchers who are widely known as progressive in their management practices. The agency has less confidence in landowners and environmentalists who have sued them in the past, and others in the community who try to undermine their mission. Malheur Forest employee Jay Harper explains that trust and credibility are the two main factors that influence the relationship between the forest and adjacent landowners. “I think a lot of it is building trust, that trust relationship...We got to be successful. We can’t promise them something and not deliver because what’s gonna happen again? You don’t have that trust.” Rancher Alan Cox agrees, pointing out that cooperating with the Forest Service needs to be a two-way street; the agency must contribute at least as much the private landowner in terms of money, time, and other resources. “They got to meet half way. I don’t like goin’ all the way. I’ve done that a few times...and end up being too nice at the end.” Based on his experiences working with the agency, Mr. Cox has little assurance that the forest would follow through with their end of the deal when it comes to a cooperative agreement.

Given the constraints of the agency’s policies and regulations, it is no wonder that the Malheur Forest has trouble pursuing the aggressive timber management desired by many of the locals. Nearly every time a timber sale or similar management is proposed,
explains Forest Service informants, a litigant challenges it and the proposed action gets stymied in court. Forest Service employee George Mayfield points out that because of the influence of court battles, the forest has been forced to avoid controversial projects such as salvage and timber sales.

Right now, quite frankly, what we're doing is we're going out and trying to plan the least controversial projects we can. That is the overriding issue: minimize controversy. And I'm sorry, if you want to get this landscape back into some kind of resiliency and deal with multi-ownership issues you're going to have to take on some controversial stuff. You're not going to be able to avoid it.

Issues of distrust and resentment have lead officials on the Malheur National Forest to advocate for an open dialogue with the local community. They hope that open lines of communication among the agency, adjacent landowners, industry, and community leaders can help the community to understand the challenges facing the local forest and develop solutions to ecosystem issues. Ms. Corwin explains, “The biggest thing that can be done to do more work across boundaries...is community dialogue. What you have to be willing to do and what the landowners need to be willing to do is talk at the same time and share that information.”

5.5.3 Trust Within the Forest Service

Trust within the agency itself is also important. Malheur National Forest employees blame upper level officials in the organization for the policies, regulations, and legal battles that keep them from implementing active forest management on the ground. They not only feel micromanaged by the complex policies and regulations
coming down through the agency, but feel as if top administrators do not trust the expertise on the local forest. For example, employees explain that working with adjacent landowners in regard to prescribed fire is much needed in the John Day area, but there is little institutional support for such work. George Mayfield believes that he and other local Forest Service employees understand conditions on the ground better than do distant administrators. He argues that local managers should be the ones who most directly influence how forest management is implemented, but this is not currently the case. He claims that Forest Service administrators in Portland and Washington, D.C., don’t seem to trust the decisions of their own employees on national forests.

Trust their decisions. Trust your specialists...My impression is there’s still people at the upper levels of the outfit that don’t have faith in their people on the ground. Well then it’s just like, ‘What the hell am I doing here?’...We don’t have the support. So it’s like we’re out here kind of on a limb.

Distrust within the agency makes it difficult to cooperate with adjacent landowners. “I don’t think the stumbling block is the landowners,” notes Jay Harper who is speaking of the constraints to cooperation. “I think where we get resistance is internal...I think we create most of our [pressure].” He is referring primarily to the regulations, policies, and mounds of associated paperwork that agency employees must work through. Both Mr. Mayfield and Mr. Harper suggest that distrust within the agency also influences the social dynamics of the local employees, and affects how willing are managers on the Malheur Forest to support cooperative agreements with adjacent landowners.
5.5.4 Distrust of Industry and Environmentalists

Distrust is also expressed of stakeholders outside the agency, most notably the local timber industry and environmentalists. Both are viewed as being manipulative and politically well connected. Among other concerns, the industry is also seen as having a short term perspective, and environmentalists are criticized for their emotive arguments and for misunderstanding the “local way of life.” It is important to be aware of attitudes toward industry and environmentalists because the two stakeholder groups tend to hold opposite perspectives, polarize debates over forest management, and subsequently shape the course of cooperation and fire management.

According to environmentalists, land managers, and other community members, the local timber industry has never been in it for the long haul. Environmentalist Walter May attributes today’s tough economic times in the industry to its appetite for high levels of timber harvest. He draws parallels between the over cutting by Edward Hines Lumber Company, which logged in the area mainly in the 1930s, and the local timber companies today. “They are doing the same thing to their kids that Hines did to them. I don’t have any sympathy for them…They brought it on themselves.” Longtime resident Howard Ferguson claims that the Edward Hines Lumber Company had circuitously cut huge volumes of timber. “They did a sneaky thing. Every night a caravan of ten big, big long trucks would go out of here, every night…after dark.” Even logger Neal Richards points out that the poor management practices and high harvest levels of a few decades ago lost the trust of the locals. “The large clearcuts that we did here were a mistake…Those things that we did in that period of time cost us the trust.”
Informants also contend that the industry strives to maximize short term profits. For example, Mr. May argues that the industry fabricates the idea that they are managing for the long term health of the forest and community. “Every mill town, every logging town has that, and it comes right out of the mills. Those are the people that [say], ‘Oh, no. We can do it. Our foresters are out there.’ Their foresters are damn liars...They know better. They know you can’t make it grow any faster.” Industry representatives concede that the Malheur National Forest has been over cut in the past, but assert that the recent protection of timber resources has resulted in forests that are in dire need of entry. Mark Stanley observes that the management of the national forests seem to swing from one extreme to another; they either over cut or undercut. “Management by the Forest Service goes through trends. I think there’s been cases where we’ve over cut...What we’ve saw during the last 10 years on the Malheur National Forest is actually a degrading, a less healthy forest [and] overstocked stands, because of lack of management.” Outside the industry, informants are wary of the motivations of timber companies to increase harvest on the Malheur Forest. For example, Mr. Feldman says that the industry is disregarding the conditions on the ground when they claim that the forest needs logging. “[They are] completely ignoring the fact that when you drive out in these woods the timber just isn’t there...Is it there to keep ‘em going for another few years? Sure. Five years? Sure. You know, if we wanted to do to the forest like we did to the easy stuff, sure.” He thinks that harvesting 30 to 50 million board feet per year on the Malheur Forest is sustainable, but not the 250 million boasted by some in the industry.
The timber industry is also viewed as politically well positioned, both locally and nationally. "The timber industry is a huge, huge money industry," says rancher Henry Lewis. "They manipulate a lot of people in a lot of ways." To some informants, the industry is seen as having connections with the Malheur National Forest, especially in the past. They declare that Malheur Timber Operators, a local industrial forest advocacy organization, continuously pressures the forest supervisor to increase harvest. Forest Service employee Kevin Baker claims that until recently "good old boys" strongly influenced management on the forest. "I think locally up until probably the mid '90s...a lot of the timber groups still felt they had a lot of control over what the Forest Service did...both in the form of who they knew back in Washington, and in the form of who they knew within the agency here locally." Mr. Baker explains that there used to be a "notorious" connection between industry timber buyers and Forest Service sale administrators. He and Mr. Harper, another agency employee, agree that since the early 1990s the tie between the industry and the national forest has weakened, due mostly to changing policies and agency downsizing. In spite of the ongoing changes in the agency, many informants are suspicious that relations between the industry and forest could be rekindled.

Likewise, distrust is expressed of environmentalists. It is articulated most strongly by private landowners and the industry, but public land managers and other community members also indicate distrust. Foremost, those in the environmental community are seen as representing views that are unfounded, rooted in emotion rather than based on sound scientific evidence. "I think some of the environmentalists are irrational and emotional," says BLM employee Gary Reeves, who typifies the attitude.
He says that misinformation advanced by environmentalists feeds the emotion of their supporters. “A lot of information that’s put together by all these preservationists is half truths.” Others criticize environmentalists for promoting a hands off approach to forest management, and blame environmentalists for some of the forest health problems in the Blue Mountains. Howard Ferguson explains that “no management” is not good management.

The problem is that some of these radical environmentalists let the bugs eat the trees: ‘Let ‘em burn down. Go back to nature. We don’t know what the problem is or what the consequences are, but let’s not disturb nature.’ It’s that kind of blind reasoning that [has gotten us into] this situation that we are currently in.

To some informants, their frustration about environmentalists contributes to a wholesale rejection of environmentally sensitive ideas, further polarizing issues related to forest management. “There’s too many people that have their fingers in the pie that don’t have a clue about what they’re talking about or doing,” declares retired Forest Service worker Martin Wells. He believes that environmentalists are weaving scientifically unsound information into forest management.

In allegedly doing so, environmentalists are viewed as failing to understand the local way of life. Mr. Ferguson explains that one environmentalist who lives in the area “is hired by somebody back East to put an injunction against every sale or every environmental move that is done in this country regardless of its merit.” He sees the activist’s efforts in the area as being fueled by ideas from the East Coast. By promoting ideas that are supported by people rooted elsewhere, environmentalists are viewed as harming the interests of locals. “They’re cutting the economic vitality in communities
like John Day, [and] they’re affecting people’s lives,” says BLM employee Gary Reeves.

“I can understand their viewpoint, but I also see what’s happening to our community
[and] what’s happening to the people I deal with, and it’s just not fair.”

Environmentalists are also viewed as being ignorant of how their personal agendas affect
the local community. Speaking of environmentalist, one informant point out:

A lot of them have this stigma that they don’t want to help a multinational
corporation go out and rape our forest or go rape some other country’s
forest...Their big fear [is] that if we sell a stick of timber out there it’s
going to help some multinational corp. Well, they also forget that that
multinational corp. might also have lots of jobs that help people feed their
families and pay their taxes and live with some level of a good life. So it’s
not just helping some executive sit back and make more dough and smoke
Cuban cigars. It’s also the guy that buys a Chevy or pays for food to feed
his two children and wife. They don’t quite see that.

He and others express frustration with how environmentalists get the support of
uninformed urban people, build a large voting contingency to stop timber sales in the
U.S., and then continue to consume wood products as multinational timber companies
switch their operations overseas.

Like industry, environmental activists are believed to be well connected to the
Forest Service. One of the most compelling stories along these lines comes from rancher
Curtis Smith, who relays his ongoing problems with the Malheur National Forest. He
describes one situation in which he met with officials from the forest and representatives
of environmental groups in regard to a timber sale bordering his place.

The only one there...that would even talk forest health was me. I felt like
an island. I really truly, if they hadn’t had the green uniforms on, I would
have said that the Forest Service people were part of this...I truly do
believe—and this sounds like lunacy—I truly do believe that there’s as
many people that belong to these [environmental] organizations as belong to the [agency]. I truly believe it. I've watched it. I've listened to it.

Mr. Smith insists that most of the local Forest Service people belong to environmental organizations, or at least express ideas consistent with the environmental movement. The accuracy of his perspective is unclear, however. Although locals tend to blame environmentalists for the way the Malheur Forest is managed “there really aren’t very many environmentalists around here,” says environmentalist Jill Strait. “That’s the funny part. There aren’t enough to go around.”

Nonetheless, Forest Service employees understand how locals get the impression that the agency is unduly influenced by environmentalists. After all, environmentalists are generally one of the only local stakeholders that get represented in public involvement processes, explains Mr. Mayfield.

I’m sure the impression to local citizens is all we cater to is the environmentalists, and in essence they’re right. Because right now the environmentalists are the only ones giving us any comments of significance. And even then it’s questionable. We probably give them too much merit. My personal view is that at the Forest Service we’ve swung too far to appease the environmental side of the triangle right now, and at the expense of the sort of socioeconomic side of the issues.

He explains that the local timber industry doesn’t effectively participate in the forest’s management decisions nor in planning. The industry, he says, fails to interject substantive comments in the local public involvement processes. “They’ll throw stones, but they just won’t participate.” Forest Service worker Kevin Baker agrees, explaining that the local timber companies and consultants made a conscious decision to stop participating in public involvement processes on the Malheur National Forest.
Back in '92 when the first of the screens were starting to come out the local timber industry groups literally made statements that they would not participate in this process. 'If the Forest Service isn't going to listen to what we're going to say, then we're not going to participate.' [They] basically decided that they were not going to participate in public comment periods for environmental documents, or participate and come to the table with everybody else and help us come up with a project that's going to make everybody happy. They basically said, 'We're not going to do this. If you're not going to listen to us and have it our way, then we're not going to participate.'

Indeed, Mr. Mayfield wishes the industry would participate in the forest's decision-making because "right now the environmental issues and everything are taking front and center; it would be nice to have some of those other issues show up and have some moderation."

5.5.5 Building Trust Through Cooperation

Despite the prevalence of distrust and resentment, many informants view cooperation itself as a way to build relationships among public and private land managers. "The only way we're gonna solve our problems is by having a working relationship with the people we deal with," says BLM employee Gary Reeves. "That involves trust, and that involves establishing that relationship." Small woodland owner and logger Neal Richards agrees: "You would get more people that would be willing to participate if things were done right and they had faith in the agency." Informants explain that the success of cross-boundary management depends on rapport among managers, a relationship to which the act of collaborating can contribute. Martin Wells points specifically to prescribed fire partnerships as an opportunity for building the reputation of the agency among local landowners.
That’s part of the partnership scheme... Get them to work with you hand in hand. Pull a project off and burn it. Have it work out real good. Then have one of those people walk up to them and say, ‘Boy, we don’t trust that damn Forest Service’—‘Well I do, I’ve worked with them.’... That’s how you snub that thing. Bring them in and work with them on it. That’s how you change that attitude.

In another interview, Forest Service workers Kevin Baker and George Mayfield explain that the benefits of cross-boundary management may offer incentives for public and private managers to reconcile some of their differences, while working together towards a common goal. “The optimist in me says there’s a tremendous feature here for collaborative, demonstrative activities and opportunities that could, done properly, help to build trust [and] rebuild the credibility of the Forest Service,” explains Mr. Mayfield.

The trust that grows from cooperation might also have community-wide benefits. Sherri Ferguson, who is active in county government and intensely interested in the future of the community, says that ultimately partnerships among public and private managers might alleviate the contentiousness that characterizes the relationship between the agency and community. “I think it is feasible to have these partnerships. I think it’s beneficial. I think it’s one of the ways these smaller communities are going to survive. Without it, I think it’s going to be harder to be economically strong.” Ms. Ferguson and others depict the process of building trust through cooperation as a self-reinforcing system. When potential cooperators see each other as sufficiently credible and reliable, suggest informants, they will be more willing to enter a cooperative relationship. In turn, working relationships can develop from a partnership that goes well. This parallels Deutsch’s (2000: 29) conception of cooperation, which maintains that the type of social
relationship (e.g., cooperation or competition) tends to elicit that same type of relationship.

Cooperation induces and is induced by perceived similarity in beliefs in attitudes, readiness to be helpful, openness in communication, trusting and friendly attitudes, sensitivity to common interests and deemphasis of opposed interests, orientation toward enhancing mutual power rather than power differences, and so on. Similarly, competition induces and is induced by use of tactics of coercion, threat or deception; attempts to enhance the power differences between oneself and the other; poor communication; minimization of the awareness of similarities in values and increased sensitivity to opposed interests; suspicious and hostile attitude; the importance, rigidity, and size of issues in conflict; and so on.

The trust-building potential of cooperative fire management might serve to bolster its benefits, while highlighting its application to other ecosystem management issues in mixed ownership settings.
6.0 DISCUSSION AND CONCLUSION

This research is a case study in complexity. In the John Day Valley, cooperative fire management is buried within a web of land tenure, ideology, power, change, and trust. The themes are dynamic and interactive, encompassing an array of intertwining factors that influence the ability and willingness for managers to design and implement public-private cooperation for ecosystem management. This complexity underscores the need for progressive approaches to cross-boundary cooperation that are as equally dynamic and inclusive.

In this closing chapter, the key findings are briefly interpreted and synthesized. The chapter is divided into four sections: (1) Prioritizing Themes, (2) Key Factors for Cooperation, (3) Further Research, and (4) Closure. Prioritizing Themes suggests that ranking the themes can highlight the factors most critical to cooperative relationships among land managers. Key Factors for Cooperation analyzes the crucial points of each theme that impact perspectives toward cooperation. Further Research recommends research topics and questions that could be addressed in follow-up work. The chapter closes with some final thoughts about the prospects for cooperative fire management in the John Day Valley.

6.1 Prioritizing Themes

The themes identified in this research do not each have the same level of significance for cooperation. Ranking them in terms of their importance and application to cooperative fire management helps us to understand the relative influence of these
issues on a manager's ability or willingness to cooperate (Figure 3). Cooperation is fundamentally driven by land tenure, ideology, power, and change. Who owns the land, what they value, who are the winners and losers, and the changing context within which these issues fall serve as the building blocks for cooperative relationships. These elementary themes set the stage for the level of trust among managers, which ultimately dictates the course of cooperation. The hierarchy can be thought of as a series of lenses through which cooperation is viewed. Each theme offers a way of looking at the situation, and encompasses its own set of opportunities and challenges. If we view a

![Thematic Pyramid](image)

**Figure 4. Thematic Pyramid.** Themes pictured at the base of the pyramid are foundations of those shown higher up.
situation through the lens of land tenure, for example, we can understand how land tenure influences things. The themes comprise a new set of lenses through which we can view cross-boundary cooperation. One employee from the Malheur National Forest uses a similar analogy to describe what he sees as layer upon layer of regulations and policies that place strict limits on forest management in mixed ownership landscapes.

Current guidelines, standards, directions in place...really limit...We used to call them “screens.” Whatever fell through your screen was the opportunity. Well I now call them a “bucket.” And that bucket has got a pin hole in the bottom. And whatever drips through that bucket, that’s your area of opportunity. So therein lies the problem. I’ve got this little drop that’s my opportunity. And the likelihood of that opportunity meshing with the needs mixed ownership? Probably a fairly low probability.

The themes represent an attempt to capture the layers of complexity within which cross-boundary cooperation is embedded. Of the themes, land tenure, ideology, power, and change are fundamental and set the stage for trust among stakeholders.

Ranking the themes helps to highlight the stumbling blocks to which efforts for enhancing cooperation should be directed. In some cases, for example, fundamental differences in land tenure might be seen as intractable, with greater progress made by conceding differences. In the same way, it may be more productive to understand and acknowledge the ideological differences among stakeholders than to compromise. The hierarchical arrangement of themes also illustrates the relative importance of trust and cooperation. Although the current dialogue on collaborative resource management emphasizes the need for building trust, it generally ignores the influence of fundamental issues of land tenure, ideology, power, and change. This research suggests that recognizing cooperation as an inclusive and complex system comprised of a multitude of
interacting components is a critical step toward more fully understanding the realistic role that cross-boundary cooperation can play in mixed ownership landscapes.

6.2 Key Factors for Cooperation

Ranking the themes brings order to what otherwise is an involved and intricate narrative. This section is organized around the Thematic Matrix, which details the key factors impacting the ability and willingness of stakeholders to cooperate (Table 1). Each cell in the matrix identifies how the stakeholder group’s perspective toward cooperation is most influenced by the theme. The combination of the pyramid and matrix represents an attempt to distill the findings down to the fewest kernels without doing injustice to the complexity.

6.2.1 Land Tenure

Land tenure is absolutely foundational. Land tenure defines who owns a particular parcel and attributes specific rights associated with ownership. It is also normative, reflecting societal values about who should have the power, influence, and control over resources. In the John Day Valley, perceived differences between owning a private ranch or forest and managing the national forest directly influence prospects for cross-boundary cooperation. Differences in personal investment and accountability, management objectives and efficiency, and the relative ability to subsume risk reflect these basic differences in land tenure. They impact how managers view the land, the relationships among managers, and consequently how willing managers are to cooperate.
<table>
<thead>
<tr>
<th>Trust</th>
<th>Multiple allegiances of Forest Service limit common ground with locals.</th>
<th>Mistrust and resentment toward Forest Service limits dialogue.</th>
<th>Weakening connection with Forest Service fosters blame and resentment.</th>
<th>Environmentalists fear collaboration between Forest Service and locals.</th>
<th>Close connection between county commission and industry fosters distrust of county leaders among locals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>Change creates uncertainty about direction of agency.</td>
<td>Change limits tenure security and challenges perceived tradition of local control.</td>
<td>Unpredictable timber supply from federal land has shifted cut to private land and other countries.</td>
<td>Forest Service's move away from commodity production to ecosystem management is consistent with beliefs of environmentalists.</td>
<td>Uncertainty simultaneously stimulates resistance to change and initiates economic diversification.</td>
</tr>
<tr>
<td>Power</td>
<td>National direction establishes power of bureaucracy relative to community.</td>
<td>Owners place high value on maintaining sense of control over property.</td>
<td>Industry has largely surrendered political influence over national forest management.</td>
<td>Environmentalists promote ideas where most successful: Washington, D.C., and urban areas.</td>
<td>Dominance of Forest Service puts agency and community on different playing fields.</td>
</tr>
<tr>
<td>Ideology</td>
<td>Management driven by voting public, interest groups, and purée of public values.</td>
<td>Owners can act on their own values.</td>
<td>Industry greatly influenced by markets and technology.</td>
<td>Ideas about preservation distinguish environmentalists from dominant local interests.</td>
<td>Community leaders place high value on maintaining cultural identity.</td>
</tr>
<tr>
<td>Land Tenure</td>
<td>Turnover of staff and accountability to national public limits personal interest in forest.</td>
<td>Emotional and familial connection to land fosters personal stake in property.</td>
<td>Financial investment motivates industry to maximize profit.</td>
<td>Environmentalists believe that management of national forests reflects desires of national public, rather than local communities.</td>
<td>Community survival requires balancing of local economy and national interests.</td>
</tr>
</tbody>
</table>
The influence of land tenure on cooperation is most pronounced in the relative levels of personal interest among land managers. Forest Service managers do not have the personal connection nor stake in the land because they do not own the land. In addition, public officials come and go and have little accountability to the local community. When it comes to cooperative agreements with adjacent neighbors, the turnover of staff and the national orientation of the Forest Service put public employees at a disadvantage. It is well established that cooperation is more likely to occur among people who have close working relationships (Wondolleck and Yaffee 2000). It takes time to establish rapport and build those relations. The ability for the Forest Service to cooperate with adjacent landowners will be limited as long as turnover remains high and the agency is viewed as interested in securing the support of the national public, rather than pursuing local interests. The fissure between public and private interest is widened by the emotional, familial, and financial ties to the land exhibited by landowners.

6.2.2 Ideology

Distinctions in public and private landownership highlight fundamental differences in ideology that can have profound effects on cooperation. The Malheur National Forest is a federal agency, driven by the values and beliefs of the national public. This range of values presents public land decision-makers with a complicated mess; an “inchoate mass” of politics, technology, and social choice (Schwarz and Thompson 1990). The Forest Service is forced to manage for a “purée” of public values that demand national forests be managed for multiple uses. Although managers on the Malheur Forest clearly have their own ideas about forest management, they cannot act on
those values. In contrast, a neighboring rancher who is motivated by his or her own values and beliefs can act on those values. The discrepancy between managing for a broad range of ideologies on public land and managing for personal ideologies on private land sets the fence between public and private managers.

This differential ideology makes it difficult to find common ground. Sharing goals, interests, and a sense of ownership in a problem are important steps toward developing collaborative relationships (Wondolleck and Yaffee 2000). In the John Day Valley, managers who have disparate ideas about the human-nature relationship, fire management, and cooperation find it difficult to identify the collective benefits of cross-boundary management. Is the purpose of a forest to grow fiber as quick as possible, or is it to provide for a range of goods and services of which economic return is only a slice? Is fire a tool for removing suppressed seedlings without pretreatment, or is it for burning piles of undergrowth that had previously been cut and stacked? Such questions rest on ideologies that highlight the differences between basic beliefs and values rather than emphasize their commonalities. The timber industry, for example, uses fire judiciously because it looks to natural regeneration to reduce the cost of planting seedlings. Industry does not want to damage young trees because they are in the business of tree farming. Alternatively, today the Forest Service puts less emphasis on growing trees for harvest, and more on managing for the historic “park-like” conditions. At least in the West, national forests are integrating the prolific use of fire into management plans in order to burn out the undergrowth that on private land industry is trying to save. Reconciling such different management objectives adds to the difficulty of cross-boundary cooperation.
These ideologies are defined, expressed, and strengthened through stories. Stories or myths bring meaning to the past and present. They offer a sense of stability to otherwise uncontrollable situations by helping to explain the social reality of an individual or community. William Kittredge describes the rural West as a product of such stories that dictate behavior and attitudes.

We live in stories. What we are is stories. We do things because of what is called character, and our character is formed by the stories we learn to live in. Late in the night we listen to our own breathing in the dark, and rework our stories. We do it again the next morning, and all day long, before the looking glass of ourselves, reinventing reasons for our lives. Other than such storytelling there is no reason for things (Kittredge 1996: 158).

The metaphor of a story draws attention to how informants construct reality. These social constructs have consequences. In the Valley the social more of individualism, for example, helps to create a common culture or group solidarity that binds locals together, excluding those perceived to be outside the community. This social cohesion can help community members attribute causation and place blame when things go awry. While stories bring a sense of stability to those who adhere to them, they foster assumptions that can be harmful and contribute to the failure of cooperation. Preconceptions of neighbors can influence the extent to which managers will consider working together. Indeed, stories can define the winners and losers even before a collaborative game is played. The fact that humans construct their own realities is evident in this research.

Stories also illustrate the human capacity for self-contradictions, which further contributes to the complexity of cooperation. In two interviews, for example, ranchers went to great lengths to explain how environmentalists and the Forest Service were to
blame for halting timber sales. In one case, Don Wicker complained profusely about how environmentalists were hurting the community by taking timber sales to court. In the same interview, though, he proceeded to describe how he had single handedly stopped a timber sale near his ranch. He explained that the sale would have been in a roadless area, and that punching roads through it would have scared elk onto his ranch. Besides, he said, the area was “just beautiful” and he loved the elk hunting it offered. In another interview, rancher Curtis Smith had similar criticism of the Malheur Forest, but he, too, described his success at stopping a timber sale after taking it to court. He explained that the sale would have been in a steep and rugged hillside bordering his ranch. In neither case did the ranchers make the connection between their own legal efforts, the difficulty that the Malheur Forest has in offering timber for sale, and the economic hardships facing the local industry. These examples illustrate the human capacity for internal contradictions, and how they can result from the desire to attribute causation in order to maintain a sense of control.

6.2.3 Power

The desire to maintain control is one of the essential elements of power that affects cooperation. The unequal distribution of power among the public and private sectors has huge implications for cross-boundary management. Other research confirms that people who perceive power inequities have little interest in cooperating (Deutsch 2000; Williams and Ellefson 1997; Schonewald-Cox et al. 1992; Hough 1988). Private landowners in the John Day area place high value on maintaining a sense of control over their property. In the eyes of many landowners, cross-boundary cooperation threatens
this control by sweeping the management of their private property into the public arena. Public-private collaborations require that private land heed the same environmental regulations facing the Forest Service, and thus private landowners who agree to cooperate open their land to public scrutiny. An additional factor to consider is that landowners fear that cooperating with the federal government, arguable a common enemy in the Valley, is akin to giving in or turning one’s back on a fight. Giving in is certainly not something to which a rugged individual would concede.

The chasm between the power of the Malheur National Forest and that of adjacent private landowners is vast. Although the residents of the John Day Valley are constituents of the Forest Service, as with all federal bureaucracies the agency is driven by a range of public values. Cross-boundary cooperation is caught in this tension between local and national interests. On the one hand, the national direction of the Forest Service calls for a greater emphasis on cross-boundary ecosystem management, where forests are managed for the historic range of variability. In fact, cooperation needs this institutional support in order to be successful. On the other hand, it is equally important that individual Forest Service managers and neighbors have productive working relationships. In order to built such relationships, both the federal forester and the rancher need to have the capability to keep promises and to act in a timely manner.

Working through these power inequities is a tricky task. The agency’s control of the majority of the land base in Grant County remains an ever present reminder of Forest Service dominance. A change in national forest policy can have profound impacts on the John Day community. For example, when timber harvest on the Malheur Forest exceeded 250 million board feet in the mid 1980s local businesses thrived. Likewise, as
the volume of timber sold on the forest declined later that decade, it set off a string of
mill worker layoffs that continue to afflict the community. The agency’s ability to
implement management inconsistent with the needs of the local economy feeds the sense
of powerlessness in the community and negatively influences prospects for cross-
boundary cooperation. Other research confirms that the awareness of power differentials
reduces the willingness of local communities to enter into a dialogue with a dominant
landholder (Williams and Ellefson 1997; Hough 1988). Since cooperation requires
productive lines of communication among the players, the omnipotence of the Forest
Service presents a formidable obstacle to discourse about cross-boundary management.

The distribution of power presents another dilemma for cooperation. Cooperation
is deemed as a way to create innovative solutions to the complex issues facing ecosystem
management. It utilizes local knowledge in an attempt to develop management that is
more appropriate for conditions on the ground than management dictated by arbitrary
regulation and policy. Cooperation can be viewed as an attempt to encourage flexibility
in policy that necessitates some devolution of power. However, cooperation falls within
the context of a federal agency and national environmental issues. Within the agency and
national environmental interest groups, there is constant pressure to ramp power up to the
national scale. Michael McCloskey (1995) of the Sierra Club, one of the most widely
cited critics of local collaboration, is disheartened by the current trend toward local
management because he believes that it has the potential to empower people on the
ground who are not interested in the “public interest” of the nation. As expected, national
interest groups would rather pursue their mission where they are most successful, in
urban centers and in Washington, D.C. This ethical question about the scale of policy-
making is another challenge that influences the perspectives toward cooperation and the degree to which such approaches garner support.

6.2.4 Change

The changes facing the John Day Valley and the Forest Service further complicate prospects for cross-boundary cooperation. Most importantly, this changing context creates a sense of uncertainty and unpredictability among land managers and other stakeholders. The political nature of national forest management means that the Malheur Forest has little assurance that its mission will not be altered at least every four years, when there is always the potential for a new administration to take control of The White House. In addition, Congressional elections every two years can reorient ideologies among influential Congressional committees. Furthermore, the increasing use of the court system to challenge timber sales and enforce environmental regulations adds more uncertainty. How can the agency be confident that cross-boundary cooperation is not a passing fad, only to fall by the wayside when political support wanes? How can managers predict the consequences of a management plan challenged in court? The potential for a shift in the agency's mission, in combination with downsizing and a greater influence of the courts, has added up to an agency in flux. The John Day community faces its own set of changes, including decreased dependence on federal timber and changing demographics. These transitions translate to relationships among public and private landowners based on shaky ground. Despite a history of instability and flux, most informants depict the changes facing the agency and community today as new and unanticipated.
Landowners, industry representatives, and community leaders, for example, perceive that the Forest Service used to be locally controlled. Based on data provided by the Malheur National Forest, the forest sold less volume in the 1990s (957 million board feet) than in the previous four years, 1986 through 1989 (1.04 billion board feet), a trend that reflects the agency-wide shift away from commodity production. Many informants attribute this reduction to the increasingly political nature of forest management. However, the Forest Service has always been a national and politically driven agency. It may be that the perspectives of informants are rooted in the fact that the agency’s current emphasis on preservation is not consistent with the desires of many locals, at it was in the past. According to Kittredge (1996: 159), the West needs to move beyond such stories that foster resentment, blame, and resistance.

If we ignore the changing world, and stick to some story too long we are likely to find ourselves in a great wreck. It’s happening all over the West, right now, as so many of our neighbors attempt to live out rules derived from old models of society that simply reconfirm their prejudices. They get what they want to see. Which is some consolation. But it is not consolation we need. We need direction.

The notion that the Forest Service has become an increasingly political agency that has removed power from the community is an attractive story for locals. It is plausible and is easy to understand, and serves to shift the blame of reduced harvest to politicians, environmentalists, urban voters, and others outside the community. However, if cross-boundary management is to be viable in the John Day Valley, a more holistic notion of cooperation must be embraced. Stakeholders and policy-makers need to recognize that cooperation is embedded within a complex web of fundamental issues that together build the foundation for cooperation.
6.2.2 Trust

The fundamental themes of land tenure, ideology, power, and change culminate at the issue of trust. It is well established that trusting relationships are prerequisites for cooperation (Lewicki and Wiethoff 2000; Wondolleck and Yaffee 2000; Ostrom 1998; Moore 1995; Gambetta 1988; Hough 1988). If there is not the confidence that a relationship is reciprocal, then there is little chance that stakeholders will cooperate with each other. In the John Day Valley, distrust among stakeholders and resentment toward the Forest Service present obstacles to cross-boundary cooperation.

Most importantly, resentment toward the Forest Service and general distrust of government limits the potential for dialogue between the agency and locals. While the Forest Service is aware of the need for open communication with the community in order to establish a trusting relationship, there are few forums for doing so. The deep roots of resentment further limit communication. Ever since the Blue Mountain Forest Reserve was created a century ago (eventually to become the Malheur National Forest), locals have complained about the federal government’s “forceful” takeover of land. These complaints were especially prevalent in turn of the century newspaper articles, even though the public land was created, in part, to lessen controversy between the grazing of sheep and cattle on the public domain (Mosgrove 1980). Perhaps it was the government’s interference with independent minded cattle ranchers that helped to make the government the adversary. Whatever its roots, distrust and resentment of the federal government remain significant impediments for cooperation.

There is evidence to suggest that in the John Day area distrust and resentment may be expressed in the form of scapegoating, an imitative behavior that helps people
place blame (Girard 1986; Burke 1954). Scapegoating creates preconceptions about stakeholders. It defines which stakeholders are untrustworthy without understanding their particular perspectives or values. For instance, the Forest Service has long been a common enemy of the community, but few seem to ask why. The common social experience of local informants may foster their adherence to stories that depict the Forest Service, the government, and others linked with the outside world as entities to be feared. Trust among public and private land managers remains a tough issue in John Day because of its historical roots and its connection to the fundamental themes described earlier.

Distrust, resentment, and scapegoating set the stage for relationships between public and private land managers. In order for cooperation to occur, there needs to a certain level of assurance that a cooperative action will be returned, or at least that agreeing to work together will not harm either party. The degree of trust also influences how much other stakeholders are willing to support efforts at cooperation. For example, both local and national environmental groups are hesitant to support local collaboration such as cooperative fire management because they fear collaboration between industry, community leaders, and the Forest Service. In the Valley this fear, in part, stems from relatively close relationships that one of the local mills allegedly had with the Malheur National Forest in the past. Local people both within and outside the environmental community fear that such close ties could be rekindled through cooperative management that empowers radical stakeholders who do not represent the needs of the community as a whole.

The issue of trust must be considered carefully. While trust may indicate confidence among stakeholders and is important for cross-boundary ecosystem
management, a trusting relationship does not necessarily produce a positive outcome. The examples of agency domination described by The RSS Task Force on Persistent Rural Poverty (1993) suggest that agencies and specific constituents that trust each other can have negative consequences for the environment and society. When examining trust among stakeholders it is important to ask who trusts whom, for what reasons, and what could be the impacts of such relationships. It is also important to look for avenues for building the social capital of stakeholders that might eventually pay dividends in the form of working relationships. Regardless, trust among managers is a precursor to cross-boundary cooperation that can benefit people and ecosystems alike.

6.3 Further Research

The experience of conducting this research has highlighted several areas for further inquiry that could serve our understanding of cross-boundary cooperation. These include:

- **Apply thematic matrix to other geographic areas.** The matrix used to understand the key factors impacting cooperation (Table 1) may provide a useful framework for beginning explorations of similar cross-boundary issues in mixed ownership landscapes. The foundational themes offer a starting point for identifying the basic (and most essential) drivers of cross-boundary issues in other locales.

- **Explore other influences of land tenure.** Since land tenure represents the most basic theme, it would be productive to analyze this particular lens further. Looking at the influence of land tenure on cross-boundary cooperation in other geographic
areas can serve to evaluate the claims in this work and identify additional factors of land tenure important for cooperation.

- *Analyse role of group dynamics.* The fieldwork exposed how the perspectives of informants may be influenced by group dynamics. Our understanding of the complexity of cooperation could be advanced by analyzing the role that in-group/out-group, social circles, and similar group phenomena may have in shaping attitudes toward cooperation.

### 6.4 Closure

"It sounds warm and fuzzy to get together and work with your neighbors."

*—Thomas Olson, ODF, John Day*

Cross-boundary cooperation brings to mind the idealized image of neighbors who put their differences aside, identify common ground, and work together to better the land. Indeed, it is easy to fall into the trap of romanticizing the notion of building personal relationships that benefit ecosystems and communities. Who could doubt the merits of an endeavor? The archetypal image of cooperation is reminiscent of a barn raising, where fellow citizens are drawn together by a common place, a desire to invest in a community, or a recognition that the favor will be returned. In his essay about the dangers of collaboration, law professor George Coggins points out that “only a misanthropic curmudgeon could question the utility of a negotiating or mediating mechanism that stresses the virtues of civility, reasonableness, cooperation, and consensus building” (Coggins 1998: 27). To managers on the ground, however, working with adjacent
owners conjures up basic questions about the benefits of cooperation and brings to the fore its complexity. As with much of resource management, cooperative fire management is complicated because it involves the tension between the public good and private interests, is deeply rooted in history, and highlights differences in competing belief systems. This research suggests that building the trusting relationships that are required for cross-boundary cooperation it made difficult by the existence of a complex web of land tenure considerations, differential ideologies, power inequities, and a sense of uncertainty produced by social change.
BIBLIOGRAPHY


Daniel, T. C. 1988. Social/political obstacles and opportunities in prescribed fire management. Paper read at Effects of Fire in Management of Southwestern Natural Resources, November 14-17, at Tucson, AZ.


Martin, R. E. 1995. Prescribed fire as a social issue. Paper read at Environmental Regulation and Prescribed Fire Conference, March 14-17, at Tampa, FL.


Robbins, W. G. 1999. Landscape and Environment: Ecological Change in the
Intermontane Northwest. In Indians, Fire and the Land in the Pacific Northwest,


Robson, C. 1993. Real World Research: A Resource for Social Scientists and 

RSS Task Force on Persistent Rural Poverty. 1993. Theories in the Study of Natural 
Resource-Dependent Communities and Persistent Rural Poverty in the United 


Sample, A. V. 1994. Building partnerships for ecosystem management on mixed 

management between national parks and surrounding lands: a review and 

Handbook of Qualitative Research, edited by N. K. Denzin and Y. S. Lincoln. 

Schwarz, M., and M. Thompson. 1990. Divided We Stand: Redefining Politics, 

Selin, S., and D. Chavez. 1995. Developing a collaborative model for environmental 

Burning. In Natural and Prescribed Fire in Pacific Northwest Forests, edited by 
J. D. Walstad, S. R. Radosevich and S. V. Sandberg. Corvallis, OR: Oregon State 
University.

Shindler, B., M. Reed, B. Kemp, and J. McIver. 1996. Forest Management in the Blue 
Mountains: Public Perspectives on Prescribed Fire and Mechanical Thinning. 
Corvallis, OR: Oregon State University. USDA Forest Service Pacific Northwest 
Research Station Global Environmental Protection Program. Blue Mountains 
Natural Resources Institute.


INFORMED CONSENT FORM

This research is being conducted to better understand the opportunities and challenges for cooperative fire management among landowners in the vicinity of the John Day Valley.

This project is supported by the Department of Forest Resources at Oregon State University. OSU researchers involved in the project include Dr. John Bliss, Starker Chair in Private and Family Forestry, and Stefan Bergmann, graduate research assistant.

Information is being gathered from interviews and other interactive research activities with community members in the John Day area. This research is expected to take about 1-2 hours of your time. With your permission, this session may be audio tape recorded.

We know of no risks to participants. Associated benefits include having the opportunity to confidentially express opinions about fire management in the John Day area.

To minimize any potential risks the following rights are reassured to participants:

**Your participation is entirely voluntary.**

**You are free to decline answering any question.**

**You are free to withdraw from the project at any time.**

**Your name and other identifying characteristics are strictly confidential.**

Excerpts from interviews may be included in published research articles or professional presentations, but under no circumstances will your name or identifying characteristics be included in research reporting unless you otherwise specify, in writing, your agreement to be identified. Audio tapes, transcripts, and/or notes will be archived with Dr. John Bliss at the Department of Forest Resources, OSU College of Forestry.

Your signature indicates you have read and understand the contents of this form.

SIGNATURE: __________________________________________________________________________

NAME (printed): _______________________________________________________________________

DATE: ______________________________________________________________________________

INTERVIEWER: ________________________________________________________________________

Thank you for your participation. Questions about the project should be directed to Dr. John Bliss, Starker Chair in Private and Family Forestry (541-737-4427). Questions about your rights as a research subject should be directed to Laura Lincoln, Coordinator, OSU Institutional Review Board for the Protection of Human Subjects (541-737-8008).