2018

# A DECADE OF GOVERNING THE BLACKFOOT COMMUNITY CONSERVATION AREA (BCCA): COMMUNITY INVOLVEMENT AND LANDSCAPE CONNECTIVITY THROUGH PUBLIC PRIVATE PARTNERSHIPS

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# A DECADE OF GOVERNING THE BLACKFOOT COMMUNITY CONSERVATION AREA (BCCA): COMMUNITY INVOLVEMENT AND LANDSCAPE CONNECTIVITY THROUGH PUBLIC PRIVATE PARTNERSHIPS

By

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Thesis

presented in partial fulfillment of the requirements
for the degree of

Master of Science
in Resource Conservation

The University of Montana
Missoula, MT

Official Graduation Date: May 2018

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**ABSTRACT**

Barton, Alexander A, M.S., May 2018 *Resource Conservation*

A Decade of Governing the Blackfoot Community Conservation Area (BCCA): Community Involvement and Landscape Connectivity through Public-Private Partnerships

Chairperson: Dr. Jill Belsky, PhD

In recent decades, non-governmental organizations have acquired and established community forests and conservation areas in the U.S. However, there have been few empirical studies on their governance. This study focuses on the Blackfoot Community Conservation Area (BCCA) in the Blackfoot watershed of Montana, created in 2005. The BCCA is a 41,000 acre mosaic of private, state, and federal lands, including 5,600 acres known as the "Core" located near Ovando mountain and owned by the Blackfoot Challenge, a local watershed organization and leader in grassroots conservation. This research examined the definitions, activities and lessons learned over the past decade with regard to governing the BCCA and especially to operationalizing two of its key governance principles: community involvement and landscape connectivity through public-private partnerships. The research methodology involved personal interviews with BCCA Council members, review of BCCA Council meeting minutes and MOUs with partnering landowners, and analysis of resource management decisions and activities, specifically developing a motorized recreational use policy, and weed and forest management across the mixed ownership landscape. Regarding the community involvement principle, the research found that it was operationalized through four levels of involvement: (1) information-sharing, (2) perspective-gathering, (3) decision-making, and (4) BCCA Council membership. Close examination of motorized use planning showed the BCCA council has learned strategies to incorporate and reconcile conflicting values and interests in decision-making processes, which have included delegation to small work groups, cooperation, and evidence-based adaptation. Regarding landscape connectivity, the study found that BCCA partners share costs on noxious weed management, and that forest treatments in BCCA forests are carried out in light of the ecological and management context of adjacent ownerships. Shared commitments and regular communication between land managers foster relationship-building and the ad-hoc exchange of financial and technical resources. Nevertheless, administrative sideboards and financial limitations remain primary constraints to achieving broad goals, and most resources have been invested in the BCCA core. The study concludes with the necessity that the BCCA council focus on how to bring a broader array of community interests into decision-making processes and positions, notably BCCA council membership, and pursue diversified funding strategies for joint-projects with BCCA partners.

**ACKNOWLEDGMENTS**

I must acknowledge the many people who have been a support to me during this thesis research process, and my graduate program as a whole. First and foremost, I would be nowhere without the continued support and diligent guidance of my advisor Jill Belsky. Thank you, Jill, for the many conversations (and Jolly Ranchers) we had sitting around your table trying to tease out and clarify my findings. I appreciate you pushing me to become a clearer and more critical writer, thinker, and investigator. I owe similar thanks to my committee members, Martin Nie and Sarah Halvorson for introducing me to the graduate program in Fall 2015 in Research Design and Natural Resource Policy and Administration. Martin, your class confirmed my interest in policy and passion for conservation of western public lands.

I would be remiss not to acknowledge the countless friends and family who have been by my side over the last three years. I was lucky to be a part of a fantastic group of smart, exciting, and talented colleagues in this program who taught me so much both in and outside of the classroom. In this way, I not only owe the University of Montana and this graduate program my gratitude for the academic and professional skills, but also the many lifelong friends I have made here. Clancy Jandreau and Yolie Bodie, Tom Lang, Peter Metcalf, and Heidi Blair, and Wes Vassau deserve special mentions. Thank you, also, Julie Savage for the many conversations around the kitchen table. We needed that. A special kind of appreciation is in order for my partner, Danielle Sanderson, for her unrelenting support, selflessness, and love throughout the process. I would also like to acknowledge my family for their firm support and encouragement when I needed it. You always had my back. I'm grateful for the weekly calls with my grandparents, who inspire me endlessly.

My graduate studies would not have been possible without the support of the Wyss Foundation and assistance I received through the Wyss Scholars Program. I am humbled to be a part of such an amazing collection of young conservationists and big thinkers (I'm looking at you, Matt Hart).

And, finally, I need to acknowledge the good people of the Blackfoot watershed, and specifically the BCCA Council members and the Blackfoot Challenge. Thank you for giving me a seat around the table at the Ovando Fire Hall (which I call my remote classroom) and your willingness to share your perspectives with me. I'm grateful to have had the opportunity to learn from you.

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**LIST OF ABBREVIATIONS**

BCCA – Blackfoot Community Conservation Area

BC – Blackfoot Challenge

BCP – Blackfoot Community Project

FWP – MT. Department of Fish Wildlife and Parks

DNRC – MT. Department of Natural Resources and Conservation

USFS – U.S. Forest Service

USFWS – U.S. Fish and Wildlife Service

RMEF – Rocky Mountain Elk Foundation

NFF – National Forest Foundation

PCTC – Plum Creek Timber Company

TNC – The Nature Conservancy

## 1. INTRODUCTION

In recent decades, there has been increasing interest in community forestry in the U.S., including community-owned forests (Baker and Kusel 2003; Belsky 2008, 2015; Brendler and Carey 1998; Charnley and Poe 2007; Danks 2009; Kusel and Adler 2003). Community forestry refers to a suite of forest management and institutional arrangements that significantly involve forest management and governance by and for a particular community of residents or resource users. Community forestry often refers to these "bottom up" institutional arrangements on government or public owned forests whereas community forests and especially community-owned forests may refer to either historic systems based on common property or more recent forests acquired by private entities such as a non-governmental organizations. In any case, community forests are managed by and for particular communities of residents and/or resource users (Belsky 2008; Charnley and Poe 2007). The essential goal of both pivots on dual, entwined social and ecological goals; that is, ecological stewardship and, "support [for] forest-based activities and enterprises that contribute to community goals" (Danks 2009:172). Brendler and Carey (1998) emphasize that community forestry is about ensuring access to forests by local communities, participation of community members in designing sustainable forest plans, and pursuing ecological objectives that benefit forest resources and ecosystems, as well as to provide for a variety of economic and non-economic services.

Understanding the similarities and differences around community forests is complicated. Belsky (2008) offers a typology of community forests (or community-owned forests), not including community forestry, or that practiced on government-owned or public lands. She identifies three types of community forests: 1) indigenous community forests, 2) town or municipal-owned community forests, and 3) community-based conservation organization - owned community forests. Indigenous community forests are those that emerged organically (i.e., without external assistance) and are based on historic common property regimes, frequently managed through customary laws and rules. Town or municipal community forests, in contrast, are based on legally enforceable bylaws and ordinances, often drafted by an elected town council or committee, serving a geographically defined community of users (Belsky 2008). Historically in the US, indigenous community forests existed among Native Americans, and town forests in New England since Euro-American settlement (McCullough 1995). Community forests owned and managed by non-governmental organizations is a much more recent phenomena in the U.S.

The rise of community forests owned and managed by non-governmental organizations in the US has arisen in large part due to recent shifts in forest ownership. In recent decades, downturns in domestic timber markets have driven timber companies to divest of their "higher and better use" (HBU) timberlands, which often have greater value for residential development than as industrial forests. Between 1989 and 2016, Plum Creek Timber Company ("Plum Creek"), formerly Burlington Resources and recently merged with Weyerhauser Company, was the single largest owner of private forestland in the United States (Jermanok 2006; Best and Wayburn 2001). They owned 1.6 Million acres in Montana alone (Jensen et al. 1995). In the Blackfoot watershed of western Montana, they owned approximately 20% of the all lands within the watershed, and, in the early 2000's, began announcing their intent to sell upwards of 100,000 acres in the Blackfoot and nearby Swan Valleys in the coming decades (Hartmann 2004; Duvall 2006).

Representatives from the Blackfoot Challenge, a local non-profit organization focusing on watershed conservation, Montana chapter of The Nature Conservancy (TNC), and Plum Creek Timber Company met to discuss a conservation pathway for these sales. This initial meeting in 2002 sparked the Blackfoot Community Project (BCP), a multi-year plan to purchase and sell Plum Creek parcels. Parties to the BCP included the MT chapter of TNC, USFS, BLM, MT DNRC, MT FWP, the Blackfoot Challenge, university academics, and private landowners. Its mission was to acquire Plum Creek lands and convey them to different conservation ownerships and, especially, to avoid residential development and further fragmentation of the landscape; disposition decisions would be based on a "community-driven plan" (BCP Disposition Plan 2003). The BCP was able to accomplish what at the beginning may have been seen as an unthinkable project, that is, to generate $73 million dollars and purchase 88,000 acres.

In Montana, as in other cases where community forests have arisen from large-scale timberland divestment, the intention is to foster natural resource stewardship and capacity of local citizens and groups to participate in forest governance and management for public benefits and uses (Belsky 2008, 2015; Kelly and Bliss 2012). Even where former timberlands are purchased and conveyed to community-based management, the goal is for them to be managed for the public interest. As such, they constitute a public-private property hybrid (Duvall 2006; Belsky 2008). Due, in part, to their short history, the outcomes and experiences of non-governmental organization-owned and managed community forests remain largely unexplored.

As many of these forests begin to recover and mature, there is an increasing opportunity to examine on-the-ground outcomes and governance regimes and how such efforts may be improved in the future.

This study examined the Blackfoot Community Conservation Area (BCCA), located in the Blackfoot watershed of Montana. The BCCA began in 2004 with TNC's purchase of approximately 5,600 acres of divested timberlands at the base of Ovando Mountain. These 5,600 acres are now owned by the Blackfoot Challenge and serve as the "Core" of the BCCA. Fairly soon after its purchase, the BCCA was enlarged to include cooperative management agreements with adjoining lands. These entailed different ownerships, including private, federal and (Montana) state agencies, for a total of 41,000 acres. The question of who should manage the BCCA was a key decision. After considerable deliberation, the Blackfoot Challenge instituted the BCCA Council as the main governance body for the new community conservation area. The BCCA Council initially was composed of a 15-member board of local residents, user groups, and federal and state agency personnel. Their main charge was to develop and implement management plans for the BCCA Core area and the adjoining lands to be managed as part of the larger BCCA entity, which would be managed based on an "ecosystem management" approach. Between 2005 and 2008, the BCCA Council developed the first BCCA Management Plan for the Core with the assistance of state, federal, and private resource management professionals, and signed a Memorandum of Understanding (MOU) between the parties to formalize their cooperative partnership. Today, those involved in the management of the entire BCCA are reflecting upon their original management objectives, steps taken, accomplishments, challenges and future paths. However, since its completion in 2008, there has been no systematic examination of the use and implementation of the current management plan.

This thesis is an attempt to provide a systematic analysis of some of the challenges and opportunities associated with implementation of the BCCA Management Plan for the Core. Its primary objective is to provide the BCCA leadership with an evidence-based and useful analysis of a few of its primary objectives to inform future assessments, implementation, and management plans. Rather than trying to study all the goals and activities of the BCCA Council over the past decade, the study focused on two key management principles articulated in the first BCCA management plan: the principles of ***community involvement*** and ***landscape connectivity through public private partnerships***. The study specifically asks:

1.) How are the two principles of community involvement and landscape connectivity in the BCCA management plan defined and operationalized?

2.) How have these two principles informed on-the-ground management of BCCA projects?

3.) What lessons and insights does the study suggest for managing the BCCA according to these two principles in the future?

The thesis is organized in the following way. In the second chapter, I provide a literature review on community-owned forests and current state of knowledge regarding the principles of community involvement and landscape connectivity. In the third chapter, I discuss the research methodology including data collection and analysis procedures. As part of outlining my methods, I also share my personal position and experiences working as an intern of the Blackfoot Challenge and collaborator with the BCCA Council in their effort to update the BCCA Management Plan for the Core in the summer of 2016 prior to, but overlapping with, the start of my field research. I also provide a more detailed history and background of the creation of the BCCA, the origin of its current management plan, and designation of its key guiding principles, which form the backbone of this study.

In the fourth chapter, I present the results of the research. This chapter is broken into two main parts focusing on the two key management principles under investigation: the first addresses community involvement and then second landscape connectivity. Each part begins with how the principles are defined for the BCCA Core and the associated charges for the BCCA Council. It then provides empirical examples of how these principles were operationalized in specific actions on the BCCA Core and adjacent lands over the past decade. The results raise a variety of major themes. As to the community involvement principle, the BCCA Council is charged with maintaining diverse representation of values and opinions from across the watershed in ongoing governance. In practice, the BCCA Council has operationalized the community involvement principle by developing protocols and strategies in four key dimensions: information-sharing, perspective-gathering, decision-making, and BCCA Council membership. Through these means, the BCCA Council creates opportunities for interested parties and stakeholders to have an influence over what and how management decisions are made on the BCCA Core, and to a lesser extent, surrounding lands within the larger BCCA. It reflects the challenges noted in the academic literature on taking a broad approach to defining who

constitutes the "community" in a community conservation area, and for ongoing vigilance and adaptation to creating diverse opportunities for community involvement.

To operationalize the landscape connectivity principle, the study highlights how the BCCA Council has coordinated financial and technical resources toward issues of mutual interest and concern across the BCCA lands. Key examples of the BCCA Council's cooperative funding strategy are discussed, notably for noxious weed management and conducting forest management and restoration across the landscape. These examples demonstrate how financial and technical resources are leveraged to generate efficiencies, and facilitate management activity on the BCCA Core and public lands. They also show the value of the BCCA Council as a platform for inter-organizational communication. Commitments to the landscape connectivity principle have fostered project coordination, knowledge-sharing, and relationship-building among the cooperating landowners that, I argue, supports productivity among both the social and ecological dimensions of the BCCA cooperative endeavor.

In the concluding chapter I highlight the major challenges and obstacles the study found with operationalizing each principle. My conclusions include but go beyond the voices entailed in the many interviews I conducted for the study to bring in my own interpretations and comparisons with the academic literature. Here I revisit the challenging question of who is the community for whom the BCCA is managed by and for? Among those most directly charged with governing the BCCA, the BCCA council, I heard mixed responses ranging from a very narrow (i.e., nearby residents) to very broad definitions (i.e., all users and self-identified stakeholders). That the BCCA entails a mixture of public, private, and Blackfoot Challenge ownership confounds the question. Making decisions in the best interest of the Blackfoot watershed "community" remains challenging in large part because this means different things to different people. A related challenge is maintaining volunteers to serve on the BCCA Council, and ones representative of the broad range of users and interests in the BCCA. Though BCCA agencies and landowners have agreed to define and work toward common goals and objectives, BCCA Council members recognized that administrative procedures and agency sideboards were the greatest impediment to project implementation on public lands and across boundaries. Strained agency resources and uncertain budgets were also a key limitation to practicing landscape connectivity, making ad-hoc opportunism the most feasible strategy for acquiring and leveraging resources.

Lastly, in the conclusion chapter I suggest recommendations for the BCCA Council to manage the BCCA lands going forward. As the BCCA project leans into its second decade, now is an opportune time to reassess the principles on which the BCCA was formed, and the actual strategies employed by the BCCA Council to put them into practice. As with continually being willing to (re)assess and (re)define who constitutes the BCCA community, the council needs to maintain its flexibility and openness to new definitions and approaches. Specific examples are discussed how it may continue to do so. With regard to the landscape connectivity principle, formal state and federal recognition of cooperative agreements are critical to collaborative natural resource management across boundaries. The BCCA Memorandum of Understanding (MOU) has provided grounds for cooperation, but this thesis argues for further exploration into other instruments, tools, or mechanisms, such as National Forest planning, that can create or enable stronger commitments from public agencies to define and act upon cross-boundary goals. As funding remains an ongoing challenge, continuing to find ways to generate revenue and leverage public and private dollars will also be critical in the future. Developing short- and long-term priorities for cross-boundary management at the resource sector or site-level will aid in guiding future investments and fund-raising strategies. Continually defining and communicating a shared vision for the wider BCCA among cooperating landowners needs to be a priority, especially as new members come into the BCCA Council. A clear shared vision will inform more effective communication between BCCA Council members and within agency hierarchies regarding opportunities to coordinate resources and pursue common goals across the larger BCCA.

## 2. LITERATURE REVIEW

There are two key bodies of literature that influence this study's questions and guide the analysis. These are literatures on landscape connectivity and community-based natural resource management. In this chapter, I introduce the basis for the concept of landscape connectivity and review how it is related to the emergence of ecosystem management and related concepts in the legal and policy environment in the US. I then turn to collaboration in natural resource management to illustrate the promise and challenges of collaborative approaches to apply these concepts in practice. Next, I introduce a related literature on community-based natural resource management, particularly the emergence of community forests in the US, including different types, and definitional and operational challenges. The latter includes the concern for inclusivity in decision-making processes.

### Landscape Connectivity and Ecosystem Management

Research in the fields of conservation biology and landscape ecology has led to the understanding that landscape level processes are imperative for supporting ecosystem function (for a comprehensive literature review, see Correa Ayram et al. 2016). Key ecosystem functions and processes (such as primary productivity, nutrient cycling, and energy flows) are inherent to wildlife population dynamics, hydrological systems, and plant regeneration. These processes occur across the ecosystem's structural components, i.e., its geological features, soils, and terrestrial and aquatic habitats that are unique to specific places. Landscape connectivity refers to the degree to which these flow unimpeded within, between, and across the landscape (McArthur and Wilson 1967; Correa Ayram et al. 2016). Though connectivity can be undesirable when it leads to the spread of noxious weeds or adverse genetic material (Jackson and Pringle 2010), research shows that connectivity generally supports ecosystem resilience to climate change, disease, drought, and fire (McRae, Hall, Beier, and Theobald 2012).

Potential barriers to connectivity are many, and some are natural while others are human created. Natural barriers to connectivity in aquatic systems include, but are not limited to, waterfalls, beaver dams, and seasonal changes in flow regimes due to fluctuations in precipitation. Over land, connectivity may be limited by natural features such as creeks and other wetlands or water bodies, elevation gradients and mountain ranges, or natural disturbances

like fire, landslides, or forest infestations. However, human modified landscapes are an increasingly pervasive barrier to habitat connectivity (Gantchoff and Belant 2017). Dams, culverts and stream crossings (Milt, Doran, Ferris, Moody, Neeson, and Mcintyre 2017), and dewatering from irrigation withdrawals (Rugel, Jackson, Romeis, Golladay, Hicks, and Dowd 2012) constitute human-created barriers to connectivity in aquatic systems. Urban development, residential subdivision, industrial agriculture and forest management, and fences and roads (Theobald, Crooks, and Norman 2011), are just some of the human-created barriers that affect and fragment terrestrial systems. Significantly, human barriers to connectivity are also closely tied to property ownership boundaries.

In contrast to the fluidity of ecosystem processes, political-administrative boundary lines have been superimposed often without an ecological basis (Keiter 1998). This is abundantly clear in the checkerboard pattern of public and private ownership in the U.S. West. The origins of the checkerboard pattern can be traced to legislation bolstering the nation's westward expansion during the late 18$^{th}$ and 19$^{th}$ centuries (Jensen et al. 1995). The passage of the Land Ordinance in 1785 established the Public Land Survey System, and based all subsequent land surveys on a gridded pattern of square mile sections. Subsequent disposition legislation in the 19$^{th}$ and 20$^{th}$ centuries, which enticed Euro-American settlers and developers into the west resulted in a "crazy quilt" of public and private ownership (Jensen et al. 1995). Due to this history, ownership within a given ecosystem may comprise differing local, state, and federal jurisdictions, private land use practices, and management philosophies that dramatically vary from one parcel to another, and leave stark footprints on the landscape. These issues lie at the heart of present difficulties and concerns in conservation and management of large landscapes and ecosystem functions.

In recent decades, research has informed a reorientation in the science and practice of conservation from a focus on single species, stands, and habitats within specific parcels to large landscapes and ecosystems across boundaries (Szaro, Sexton, and Malone 1998; DellaSala et al. 2015; Milt et al. 2017). Keiter (1998:332) notes that profound transformations are afoot in natural resource policy and administration, stemming from what he calls, "ecological facts that can no longer be denied." Indeed, the increasing relevance of landscape connectivity to natural resource management is reflected in the academic, technical, and policy literature showcasing such terms as ecosystem management (Grumbine 1994; Interagency Ecosystem Management

Task Force 1996; Keiter 1998; Lubell 2004), landscape-level conservation planning (Trombulak and Baldwin 2010), ecosystem-based management (NOAA n.d.), and, more recently, the "all-lands approach" of the USFS (Charnley, Kelly, and Wendel 2017). Despite subtle differences in terminology, many find agreement on the necessity for collective action and collaboration among private individuals, organizations, and state and federal agencies to mitigate habitat fragmentation and increase connectivity at ecosystem scales (Lubell 2004).

Because of the close relationship between landscape connectivity and ecosystem management, and the wealth of scholarly literature on the topic, I offer a closer look at the concept and its applications. Though concrete definitions of ecosystem management remain elusive, scholars have investigated its key features and principles. Ecosystem management deviates from traditional natural resource management approaches of the 20$^{th}$ century in its consideration of non-economic values and long-term sustainability (Grumbine 1994; Interagency Ecosystem Management Task Force 1996; Szaro et al. 1998; Yaffee 1999; Gray, Fisher, and Jungwirth 2001). Keiter (1998) found agreement on six primary principles of ecosystem management in practice: 1) to gain buy-in, goals must be socially defined; 2) coordination among multi-jurisdictions is required, such as between federal, state, tribal, and local entities, including private landowners and organizations; 3) the focus is on multiple resources rather than on a single resource; 4) the goal is to maintain and restore biodiversity and sustainable ecosystems; 5) it must occur over large spatial and temporal scales to accommodate dynamic and unpredictable forces and pressures; and 6) an adaptive management approach is necessary to address ecological complexity and uncertainty, including experimentation, scientific data-gathering and evidence-driven adjustments. In this light, the inherent objective of ecosystem management is to coordinate otherwise disparate planning processes, jurisdictional authorities, databases, and interests to better manage, steward, and recover natural systems in balance with human well-being.

One of the first examples of ecosystem management to be tried at the federal level was the Northwest Forest Plan (DellaSala et al. 2015). In 1993, then President Clinton established the Forest Ecosystem Management Assessment Team (FEMAT) through executive order to aid in breaking the political and economic gridlock arising from the Northern Spotted Owl controversy (FEMAT Report 1993; Szaro et al. 1998; DellaSala et al. 2015). The FEMAT was tasked with assessing and identifying ways for federal agencies (USFS and BLM) to plan in light of social,

economic, and ecological factors across 10 million ha in the Pacific Northwest region while meeting the requirements of the existing procedural and substantive environmental laws (FEMAT Report 1993:4). While a review of the lessons learned from FEMAT and Northwest Forest Plan is outside the scope of this literature review, it stands as a significant milestone in translating ecosystem management into federal natural resource policy and administration (for a recent review, see DellaSala et al. 2015).

Concurrent to the FEMAT and Northwest Forest Plan, other federal and state entities were applying ecosystem management in other ways (Congressional Research Service 1994). In 1993, the Clinton White House began developing a policy vision for how to achieve economic development while sustaining the environment, and established the Interagency Ecosystem Management Task Force (IETF) to provide recommendations. The IETF defined ecosystem management as a method, "for sustaining or restoring natural systems and their functions and values…based on a collaboratively developed vision of desired future conditions that integrates ecological, economic and social factors" (Interagency Ecosystem Management Task Force 1996:3). Federal agencies involved in the task force affirmed their commitment to the IETF's recommendations through a memorandum of understanding, which led to several agency reports, reference texts, and workshops on how to apply ecosystem management across federal lands and waters (Szaro et al. 1998).

Another variant of ecosystem management, and pursuing landscape connectivity more specifically, is taking an "all lands approach." The term was introduced in 2009 by former Secretary of Agriculture Tom Vilsack. His use illustrates ongoing attention to managing ecosystems across property boundaries on a landscape level, and how its translation in practice and policy is continuing to evolve at high-levels in the US:

> The threats facing our forests don't recognize property boundaries. So in developing a shared vision around forests, we must also be willing to look across property boundaries. In other words, we must operate at a landscape scale by taking an all lands approach. (Vilsack 2009 in Charnley et al. 2017)

It could be argued that the rise of the ecosystem management approach has informed recent federal legislation and administrative rules and policy that encourage collaboration between public land managers and other landscape residents and stakeholders (Bates van de Wetering 2006; Schultz, Jedd, and Beam 2012). A prominent example is the passage of the Forest

Landscape Restoration Act in 2009, establishing the USDA-USFS Collaborative Forest Landscape Restoration Program (CFLRP) (Schultz et al. 2012). This program provides competitive funding for teams of government and non-governmental interests to work together on multi-faceted, interdisciplinary restoration projects on high priority National Forest units of at least 50,000 acres. It was envisioned as a way to involve diverse local stakeholders in the NEPA process and restoration planning, and enable the Forest Service to meet their goals and mandates across larger spatial scales. Other notable legislation in recent decades created the Valles Caldera Trust (Valles Caldera Preservation Act 2010; Public Law 106–248), the Northwest Power and Conservation Council (Northwest Power Act 1980; 16 USC 839(a)-(h)) and stewardship contracting in the National Forest system (Butler 2013; Cheng and Sturtevant 2012; Schultz et al. 2012; Gerlak and Heikkila 2006; Nie and Fiebig 2010). Though the above examples differ in their histories, authorizations, goals, and geographic contexts, they share a common origin in an increasing appetite for experimentation with aspects of ecosystem management on federal public lands.

Congress has also granted federal agencies a slate of authorities with associated appropriations to facilitate cooperation with property owners outside of their jurisdictions, which arguably set the stage for landscape level partnerships such as the Blackfoot Community Conservation Area (BCCA) (USDA 2011). These enable cooperative agreements for cost-share, technical assistance, or other agency participation with non-federal entities, including private landowners, state agencies, or non-profit organizations to address goals at ecosystem scales. An amendment to the Cooperative Funds and Deposits Act of 1975 known as the Wyden amendment, presents a good example. The amendment, "provides the Forest Service with a tool to operate more efficiently, to restore ecosystem health across multiple ownerships and to build constructive, collaborative relationships with communities and stakeholders" (USDA Wyden Guidance, 2005). The passage of the Partnerships for Wildlife Act in 1992 coincided with the rise of ecosystem management in science and policy circles. The act created the Wildlife Conservation and Appreciation Fund, and intended to promote partnership between the USFWS, state agencies, private organizations and individuals to "carry out…projects to conserve the entire array of wildlife species in the United States" (16 USC 3742(1)). Additionally, the Cooperative Forestry Assistance Act of 1978 created the USFS—State and Private Forestry Program which continues to evolve based on the policy that it is, "in the national interest for the

secretary to work through and in cooperation with [state and private entities] in implementing Federal programs affecting non-federal forest lands" (16 USC 2101(e), emphasis added). Though there are many more, these are some mechanisms through which federal agencies are authorized to cooperate with and formally support non-federal entities to manage resources at broader scales.

Federal land management agencies have also integrated ecosystem management principles into administrative rule-making. Notably, in 2012, the USFS promulgated a new rule for National Forest planning (36 CFR Part 219). The influence of ecosystem management is particularly clear in sections of the rule dealing with wildlife conservation planning, which lay out new directives for meeting the National Forest Management Act's (NFMA) wildlife diversity mandate (Schultz, Sisk, Noon, and Nie 2013).[1] Schultz et al. (2013:432) argue that the rule is significant in that it commits the USFS to, "restore or maintain landscape connectivity to facilitate movement, migration, and dispersal." Other sections of the 2012 planning rule, namely the several "all-lands" provisions and monitoring requirements, are aimed at encouraging cooperation with adjacent entities and landowners (Charnley et al. 2017; Schultz et al. 2013). Moreover, the rule states that responsible officials must "engage the public…early and throughout the process," and "shall encourage participation by…private landowners whose lands are in, adjacent to, or otherwise affected by, or whose actions may impact, future management actions in the plan area." (USFS Planning Rule, 36 CFR 219.4 (a)(1)). In this way, the rule highlights the necessity of resource managers to look across boundaries, and enter into cooperative arrangements with adjacent landowners and state entities to define and meet landscape level goals.

These developments at the federal level dovetail with the increasing interest in co-management arrangements between state and non-state actors to achieve better social and ecological management (Plummer and Fitzgibbon 2004; McCarthy 2005). Co-management links higher-level institutions of governance with various lower level institutions such as states, local governments, NGOs, and even resource users themselves (Berkes 2009; Plummer and Fitzgibbon 2004). Based on the subsidiary principle (Plummer and Fitzgibbon 2004), these

[1] ''provide for a diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives'' (16 USC 1604(g)(3)(B))

arrangements entail devolving some level of authority or management responsibility, through contracting or downsizing, to lower levels of governance. In this way, Brondizio, Ostrom, and Young (2009:255) define co-management as a "method for supplying governance that features cooperative decision-making among users and public authorities." As such, Berkes (2009:1694) points out that efforts at co-management are compatible with increasing scholarly and applied interest in "people-centered governance."

## Collaboration in Natural Resources Management

Institutionalization of ecosystem management in the U.S. has been supported by citizen-driven initiatives demanding collaboration among diverse parties to manage natural resources, even among historic adversaries (Wondolleck and Yaffee 2000; Weber 2000; Keiter 2003; Margerum 2007; Nie 2008; Mountjoy 2014). Collaborative approaches are involved in a variety of activities including community-based conservation (Berkes 2004), collaborative governance (Ansell and Gash 2008), community-based forestry (Danks 2009; Cheng, Danks, and Allred 2011; Cheng and Sturtevant 2012), community forestry (Brendler and Carey 1998), community-based ecosystem management (Gray et al. 2001), and grass-roots ecosystem management (Weber 2000). Despite subtle differences, participants and advocates of collaboration echo a generic vision for different peoples across different property regimes to find common values and interests in managing a landscape for promoting human well-being, ecological health, and economic prosperity. The "idealized narrative" of collaboration is to "reduce conflict among stakeholders; build social capital; allow environmental, social, and economic issues to be addressed in tandem; and produce better decisions" Conley and Moote (2003:372). These approaches have enjoyed immense political support in recent decades, and play an increasingly large role in natural resource management in the U.S. (Weber 2000; Conley and Moote 2003; Nie and Fiebig 2010; Keiter 2003). Craig (2007) reported that more than 3000 organizations were currently at work at the time of his study.

Many of these initiatives arise out of disenchantment with the top-down, centralized resource management paradigm (Margerum 2007), and the poor environmental and social outcomes to which it has led (Weber 2000; Baker and Kusel 2003; Cheng et al. 2011). Voices from the collaborative movement link biodiversity losses, declining water quality, and forest

degradation at large scales with the disparate and conflicting mandates of state and federal agencies, and political impasse and litigation to the exclusion of diverse stakeholders from decision-making processes (Schuett, Selin, and Carr 2001). The failures and limitations of the public sector in this regard can have heavy consequences, especially for rural communities dependent upon natural resources (Weber 2000). In many places, a common instigator for collaborative initiatives is what Plummer and Fitzgibbon (2004) term a "real or imagined crisis" that threatens local ways of life, which could include listings of at-risk species under the Endangered Species Act (ESA) or degraded water quality. In this way, collaborative initiatives seek to take the reins from traditional institutions who have not been capable of maintaining ecological integrity, economic opportunities, and access and benefits to local people (Cheng et al. 2011)

Perhaps ironically, scholars argue that the active participation of state actors in collaborative efforts is a critical component of their opportunity to be successful (Moote and Lowe 2007; Born and Genskow 2000; Sabatier, Quinn, Pelkey, and Leach 2002; Doppelt Shinn, and John 2002). Active participation can include recognition through cooperative agreements, memorandum of understanding, or other agency commitments, which Born and Genskow (2000:50) describe as "measures of formal governmental support." Hence, collaboration often involves legally binding or informal arrangements or agreements among abutting private and public landowners (Bixler 2014; Wyborn and Bixler 2013). In these instances, management objectives are formulated among agencies, institutions, and willing individuals in an atmosphere of cooperation. In theory, this can lead to synergy and efficiency in managing natural resources, a quality that Wyborn and Bixler (2013) refer to as the "collaborative advantage." As noted above, cost-sharing through state and federal programs, technical assistance offered by public agencies, and the provision and sharing of other financial and administrative resources among landowners and between agencies tend to be some of the advantages of public-private partnership (Schuett et al. 2001; Lubell 2004; Moote 2008; Mountjoy 2014).

Even when formal agreements are established between partners, however, scholars point out that the collaborative approach confronts many social and ecological obstacles. Among them are ecological complexity, jurisdictional barriers, financial limitations, and diverse social and economic interests, preferences, and opinions as to what constitutes proper management and use of local natural resources (Keiter 2003; Wyborn and Bixler 2013). Indeed, the ecological

complexity inherent to large landscapes confounds monitoring and adaptive management efforts (Koontz and Thomas 2006; Berkes 2009). The influence local people have over public lands is constrained by procedural and substantive requirements stipulated by congressional legislation, which favors the consideration of state or national over local interests (Fiebig 2008; Nie and Fiebig 2010). Moreover, career incentives and agency reward systems often do not award personnel for collaboration, which puts some at a disadvantage if they devote time and energy toward collaborative efforts (Doppelt et al. 2002). Differing funding sources, budget constraints, and staggered fiscal timelines also stunt or limit cooperation or coordination on restoration or other projects across jurisdictions (Lubell 2004). For these reasons, observers ask what the collaborative approach can or has accomplished, and whether collaboration has really generated positive environmental outcomes; and, if social benefits, for whom? (Kenney 2000; Koontz and Thomas 2006; Scott 2015).

The increasing demand for collaborative approaches to natural resource management in the U.S. share similar origins with the rise of community-based natural resource management (CBNRM) approaches around the world. Below, I review the literature on CBNRM and the emergence of community forests in the US.

## Community Involvement in Community-Based Natural Resource Management

Like collaborative approaches in the U.S., community-based natural resource management (CBNRM) has become increasingly pervasive around the world in recent decades (Agrawal and Gupta 2005; McCarthy 2005; Charnley and Poe 2007; Dressler, Buscher, Schoon, Brockington, Hayes, Kull, McCarthy, and Shrestha 2010; Barry and Meinzen-Dick 2014). With respect to forests alone, Barry and Meinzen-Dick (2014:291) reported that by 2001, 22% of the world's forests were "owned or held in reserve for communities," that organize to make decisions about forest use and access though often with "extra-local support" (Dressler et al. 2010:7). However, approaches in CBNRM originate in social and ecological contexts not limited to forests, and are embedded in diverse institutional and legal frameworks, land tenure systems, and have varying connections to public and private sector entities, including states and non-governmental organizations (Brosius, Tsing, and Zerner 1998; Agrawal and Gupta 2005; Barry and Meinzen-Dick 2014).

In large part, the emergence of CBNRM approaches in the developing world is related to the history of western colonization, conservation, and resource development (Dressler et al. 2010; Brockington and Igoe 2006). Dressler et al (2010:6-7) and others (Brockington and Igoe 2006; Agrawal and Gibson 1999) described that the forced removal and displacement of non-European peoples to establish reserves and parks was motivated by the assumption that they degraded what colonizers envisioned as pristine landscapes (and sources of capital). As such, conservation has historically silenced or removed from the land people not associated with imperial administrations, often in the name of "Anglo-European scientific understandings of nature and culture" (Dressler et al. 2010:6). In this historical context, Brosius et al. (1998) attributes the proliferation of CBNRM programs since the late 1970's and early 1980's, abroad and in the U.S., to the motives of four predominant groups: 1) Conservationists (indigenous and foreign) who desire to mobilize local people in protection of biodiversity, 2) Development organizations aiming to address criticism over economically oppressive resource development projects, 3) Populist activists that seek to empower local groups in confronting state agencies, national government, and international capital, and 4) Indigenous people that argue for rights, political standing, and the legitimacy of their knowledge and culture. Advocates of CBNRM claim that reintegrating local people into conservation and development programs would remedy the painful history of displacement, reverse environmental exploitation, and "generate equitable solutions to poverty reduction and conservation" (Brosius et al. 1998; Dressler et al. 2010:7).

The recent movement toward CBNRM approaches is supported by a few central premises relating to understandings of "communities" that have been common across the academic and technical literature on the topic. Reed (2008) points out how normative arguments for CBNRM suggest that local resource users should have a voice in decision-making processes that affect their livelihoods and access to resources. Brosius et al. (1998) reported that practitioners of CBNRM around the world consider that, because local users are dependent on natural resources, they have more reason and greater interest in sustainable management in comparison to state actors or distant agency officials. Alternatively, Agrawal and Gibson (1999) point out that if resource users are not involved in management, remain marginalized users, or are excluded entirely, they will have the opposite incentive; that is, to use resources unsustainably. In addition to the incentives for stewardship, local users are thought to possess greater knowledge about ecological systems that makes them better suited to conserve them (Agrawal and Gibson 1999).

Reed (2008) characterizes the benefits of local knowledge in defining conservation priorities and improving practices as part of the pragmatic justification for CBNRM, an argument which also resonates with Berkes's (1989) call for the balance of traditional and scientific knowledge in resource management. These narratives have underpinned the increasing trend toward CBNRM around the world, and in the U.S.

Though CBNRM initiatives first emerged in the developing world, in the recent decades there has been increasing interest in CBNRM approaches in North America, especially community forestry (McCarthy 2005; Charnley and Poe 2007; Danks 2009; Cheng et al. 2011). Community forests are generally managed by and for particular communities of residents and/or resource users who define rules for access, resource use, and institutions for enforcement and monitoring (Desmond 1996; Belsky 2008; Charnley and Poe 2007). The essential goal pivots on dual, entwined social and ecological goals; that is, ecological stewardship and, "support [for] forest-based activities and enterprises that contribute to community goals" (Danks 2009:172). Community forestry in the U.S. often refers to institutional arrangements on government or public owned forests that grant local people greater control over resource management decision-making and access to benefit streams from forest and non-forest resources, particularly on National Forests (McCarthy 2005). This form of community forestry is akin to the collaborative approaches discussed in the above section, which center around bringing the public (including private landowners, users, or other affiliated interest groups) into discussions over public land management. However, community forestry in the U.S. is marked by considerable variation at the institutional and operational level (Charnley and Poe 2007; Danks 2009), and includes forestry or other resource management activities on community-owned lands as well.

To understand the differences in community forestry in practice, Belsky (2008) offers a typology of community forests, not including those on government-owned or public lands. She identifies three types of these community forests: 1) indigenous community forests, 2) town or municipal-owned community forests, and 3) community-based conservation organization - owned community forests. Indigenous community forests are those that emerged organically (i.e., without external assistance) and are based on historic common property regimes, frequently managed through customary laws and rules. Town or municipal community forests, in contrast, are based on legally enforceable bylaws and ordinances, often drafted by an elected town council or committee, serving a geographically defined community of users (Belsky 2008). Historically

in the U.S., indigenous community forests existed among Native Americans, and town forests in New England since Euro-American settlement (McCullough 1995). The third type, community forests owned and managed by non-governmental organizations, are a much more recent phenomena in the U.S. However, in community forests (and CBNRM efforts more broadly) where some "community" is privileged, this demands close attention to defining who is the community that resources are managed by and for? (Agrawal and Gibson 1999; Brosius et. al. 1998; Li 2002).

Some scholars point out that the definition and use of "community" in CBNRM approaches has been rather simplistic (Agrawal and Gibson 1999; Belsky 1999; Li 2002). Agrawal and Gibson (1999) illustrate how community in CBNRM is often conceptualized as comprising a discrete spatial unit, a cohesive social structure, and a set of shared norms. However, the critical scholarship on CBNRM highlights the inadequacy of limiting definitions to a residential community with assumptions of shared values, norms and interests (Agrawal and Gibson 1999; Brosius et al. 1998). Gray et al. (2001:3) highlights how community forest management often involves issues that "transcend [the] socially constructed and administrative boundaries," which define a "community of place," and tend to involve multiple "communities of interest" such as user groups that may be at odds. This reflects Desmond's (1996:18) argument that a better way to think about community is in terms of diverse user groups, or "local group[s] of people who acknowledge each other's access and use rights to a natural resource." Additionally, scholars call attention to the "internal inequities, conflicts and enduring divisions related to class, ideology, race, ethnicity, gender, family history and old-timer vs. newcomer status" which are often obscured from view in CBNRM programs (Danks 2009:174; McCarthy 2005).

Moreover, Agrawal and Gibson (1999:633) argue that one of the chief failures of a "vision of small, integrated communities" in CBRNM initiatives is that it can negatively affect outcomes. In a case study of community-based ecotourism in Belize, Belsky (1999) demonstrated that lack of attention to fundamental class and political and family patronage alliances led to extreme inequitable benefit sharing and resulted in sabotage of projects, and even acts of violent resistance by those not benefitting from the ecotourism activities. Thus, if ecological stewardship and equitable institutions for local resource management are to be achieved, Agrawal and Gibson (1999) suggest that these initiatives, including community-owned

forests, need to be attentive to the potential diversity of values, preferences, and mixed positions with regard to rules and institutions for rule-making.

A more nuanced awareness of community in community-owned forest initiatives is particularly important in places undergoing dynamic social change, such as the U.S. intermountain West which has recently been termed the "new west" (Winkler, Field, Luloff, Krannich, and Williams 2009). In many rural communities in this region, natural resource-based industries and an agricultural orientation to land management and valuation have given way to a recreation-based, services industry under which aesthetics and amenity-values are preeminent interests (Duvall 2006; Winkler et al. 2009). As such, the integration (or lack thereof) of newcomers into rural western communities presents a significant, and unmistakable, challenge for identifying shared objectives for managing resources. As Yung and Belsky (2007) show in the context of a rural ranching community in western Montana, newcomers valued wildlife and wildness, consuming the aesthetic and spiritual appeal of the landscape, while long-time ranchers valued their history, communities, and relationships upon which their ranching livelihoods depended. These different positions can underlie conflicts among new and old landowners over appropriate use of lands, both public and privately owned. These findings reveal how the formation of a "community" is contingent upon relationships and social processes as much as shared residence in a place (Yung and Belsky 2007).

Additionally, the task of determining who should manage community forests owned by non-governmental organizations, and on what values, is likely to be especially complex given how they are acquired and established. As the Community Forest Collaborative reports in a review of enabling conditions and resources needed to create and manage community forests, establishing new community forests, "requires a significant amount of professional expertise and guidance" (CFC 2011). Financing land acquisition is complex, and these community forests will often partner with a "private equity partner, state, regional or local non-profit that has access to capital, staff time and expertise [and] can offer capacity." (CFC 2011:16). This type of partnership reflects what Wyborn and Bixler (2013:59) refer to as the "cross-scale interactions" of community forest owning organizations. As such, new community forests have complex ties; both to local users and residents and to distant sources of capital and expertise, including individuals, public and private organizations and agencies, and even state or US congress. In this light, community forests of Belsky's (2008) third type face unique challenges in developing

community involvement strategies that account for the diverse interests of local residents and user groups while also remaining attentive to distant contributors and others who have a stake in community forest resources.

## Approaches to Community Involvement in Natural Resource Decision-making

Studies of decision-making in natural resource management have examined distinctions between the community involvement strategies of community-based conservation initiatives like community forests (Griffin 1999; Weber 2000; Gray et al. 2001; Leach 2006), and the mechanisms for broader citizen (or public) participation at the state and federal administrative level (Halvorsen 2006). Because the larger BCCA includes public and community-owned lands, I review insights from the literature in both contexts. In each, researchers examine elements and techniques of decision-making processes such as the forums used (Griffin 1999; Carr and Halvorsen 2001; Parkins and Mitchell 2005; Leach 2006), the influence of public input over outcomes (Arnstein 1969), and how participants perceive decision-making processes and outcomes (Lind and Tyler 1988; Gibson 1989; Smith and McDonough 2001). Scholars have employed diverse theoretical frameworks, including procedural and distributive justice (Lawrence, Daniels, and Stankey 1997; Danks 2009; Smith and McDonough 2001), democratic ideals of inclusiveness and representativeness (Leach 2006), and the growing critical theory of deliberative democracy (Chambers 2003; Parkins and Marshall 2005; Rodela 2012).

In the 1960's and 1970's, demand for greater public participation in natural resource decision-making in the US led to dramatic institutional changes at the state and federal level (Griffin 1999). Prior to this time, agency decisions were framed as technical or scientific problems that agency experts were solely equipped to solve (Lawrence et al. 1997). Following a series of controversies over public land management, e.g., the perceived mismanagement of the Bitterroot National Forest in Montana among others, the table was set for the rise of public participation as a check on agency actions (Bolle 1971). Several key environmental laws were passed during this period, including the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA) and the Federal Land Planning and Management Act (FLPMA). These laws mandated agencies to institutionalize public scrutiny, oversight, and input in decision-making, and provided an avenue for organized interest groups to intervene and

obstruct agency actions through the judiciary (Nie 2008). Current procedures for public participation include timelines for public notices, press releases, public meetings and hearings, and bookended periods for written and oral comment (Griffin 1999; Halvorsen 2006).

Notwithstanding the development and proliferation of these procedures, state and federal agencies continue to be plagued by public criticism and conflict over how participation mandates are carried out (Lawrence et al. 1997). Primary critiques point out that agencies appear to "announce and defend" their initial proposals despite being mandated to account for public input (Halvorsen 2006). As such, citizens become skeptical that voicing their opinions will actually affect agency decisions, which sows deep-seated distrust (Parkins and Mitchell 2005). Others argue that an institutional bias toward scientific expertise does not take local knowledge seriously (Lawrence et al. 1997; Berkes 2004; Rodela 2012), and that public participation has failed to reduce conflict and serial litigation by interest groups from all sides (Griffin 1999; Nie 2008).

Some look to the community forests, and other similar initiatives, for insights into how to address these criticisms (Carr and Halvorsen 2001; Chambers 2003; Parkins and Mitchell 2005; Rodela 2012). In contrast to the prescribed timelines, venues, and procedures of state and federal agencies, decision-making in community forests occurs in both formal and informal settings, with diverse techniques to encourage broad participation in problem-solving (e.g., watershed councils, listening sessions, work groups, community dinners, field tours, and conversation at local bars and restaurants) (Griffin 1999; Brendler and Carey 1998; Carr and Halvorsen 2001; Danks 2009). As such, the literature often highlights how decision-making in community forests is intended to be inclusive of diverse local stakeholders, including resource users, local residents and landowners, or other interested parties in defining policies for use, access arrangements, restoration, or other project goals (Rodela 2012; Carr and Halvorsen 2001; Baker and Kusel 2003). These groups often embrace the ideals of direct democracy and deliberation to make decisions based on consensus (Leach 2006), and are often praised for their capacity to find agreement on solutions to complex problems (Weber 2000). This may be in part because decision-making in these settings often involves discussion between people who know each other, share in the use of local natural resources, and have other connections, for example at church or in activities with local civic organizations (Desmond 1996). Nevertheless, as shown above, scholars caution that community forest governance institutions should not be assumed to

be inherently equitable or inclusive. Decision-making processes that do not meaningfully incorporate diverse values can give rise to disputes over the validity and legitimacy of decisions, and undermine social and ecological goals (Baker and Kusel 2003).

In light of inevitable conflict and disagreement in both contexts, it is instructive to review a growing strain in the literature that examines how the nature of decision-making processes aid or obstruct efforts at reaching consensus (Lawrence et al. 1997; Smith and Mcdonough 2001; Carr and Halvorsen 2001; Parkins and Mitchell 2005; Rodela 2012). Procedural justice scholars indicate that satisfaction, acceptance, and compliance are closely related to whether decision-making is perceived to be fair (Lind and Tyler 1988; Gibson 1989; Lawrence et al. 1997). Regardless of whether final decisions match their preferences, participants are more likely to be satisfied if they perceive that their voices were heard and respected (Lawrence et al. 1997). In this vain, many suggest that practitioners should be cognizant as to whether "process elements" foster a sense of fairness, which involves listening, trust-building activities, mutual respect, and joint-learning (Lawrence et al. 1997:579; Parkins and Mitchell 2005; Rodela 2012). In contrast to public hearings or public comment periods that embody one-way communication between participants and power-holders, scholars agree on the importance of two-way dialogue and exchange as the basis for finding agreement. Dialogue enables a better understanding of participants' underlying values and interests in addition to their policy positions or "fixed preferences" (Chambers 2003:308; Carr and Halvorsen 2001; Halvorsen 2006). Alternatively, Lawrence et al. (1997:579) argues that efforts to resolve conflict solely by tailoring decisions to meet multiple demands yields a situation in which all parties are equally dissatisfied, or what has been called "equilibrated dislike."

In summary, the above literatures on landscape connectivity and community-based natural resource management point out how the players in resource management are changing in the U.S. The imperative to manage at a landscape scale has informed the ecosystem management policy and related concepts in the literature that has forced agency managers to look outside of their jurisdictions and cooperate with other landowners and agencies. Simultaneously, private landowners are organizing with one another, supporting organizations, and agency personnel to confront environmental problems at watershed, or ecosystem scales. Collaborative initiatives that claim to be community-based, however, must be aware of community definitions and sensitive to how decision-making and community involvement strategies are designed,

especially with regard to inclusiveness. These literatures point out essential research questions to inform investigations of newly struck community forests that have power-sharing or co-management agreements with public lands officials. It is interesting to ask how these groups define and operationalize their goals and objectives, and if they generate social and ecological benefits, for whom? How can community forests with "cross-scale interactions" (Wyborn and Bixler 2013:59) aid in applying landscape connectivity and ecosystem management principles in partnership with adjacent landowners? How do these community forest managers balance dynamic and heterogeneous interests when designing rules for access, use, and management of community-owned forests? How does partnership or co-management with local groups affect the management of government-owned lands, which are accountable to broader citizen constituencies? These are timely questions to ask, especially given the current political climate surrounding public land ownership in the U.S., and increasing demand for the devolution of public lands management authority to local resource users and nearby residents (Barry and Meinzen-Dick 2014).

Below, I review the methodology I used to examine the principles of community involvement and landscape connectivity through public-private partnerships in the BCCA. I begin with a background on my relationship to the BCCA Council as an intern with the Blackfoot Challenge, the lead organization and fee-simple owner of the BCCA Core. I then provide a brief sketch of the setting of this study, including the history of the BCCA and BCP, the geographical setting in which the BCCA is located, and the key portions of the BCCA Management Plan for the Core that were the central focus of this study. I then detail the study design, and methods for data collection and analysis.

## 3. METHODOLOGY

### Background Experiences

In January of 2016, I attended a BCCA Council meeting in the Fire Hall in Ovando. The purpose of my visit was to personally introduce my interest in a research study that examined the BCCA Council's management history and use of the BCCA Management Plan for the Core. From this meeting and initial contact with a student colleague, who is also the BCCA Coordinator for the Blackfoot Challenge, I learned that the BCCA Council had been intending to update the plan for several years but needed assistance and was interested in hosting an intern. Accordingly, they approved my research proposal and asked if I would be willing to serve in that capacity during the summer 2016. I accepted the role and over the course of the summer and fall I lived in the watershed and worked out of the Blackfoot Challenge office in Ovando to organize a review and update of the management plan. The BCCA Council's primary goal was to append the plan with updated public use policies and regulations, changes to council structure and administrative policy, and the more recent Memorandum of Understanding, among other substantive considerations regarding resource objectives. I attended regular BCCA Council meetings during this time, and facilitated three separate meetings of the Management Plan work group, an ad-hoc subcommittee the BCCA Council organized to help direct the update process. This work required an in-depth search and examination of archival documents, including more than a decade of BCCA Council and work group meeting minutes, policy developments, as well as a close reading of the BCCA Management Plan for the Core. As part of the internship, I also worked alongside the BCCA Land Steward and participated in land management activities that form the focus of this study.

The methodology of this thesis reflects key elements of participatory action research. Participatory action research is a subset of action research, which is the "systematic collection and analysis of data for the purpose of taking action and making change" by generating practical knowledge (Gillis and Jackson 2002:264). A key objective of my research was to provide the BCCA Council and Blackfoot Challenge with an informative, and useful analysis to inform future governance and management of the BCCA. With this key objective, I developed research questions in close association with members of the BCCA Council and Blackfoot Challenge. As such, the research questions could be viewed as being co-produced,

building from the concerns of these individuals, the setting and overall social context in which this research study took place. As mentioned above, a central component of my relationship with the BCCA Council that affected my research throughout was my summer internship with the Blackfoot Challenge. This enabled me to build relationships with BCCA Council members and Blackfoot Challenge staff, attend meetings and field visits, and contribute to the revision of the BCCA Management Plan for the Core through research and writing.

## Study Setting

### Plum Creek Timber Divestment and the Initiation of the Blackfoot Community Project

In the 1990's, the Plum Creek Timber Company ("Plum Creek") began divesting its timberlands in the U.S. The trend toward divestment was due, in part, to a more competitive global timber market and reduction in timber prices, as well as an opportunity for timber companies to restructure as real estate investment trusts (REIT) (Hartmann 2004). In 1996, Plum Creek began to identify thousands of acres in the Swan Valley of MT with high real estate value (known as "higher and better use" lands or HBU), and offer them for sale (Hartmann 2004). They simultaneously announced their interest in selling some of their other holdings of lower timber value farther south in the Blackfoot Valley (Duvall 2006). In 2002, Plum Creek owned nearly 20% (~300,000 acres) of the Blackfoot watershed (Hartmann 2004). In light of the looming sale of Plum Creek timberlands, and in consideration of the social and ecological values at stake (i.e., loss of historic access and land-uses, habitat fragmentation, and influx of wealthy landowners with little knowledge or interest in local culture and norms), local leaders of the Blackfoot Challenge preemptively developed a partnership with The Nature Conservancy (TNC) and Plum Creek, as well as the US Fish and Wildlife Service (FWS) who would hold conservation easements, to arrange a potential acquisition of some of these lands. By 2005, the dealings had resulted in the purchases of some 88,000 acres across the Blackfoot Valley, through what came to be called the Blackfoot Community Project (BCP).

As part of the Blackfoot Community Project, in January 2004 TNC purchased 5,600 acres north of Ovando with the intention of transferring them to the Blackfoot Challenge (Duvall 2006). In a public meeting in February of that year, the leaders of the Blackfoot Challenge identified a local interest in maintaining public access and use of the parcel, initiating a process

which ultimately led to the creation of the BCCA. In the two years that followed, the Blackfoot Challenge, in partnership with researchers from the University of Montana, began assessing local preferences, opinions, and values regarding how conservation, ownership, access, and management arrangements over the lands should proceed (Duvall and Belsky 2005; Duvall 2006). Based on a random survey, and numerous public meetings and workshops, public priorities for the BCCA began to crystallize around preserving public access, maintaining historic uses like grazing, forestry, hunting and trapping, travel on foot and horseback, firewood cutting, and conservation of vital wildlife habitat (BCCA Management Plan 2008; Duvall and Belsky 2006). Surprisingly, Duvall and Belsky's (2005) survey found that nearly half of the sampled residents in Ovando felt the BCCA should be managed in the interest of the entire watershed and beyond.

In 2005, in accordance with their goal to promote a community-driven process (Duvall 2006), the Blackfoot Challenge convened the BCCA Council that included landowners and major user groups of the BCCA as well as agency partners. The array of BCCA Council seats included five government land management personnel, five user groups (representing recreationalists, hunters, trappers, hikers, graziers, foresters, snowmobilers, and wildlife lovers), and five private landowners. This BCCA Council was given responsibility to create a management plan that included an overarching mission, specific management objectives and rules for access, and administrative procedures.

In keeping with the legacy of public-private collaboration in the Blackfoot watershed, the Blackfoot Challenge saw the BCCA as an opportunity for experimentation with cooperative land management. In 2008, a Memorandum of Understanding (MOU) was finalized and signed by adjacent landowners, including Montana Fish Wildlife and Parks (FWP), Montana Department of Natural Resources and Conservation (DNRC), USFS Lolo National Forest, and three private landowners, which expanded the acreage of the BCCA to its current 41,000 acres, though left ownership authorities and property rights unchanged. The Blackfoot Challenge describes the larger BCCA as a "multiple-use demonstration area for the watershed, implementing innovative access, land stewardship and restoration practices" (Duvall 2006:18; BCCA Management Plan 2008). Soon after the MOU was created, an official management plan was published for the BCCA Core, and has served as a management tool over the last decade (BCCA Management Plan 2008).

**The Blackfoot Community Conservation Area (BCCA) Setting and Management Plan**

The BCCA is located in the mid-reaches of the Blackfoot watershed surrounding Ovando mountain. The area straddles an important transition zone across very distinct social and ecological landscapes. The northern section is in the national forest system, including the southern border of the mountainous Scapegoat Wilderness. To the south are state and private forests and grasslands. As such, the 41,000-acre landscape contains significant wildlife habitat, a mix of forest types and grasslands, lush riparian areas and the headwaters of major tributaries to the Blackfoot River, including Monture, McCabe, Spread and Dick Creeks. Land ownership within the BCCA is comprised of 59% Lolo National Forest, 7 % DNRC, 13% FWP, 7% private lands, and 13% owned by the Blackfoot Challenge. In addition, the USFWS owns an easement on all of the BCCA Core lands, FWP lands, and a portion of the DNRC lands. Lands within the BCCA remain subject to the legal and administrative rules and regulations of their respective owners, as well as the conditions of the USFWS easement (BCCA Management Plan for the Core 2008). In this vein, the lands owned by the Blackfoot Challenge (the original 5,600) are governed and managed through the BCCA Council, which follows the management plan described below.

The plan defines the vision for the BCCA Core, describes its cultural and natural setting and characteristics, establishes administrative procedures, and outlines the "community vision" for the Core, which is to:

> Develop a working landscape that balances ecological diversity with local economic sustainability for the future benefit of the Blackfoot watershed community. Management will entail activities that seek to conserve, enhance, and maintain a balance of wildlife habitat, wetlands, water, grasslands, and timber resources with traditional uses…complimented through working cooperatively with surrounding agency and private landowners (BCCA Management Plan 2008:15)

Coupled with this vision, the plan defines multiple guiding principles on which all management activities are to be based, especially Community Involvement, Landscape Connectivity and Ecosystem Management, and Public-Private Partnerships. As to the former, the plan charges the BCCA Council with providing, "ample opportunities for public involvement and engagement in future land management and stewardship of the BCCA" and lists a variety of mechanisms and strategies for doing so. Likewise, any changes to the document must be prepared by the BCCA

Council and, before adoption by the Blackfoot Challenge board, opened for public comment (BCCA Management Plan 2008:7). To the latter goals, the BCCA Council must "define the relationship between the BCCA Core and adjacent lands and resources" and "pool public and private funding and technical resources" to build on a legacy of partnership in the watershed (BCCA Management Plan for the Core 2008:15). Moreover, as a, "living document," the management plan will be adapted as needed, "based on monitoring, landscape changes, and/or new information" (BCCA Management Plan for the Core 2008:7, 14).

The above principles are meant to guide management and restoration activity for eleven distinct, but overlapping resource areas, which include: wildlife, forest and forest products, fire, riparian and wetland areas, range and native grasslands, noxious weeds, recreation, travel management, education, and economics (BCCA Management Plan for the Core 2008:29). Due to nearly a century of timber extraction, ecological restoration is a management priority for the BCCA Core. While each resource, e.g. forests and forest products, contains a management goal and a list of objectives, these serve primarily as broad qualitative guidelines for management activities. For instance, the plan suggests a standard practice and/or limitation on certain practices, e.g., dead snags will be left for cavity-nesting birds, but does not designate the finer scale prescriptions e.g., how many dead snags should be left per acre. Rather, these decisions are up to the discretion of the BCCA Council and are made at the project level or, where applicable, are based in more specific standards and guidelines outlined in secondary plans for specific resources. For instance, the BCCA Management Plan for the Core in 2008 encourages the implementation of a more specific grazing management plan for BCCA Core leases that contains more explicit sideboards. In effect, the BCCA Management Plan for the Core gives a great deal of discretion to the BCCA Council as to how the resource goals and objectives are interpreted and operationalized for specific resources.

## Study Design

I selected three resources/uses to empirically examine how the central management principles have been translated into land management activity: 1) noxious weeds; 2) forest and forest products and 3) travel management. For this study, land management activities are defined as any and all projects or actions planned and implemented by the BCCA Council for the purposes of meeting the goals and objectives identified in the plan. However, as the BCCA

management plan contains explicit goals and objectives for eleven natural resources and/or uses of the BCCA, a comprehensive analysis of every resource was unfeasible. Instead, I treated each resource as a separate case study to examine, in depth, a specific management principle and its role and contribution to the management activities of the resource. To examine Landscape Connectivity through Public-Private Partnerships, I examined noxious weeds management and forest and forest products. For Community Involvement, I investigated travel management. (Table 1)

| **Guiding Management Principle** | **Landscape Connectivity** | **Community Involvement** |
|---|---|---|
| Focal Resource/Use | Noxious Weeds | Travel Management |
| | Forest and Forest Products | |

Table 1 – Focal resources/uses for examining key management principles.

I purposefully selected these resources because in preliminary interviews and conversations with BCCA Council members during the spring and summer of 2016, I learned that they were challenging to manage, a source of learning for the BCCA Council, and relevant to the principles. Members emphasized the importance of collaborating on noxious weed management across boundaries. Therefore, I judged that noxious weeds would be an appropriate choice for examining the principle of landscape connectivity through public-private partnership in practice. Because most of the larger BCCA is forested and was managed as industrial timberland during much of the 20$^{th}$ century, forest restoration has been a major focus of the partnership across all lands. Thus, I also examined how BCCA partners work toward landscape connectivity in the forest sector. Additionally, in these initial contacts, I learned that developing a policy for recreational motorized use has spurred immense community involvement and conflict, and therefore was a compelling choice for examining the community involvement principle.

## Overview: Data Collection Methods

The methodology of this thesis follows the form of a case study. Yin (2003) characterizes a case study as an in-depth inquiry into a contemporary social phenomenon deeply exploring the historical and institutional context within which the phenomenon exists, and using multiple

sources of evidence to examine research questions framed as, "how?" or "why?" Simons (2009) emphasizes the applicability of case study approaches to empirical studies of governance and social institutions,

> Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a "real life" context…The primary purpose is to generate in-depth understanding of a specific topic…to generate knowledge and/or inform policy development, professional practice and civil and community action (Simons 2009:21)

Furthermore, the case study approach requires triangulating multiple data sources to generate a, "highly complex and nuanced understanding of the subject of inquiry" (Hesse-Biber and Leavy 2011:256).

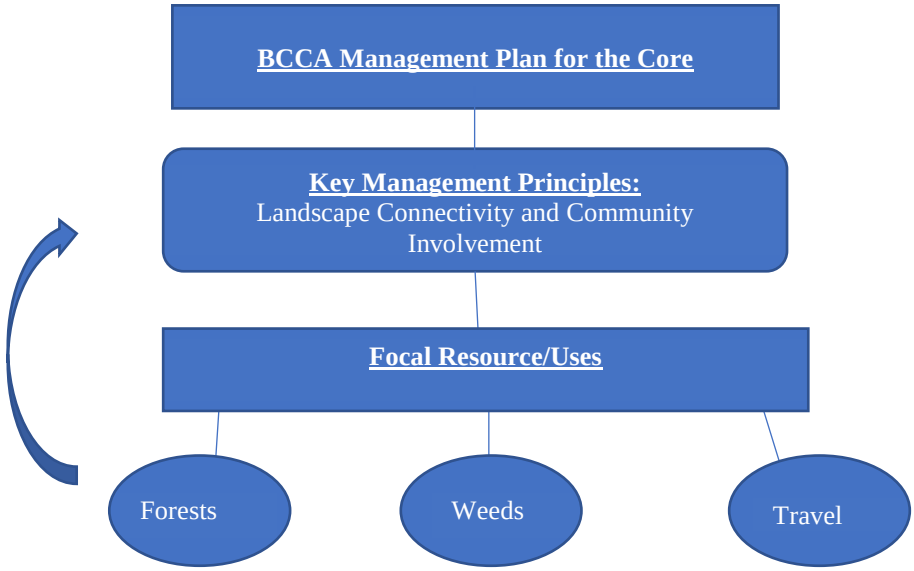


*Figure 1. Displays the framework of this research methodology, where each focal resource was used as a lens for examining management principles in practice*

Because a triangulated approach helps to substantiate and validate research findings, I use multiple methods employed over two phases (Hesse-Biber and Leavy 2011).

As recommended by Creswell (2013), this case study involved sequential phases and different data sets to answer its central questions. The research methodology was qualitative in that it emphasized the experiences of key people associated with the BCCA Management Plan for the Core, specifically the BCCA Council and Blackfoot Challenge staff/board members. In-depth exploration of the management principles and their implementation required multiple data

sources and methods, including interviews and archival documents. Qualitative interview data were supplemented with document analysis to provide additional evidence and data to probe, clarify, and corroborate respondent's perspectives or experiences.

Alongside interview data and archival documents, participant observation was a third, though less rigorous method for data collection. As mentioned above, I interned with the Blackfoot Challenge over the summer of 2016 and continued working directly in that role until December 2016. This internship dovetailed with the interviews and document searches I conducted. In all, I attended seven full Council meetings, and six work group meetings between January 2016 and April 2017. Participant-observation is considered a useful and important form of data collection in studying collaborative processes, as "it provides the richest data on both process and context characteristics" (Conley and Moote 2003:381). Accordingly, these experiences aided in contextualizing later findings in the social and cultural setting of this study. Moreover, it yielded considerable data in unstructured, casual conversations with BCCA Council members and Blackfoot Challenge staff.

### Phase I: Initial Document Searches

This first phase involved familiarizing myself with the topics, projects, and/or decisions of the BCCA Council since its inception. During the duration of my internship and this research study, I was granted full access to the Blackfoot Challenge's digital and hard-copy files. I began data collection in summer of 2016 with document analysis of the records kept by the Blackfoot Challenge staff and BCCA Council members.

I started by analyzing a total of 96 meeting minutes between 2008-2016 because discussions and management decisions occur at these meetings. I scanned the minutes for content related to the selected resources and summarized what I deemed relevant content in a separate Microsoft Word document for further analysis and notetaking. Relevant content included any and all pertinent information related to the resource, such as general policies, specific projects, and metadata, including people or agencies involved, project prescriptions and timelines, and sites. If meeting minutes showed that a topic of discussion about the resource(s) was the source of notable disagreement, was revisited at additional meetings, became the subject of a separate work group meeting, or resulted in a change to policy, I highlighted it as a topic of

special interest. For more than one topic of special interest, I reviewed meeting minutes between 2005 and 2007 (24 additional meetings), the period prior to the completion of the BCCA Management Plan for the Core, to understand the full context of the issue. In all, I summarized the relevant data and made notes of initial reflections as well as brainstormed other types of documents to investigate later, e.g., requests for proposals (RFPs), scopes of work (SOWs), actual contracts, grant applications, monitoring reports, and public comments.

This initial document review enabled me to build a working understanding of the BCCA Council's policies and project work from a historical and empirical perspective. Initial document searches assisted in familiarizing myself with the physical characteristics of the BCCA, and being able to recognize references to certain places, people, or projects mentioned at meetings or in conversation. This phase also helped to develop and refine the questions I brought to interviews, which examined how BCCA Council members see the three management principles informing on the ground management efforts for the selected resources.

## Phase II: Interviews

*Sampling Design*

The second phase involved interviews with past and present BCCA Council members and Blackfoot Challenge staff to examine how they thought the three management principles have influenced management efforts for the selected resources. To identify an interview sample, I used a purposive sampling method, which Etikan, Musa, and Alkassim (2016:2) note involves, "identification and selection of individuals or groups of individuals that are proficient and well-informed with a phenomenon of interest." The sample was broken into three broader categories: 1) Past and current non-agency BCCA Council members, 2.) Past and current agency BCCA Council members, and 3.) non-voting Blackfoot Challenge staff. I chose to interview current BCCA Council members (agency and non-agency) because they are charged with implementing the BCCA Management Plan for the Core. I interviewed Blackfoot Challenge staff due to their role in the day to day operations of the BCCA Council, including providing administrative support and land stewardship services. I chose to interview past BCCA Council members because they could provide historical background, and insight for my analysis of how the principles have been operationalized over time.

I used chain-referral and purposive sampling methods to identify past agency and non-agency BCCA Council members, respectively. The chain-referral method is useful when interviewees are a part of a group of people who know each other, as it allows the researcher to find "natural interactional units" of analysis (Berg 2004:1; Biernacki and Waldorf 1981). I selected past agency BCCA Council members by asking current BCCA Council members and Blackfoot Challenge staff who they thought I should contact for an interview. If the past member was referred on multiple occasions and/or their name surfaced in association with topics of interest in my initial analysis of meeting minutes, I contacted them for an interview. I purposively selected one past non-agency BCCA Council member because this individual was a regular attendee at BCCA Council and work group meetings I attended as part of this study. I chose to interview this member as he had been in a leadership position in the BCCA Council in the past, and was available and willing to be interviewed.

*Interview Data Collection*

In total, I conducted twenty-two interviews with twenty-three individuals (one interview was with a married couple who jointly serve as members of the BCCA Council, though with one vote). I interviewed twelve current non-agency BCCA Council members, one past non-agency BCCA Council member, four current agency BCCA Council members, three past agency BCCA Council members, and three Blackfoot Challenge staff. Agency BCCA Council members included two employees of FWP, two of DNRC, two of USFS, and one of USFWS. Of the three Blackfoot Challenge staff interviewed, two are directly involved in the day to day operations of the BCCA, one as the Land Steward and the other as the BCCA/Outreach Coordinator. The third was the acting Executive Director of the organization at the time of this study, and was not present at BCCA Council meetings or events unless at upon request.

With few exceptions, the thirteen current non-public agency BCCA Council members I interviewed are private landowners who live within or very near to the town of Ovando. Many have lived there their entire lives while some have moved to the area within the past two decades, and others moved out of the area but have since returned. Two of the three past public agency BCCA Council members live outside of the Blackfoot Watershed (in Missoula, and White Sulphur Springs), and the other lives in Seeley Lake. The four public-agency members currently serving on the BCCA Council live in various communities within the watershed

including Seeley Lake, Clearwater, and Helmville. Two of the three staff of the Blackfoot Challenge interviewed in this study live within the Blackfoot Watershed, while the other lives in Missoula. The age of BCCA Council members ranged from late 30's to late 70's, and all but five of the total of twenty-three interviewees were male. As of the 2018, the average length of time that all BCCA Council members had served was seven years. Only eight members had served less than seven years. In total, three BCCA Council members had served on the BCCA Council since its inception in 2005; five had served for nine years; three for eight years; one for seven years; three for five years; one for four years; and four for three years. The three Blackfoot Challenge staff I interviewed had been working with the organization for between 4 and 10 years.

Several interviewees are also involved in other volunteer boards and organizations within the area, including Big Blackfoot Chapter of Trout Unlimited (BBCTU), the local fire department, school board, and the historical society. By occupation, this sample included a master craftsman, an employee of TNC, multi-generational ranchers, a teacher at the local school, an employee at a television broadcasting company, multiple trappers and tradesmen, natural resource specialists from state and federal agencies, and retirees who had been employed in the timber industry and engineering fields.

Interviews ranged from thirty minutes to two and half hours, and the majority were held in person, though four were over the phone. I allowed interviewees to decide when and where to hold the interview; some were in public spaces and others in their homes. The order of interviews was based on convenience as I worked around the schedules of my interviewees. To preserve anonymity, each of the twenty-two interviews was assigned a code corresponding to the order in which the interview took place (e.g., CM1, CM17, CM19 and so on). I recorded seventeen of the twenty-two interviews. The first five interviews were not digitally recorded, though I took diligent notes and captured direct quotations, asking interviewees to repeat themselves to ensure accuracy in the data. I began recording subsequent interviews to provide more rich detail, as interviewees' responses involved a high level of variation and references to many specific projects, places, and events. After holding five interviews, I judged that recording was the most effective way to collect and analyze the data.

The interviews were semi-structured using a questionnaire with two sets of questions, each set corresponding to a separate management principle. A universal set of eleven questions

were posed in all interviews, though the semi-structured interview approach allowed for flexibility in the order and delivery of interview questions. Moreover, I encouraged interviewees to expand on perspectives and experiences they felt were most important while staying on topic. The eleven questions were intended to gather how interviewees defined each management principle, how they thought it was or was not applied in management for selected resources, what obstacles and challenges they perceived, and how these have or have not been addressed by the BCCA Council (Appendix K).

I designed additional supplemental questions to be posed to agency BCCA Council members and Blackfoot Challenge staff. Supplemental questions were intended to gather the unique perspectives of these groups of interviewees. I anticipated that agency members would have unique insight into the opportunities and challenges of the landscape connectivity principle. I asked these members how the BCCA Council has addressed the primary jurisdictional constraints of cooperation, and whether participating in the BCCA Council has conferred any benefits or advantages to their agency. I asked these questions to investigate the landscape connectivity principle from the agency standpoint.

The Blackfoot Challenge staff members also hold unique roles in the BCCA Council. For one, they do not vote, and the Blackfoot Challenge Board does not interfere with BCCA Council business. As such, the Executive Director does not attend BCCA Council meetings or participate in discussions, and so the questions posed to BCCA Council members were less relevant to his knowledge-base and experience. Instead, we held a more open-ended interview that followed the survey questions, but allowed room for discussion. I intended to encourage his lucid reflections on how the two principles related to the mission, work, and philosophy of the Blackfoot Challenge. With the other two Blackfoot Challenge staff, I was interested in their role in the BCCA Council. The BCCA Land Steward has intimate knowledge of the BCCA Core from an ecological, practical, and management standpoint, while the BCCA/Outreach Coordinator provides administrative support. Both of these functions are integral to the operations of the BCCA Council as they relate to implementing the BCCA Management Plan for the Core.

Though I used a questionnaire to guide interviews, interviewees had unique perspectives, insights, and areas of interest that affected the depth and range of responses across the sample. As the questionnaire was broken down by the two separate principles, some interviewees felt

more passionate or able to answer questions about one principle and less enthusiastic or equipped to discuss the other at length. In these instances, interviews tended to be more in-depth in some areas and less so in others. In one unique case, an interviewee solely answered questions pertaining to the principle of community involvement. Thus, the richness of interview data for each principle varied across interviews in the sample.

## Phase III: Data Analysis

*Transcript Analysis*

Interview data analysis centered on a grounded, inductive approach whereby broader themes were extracted from the data through systematic coding and analysis (Hesse-Biber and Leavy 2011; Corbin and Strauss 1990; Lorelei, Albert and Levinson, 2008). The data analysis process involved continuous exposure to the data over successive phases of transcription, memo writing, coding, annotation, and summary. I personally transcribed the recorded interviews and thus absorbed responses for a second time in the natural pace and flow of each interview. I then read through transcripts and highlighted responses according to the principle being addressed. I made note of overlaps in responses when I thought a response was related to two principles. I did not highlight responses or portions of interviews that were off-topic, redundant within the interview, or for which clarity of the response was an issue, e.g., due to ambient noise or recording issues. I looked for references to specific project names or sites, references to individuals, as well as term definitions, personal observations, and personal statements of judgement or perspective. During this initial coding, I assigned codes to each highlighted response using the language of the response, such as "Low Funding," "Advertising the BCCA," or, "Differing Mandates" and made a note showing to which principle the response and code pertained.

For each transcript, I then rewrote coded quotations by hand onto notecards. I labeled notecards by principle and code, and grouped responses that shared a code on single notecards. I wrote memos throughout the entire analysis, but specifically after finishing this process for each interview. In writing memos, I reflected on the responses for each principle, as a whole, in a narrative style, which was helpful to build individual codes into broader themes and concepts.

For each interview, I created two individual documents (one for each principle), and typed handwritten quotations, codes, and notes into the documents. As the transcript analysis progressed, I observed similarities, patterns, or repeated references to specific management actions across interviews, and grouped like responses from multiple interviews. Within each group, I then delineated responses further by regrouping more similar codes together, defining them as properties or dimensions of growing themes. For each subgroup, I wrote a summary of the main points, its relationship to the broader theme, and interactions with other themes and management principles. As this process progressed and I had additional exposure to the data, themes coalesced into concepts and more structured findings.

*Document Analysis*

Document analysis occurred throughout interview transcript analysis. Transcript data informed additional searches in Blackfoot Challenge and online government archives (e.g., legislative reports, agency management plans, and NEPA/MEPA-related documents found at http://leg.mt.gov/css/Publications/MEPA/mepa.asp). I identified important projects, decisions, or events and conducted additional searches based on the regularity with which they arose in interviews or meeting minutes, and/or if interviewees described them as having involved a great deal of community involvement, or were the focus of multi-party collaboration.

I created a spreadsheet to organize findings from document searches. This database contained a fairly comprehensive list of management actions taken on the BCCA Core. For each project, I recorded attribute information like resource(s), grant program or other funding, federal/state authorities (where applicable), project goals and objectives, methods to accomplish management goals and objectives, site location, date, partnering organizations, and outcomes (when available).

Furthermore, I continually revisited the meeting minute record as I analyzed interview transcripts. As themes emerged across the interview data, I referenced my initial analysis of the meeting minutes to orient myself in the historical timeline of BCCA Council actions. Reanalyzing meeting minutes during and after conducting interviews and document searches enabled me to understand land management efforts from the process perspective, i.e., how and why decisions were made in the BCCA Council setting, who was involved, under what circumstances, and in what context. I highlighted and analyzed additional content pertinent to

emerging themes and/or important projects with this focus in mind, and made new annotations that related to interview data.

*Participant Observation*

During my internship, and through attendance at BCCA Council functions and events, I developed familiarity with BCCA Council members and the culture of the BCCA Council that became a significant benefit to the data analysis. Attending meetings and socializing afterward provided important social context and aided in building relationships with respondents, which also translated into the candidness with which BCCA Council members offered their perspectives to me during interviews. Close interaction with the organization and the interview sample contributed to the process of understanding the BCCA Council's work, and the perspectives they shared with me. To apply structure to these learning experiences, I regularly drafted memos during my internship, and following meetings I attended in Ovando, in which I had an opportunity to reflect in a narrative style and make note of insights or compelling quotations.

In the following chapter, I present the results of this study that detail how the BCCA Council has worked to integrate community involvement and landscape connectivity through public-private partnerships into their management activity, and to what effect.

# 4. RESULTS: MANAGING THE BLACKFOOT COMMUNITY CONSERVATION AREA (BCCA)

## Introduction

In this chapter, I present results on the actions of the BCCA Council over the past decade to define and follow their key guiding principles in the management of the BCCA Core. I begin with how each principle was defined and follow with examples from management of a particular resource sector. The first section focuses on the principle of Community Involvement, with attention to Travel Management. The second section discusses Landscape Connectivity through Public-Private Partnerships which I illustrate through management of Noxious Weeds and Forest and Forest Products. The two principles were chosen because they represent the key overarching principles rooted in the mission and work of the Blackfoot Challenge in the watershed, and goals of the BCCA. The examples were chosen because they represented a resource and/or issue where the principle was relevant and challenging. As noted in the methods chapter, data for these results are from analysis of the BCCA Management Plan for the Core, BCCA Council meeting notes and documents, personal interviews with BCCA council members and others on the Blackfoot Challenge staff.

## PART A: COMMUNITY INVOLVEMENT

### Introduction

One key management principle under examination in this study is community involvement. The BCCA arose from a multi-year effort of Blackfoot Community Project (BCP) partners to acquire and resell Plum Creek lands in light of so-called "community interests." The BCCA Management Plan for the Core establishes the charge of the BCCA Council to engage members of the "community" in all aspects of the Council's activities, including planning, resource management and monitoring, and stewardship of the BCCA Core. This study examines how BCCA Council members understood this charge, and how they operationalized it over the past decade in their actions to govern and manage the property, especially the BCCA Core. In answering the question, much attention is given to scrutinizing the principle itself: what did the Blackfoot Challenge leadership and later BCCA Council mean by "the community," let alone community "involvement"? What does the latter actually entail? What should it?

The results of my inquiry into the principle of community involvement in the BCCA are presented in the following three sections. The first section documents the concerns and definitions of the community involvement principle in the BCP, the creation of the BCCA Council, and in the BCCA Management Plan for the Core. In the BCCA Management Plan for the Core, the BCCA Council articulated strategies, techniques, and procedures for community involvement in governance. This research pays particular attention to how the BCCA Management Plan for the Core defines community for whom the BCCA Core is intended.

In the second section, I move to a more detailed understanding of community involvement by introducing a conceptual diagram of the community involvement principle, with which I present and interpret the results of how the BCCA council actually went about implementing the community involvement principle. The diagram breaks the principle into four primary dimensions: (1) Information-sharing, (2) Perspective-gathering, (3) Decision-making, and (4) BCCA Council membership. Each is defined by the BCCA Council's actions and its role in involving community in governance, and suggests a continuum towards greater capacity to influence BCCA Core governance.

The empirical example I use to illustrate how community involvement operates along the four dimensions is the case of motorized use on the BCCA Core. From its earliest years, a major challenge facing the BCCA council was what rules would govern motorized use in the BCCA Core including what uses were to be permitted and to what extent they would be restricted. Determining standards for motorized use access was extremely contentious, both within and outside of the BCCA Council. And as most germane to the principle here, what defined community involvement in reaching these decisions? The results will show that the BCCA Council established and tested rules and strategies to involve the "community" that satisfied the initial reasons for creating the BCCA and an increasingly diverse set of interests. This example is a precedent-setting case, where the BCCA Council's approach to community involvement was formalized in the plan, and expressed in their on-going institutional practices.

## The Community Involvement Principle in the BCCA Council Mandate

### Community Involvement as a Principle of the Blackfoot Challenge and Blackfoot Community Project (BCP)

The origin of the community involvement principle in the BCCA is rooted in the mission of the Blackfoot Challenge, and subsequent Blackfoot Community Project (BCP). The Blackfoot Challenge has promoted a landowner-led approach for over twenty years in the Blackfoot watershed. In this instance, "community" was largely defined as the landowners in the Blackfoot watershed. This definition however has been enlarged in the ongoing activities of the organization, especially with the BCP and BCCA. The BCP was a partnership they helped create to acquire and resell divested Plum Creek timberlands, which deliberately aimed to do all of its work through a "community-driven" plan (BCP Disposition Plan, 2003). Between 2002 and 2003, the BCP held meetings in Greenough, Potomac, Seeley Lake, Ovando, Helmville, and Lincoln to acquire feedback about the concept of acquisition and which specific parcels are most attractive for purchase. However, as we will see below, the boundaries of who constitutes the "community" in the BCCA expand even further to include people outside the Blackfoot watershed who use and feel a vested interest in how the BCCA is managed.

The idea for a community area at the base of Ovando mountain came about at a meeting in Ovando in 2003 (BCCA Management Plan for the Core 2008). To explore attitudes about a community conservation area, a mail survey was conducted in late 2005 by a member of the Blackfoot Challenge and her graduate advisor. For financial and practical reasons the survey was administered only to the residents of Ovando and Helmville, people living proximate to the ground which had been selected to become the community conservation area. The survey specifically asked respondents who should legally own the BCCA, who comprises the "community" for whom the BCCA would be managed by and for, and on what primary values and interests should the BCCA be governed? (Belsky and Duvall 2005; Duvall 2006).

The results found that a local entity was desired to own and manage the BCCA though specifically who and what that local entity should involve was unclear. Respondents asked for more information as the concept of a community conservation area was unfamiliar. That the Blackfoot Challenge might become both the owner and key manager registered unease (Belsky and Duvall 2005; Duvall 2006). Following the survey, the Blackfoot Challenge decided they

would be the legal owner of the property, but develop a semi-autonomous governance body who would lead the effort to develop and implement a management plan for operating the BCCA.

### Creating BCCA Council: The Key Strategy for Community Involvement

The Board of Directors (hereafter "BC Board") were now set with creating a semi-autonomous governance unit associated with the Blackfoot Challenge that would be responsible for planning, and ongoing management and decision-making. They wanted the BCCA Core to be managed by interested residents and users who cared about the land, who could commit time to managing the property, and who were able and willing to work cooperatively with public and private partners (BCCA Council Membership Request Letter, 2005). The 41,000 acre BCCA was envisioned as a cohesive management unit, that could serve as a "demonstration area" of the Blackfoot Challenge's partnership approach to landscape level stewardship and management, and importantly entailing a "community-based" model of decision-making (BCCA Management Plan for the Core 2008:14).

In July 2005, the BC Board passed a resolution to officially create the BCCA Council, and laid out a set of basic responsibilities as well as its membership structure. The Blackfoot Challenge contacted seventy-seven individuals who had indicated interest in the BCCA survey about becoming further involved (BCCA Council Membership Request Letter 2005). In the interest of "diverse representation of community values and opinions" in the watershed, the Blackfoot Challenge selected fifteen to serve in one of three categories: 1.) agency representatives of public lands in the BCCA 2.) adjacent private landowners to the BCCA Core, and 3.) user groups (BC Board Resolution 2005; BCCA Council Membership Application Form). First and foremost, their responsibility was to establish administrative procedures for management of the BCCA Core, and to develop and implement a management plan (BC Board Resolution 2005). In this way, the Blackfoot Challenge delegated much authority to the BCCA Council to govern the BCCA. However, the BC Board would retain authorities and responsibilities including legal, administrative, and financial oversight, as well as final approval of the BCCA Management Plan for the Core and the appointment of the BCCA Council members.

Secondly, the BCCA Council was tasked with developing collaborative mechanisms for administration of the larger 41,000 acre BCCA, the boundaries of which were formalized by BCP partners in 2005. Ecological considerations and management compatibility influenced where the outer boundary fell. The Blackfoot Challenge, USFS, and TNC circumscribed management areas in the USFS-Lolo National Forest land that matched those of adjacent MT DNRC, MT FWP, and other BCP acquisitions still held by TNC (BCCA Council Meeting Minutes, Oct. 2005). From north to south, the BCCA landscape moves from mountains to grasslands; the area is a vital linkage zone for wildlife and hydrological systems. It also constitutes a land-use gradient from near wilderness to working farmland, connecting the open expanses of the Bob Marshall wilderness complex to the privately-owned valley bottom.

The creation of the BCCA Council is a significant example of the community involvement principle underlying the BCCA project, as it essentially grants the lion-share of decision-making authority to BCCA Council members, who are essentially residents of different local communities. Indeed, the Blackfoot Challenge board itself is the same – both are comprised by and for local constituents; they both represent the notion of grassroots organization. The BCCA Management Plan for the Core later defined the BCCA Council as the "key strategy for engaging the public in the BCCA project" (BCCA Management Plan for the Core, 2008:26). However, how did the BCCA council interpret its mandate to govern the BCCA Core "on behalf of the community?"

## The Community Involvement Principle in the BCCA Management Plan for the Core

The BCCA Management Plan for the Core requires the BCCA Council to involve "community" in all phases of governance. The community involvement principle is broadly defined as the responsibility to "engage community members in the planning, resource management and monitoring, and stewardship practices in the area" (BCCA Management Plan for the Core 2008:15; Appendix B). One of the BCCA Management Plan's key functions is to, "provide mechanisms for ongoing community engagement in ownership and management of the BCCA Core" (BCCA Management Plan for the Core, 2008:14). These pronouncements raise the questions who is the community, what exactly are these mechanisms, and what does involvement or engagement actually mean in practice?

The BCCA Management Plan for the Core gives basic guidance for answering these questions. In particular, a section of the plan, entitled, "Community Engagement," details the BCCA Council's overarching responsibility: "Provide *ample* opportunities for public involvement and engagement in future land management and stewardship of the BCCA" (BCCA Management Plan 2008:28, emphasis added). To aid in meeting the "ample opportunity" standard, the plan offers the BCCA Council a series of "Key Strategies for Community Engagement," which include:

- Regular communication with neighbors will be used in order to discuss management issues.
- The public will be notified about and encouraged to attend BCCA Council meetings.
- Public meetings will be held annually to report Council actions and to gather comments, feedback, and ideas. On certain projects and issues that warrant immediate feedback from the broader community, the Council will host special community meetings to acquire input.
- Communication and outreach tools will be used to update the community on BCCA activities, i.e., newsletter, Blackfoot Challenge Website, and post office notices.
- Community events and tours will be hosted on the BCCA Core to familiarize the public with the land; and,
- Members of the community will have the opportunity to be appointed to and serve on the BCCA Council as specified in term rotation procedures (BCCA Management Plan 2008:28).

These strategies highlight that communication, transparency, and accountability are cornerstones of community involvement in governance. With these strategies and mechanisms in place, the BCCA Council is meant to facilitate, "direct participation…through committees, work groups, one-on-one discussions, a semi-annual newsletter, and website updates" (BCCA Management Plan for the Core 2008:26).

In tandem with the above strategies, the BCCA Management Plan for the Core insists that the BCCA Council's decisions should reflect community interests, including proposals for use. The BC Board added a provision to the BCCA Council's delegated responsibilities in 2008 to include to, "consider community proposals for uses or projects on the BCCA Core" (BCCA Management Plan for the Core, 2008:27). To account for this responsibility, the BCCA Council created a "Project Proposal Form" and, "Guidelines and Criteria for Evaluating Proposed Projects on the BCCA Core" (BCCA Management Plan for the Core 2008). The former standardizes the proposal process, while the latter serves as a standardized analytical tool for

assessing public input as it relates to the other management goals and objectives for the BCCA Core.

At face value the above suggests a fairly well-defined community involvement mandate. It offers strategies and administrative mechanisms. However, a looming question remains: who is "the community" that is intended to be involved, or engaged, in BCCA governance? Which community, or communities, are the BCCA Core's natural and social resources intended to benefit? How has this understanding evolved over time? For insights into these questions, I provide evidence from the formation of the BCCA and the BCCA Council, elements of the BCCA Management Plan for the Core, and viewpoints and perspectives of past and current BCCA Council members.

## Defining the Community in the BCCA

From its earliest formation, the BCCA Core was envisioned as a community area to benefit the Blackfoot watershed. As noted, the results of the BCCA survey showed that many people (who mostly lived near the BCCA) desired that it be managed for wider watershed benefits (Belsky and Duvall 2006). Further, language in the letter sent out by the Blackfoot Challenge to prospective BCCA Council members in 2005 echoes this view. In the letter, Hank Goetz, a local leader and staff of the Blackfoot Challenge, wrote that: "Council members will be expected to attend meetings on a regular basis, participate in the discussion, be able to listen to opposing points of view, and make decisions that are *in the best interest of the valley at large*" (BCCA Council Membership Request Letter, 2005, emphasis added). Similar language remains a part of the BCCA Council membership application criteria (BCCA Membership Application Form). Furthermore, the "Community Vision for the BCCA Core," states plainly: "Develop a working landscape that balances ecological diversity with local economic sustainability for the future benefit of the *Blackfoot watershed community*" (BCCA Management Plan for the Core, 2008:15). The BCCA Management Plan for the Core often refers to local landowners, residents, or adjacent neighbors as key beneficiaries, and points of contact for the BCCA Council. In all, evidence suggests that the primary objective of the BCCA Core is to enable access to resource benefits for Blackfoot watershed communities.

However, definitions of community vary. There is some dissonance in the plan's language, interview responses, and in the actual experiences over the last decade that challenges the above framings. The plan also refers to the "general public" in relation to community involvement strategies and resource management objectives. Similarly, the Executive Director of the Blackfoot Challenge described the BCCA Core as an area that serves the broader public.

> Its community in the very general sense of community. It's not just Ovando. It's not really even just the Blackfoot watershed, it's the larger public community that the BCCA serves. (Pers. Comm. BC3, 2017)

This broader and more inclusive definition of community is especially relevant when one considers the recreational use of the BCCA Core. The management goal for Recreation is to "provide responsible recreational use at sustainable levels to benefit the public and the health of the resource" (BCCA Management Plan for the Core, 2008:8). Because recreational use and access to the BCCA Core is not limited to residents of the watershed, the BCCA Core, in some sense, serves as pseudo-public land. Many BCCA Council members and Blackfoot Challenge staff acknowledged that many recreational users live outside the watershed (e.g. Missoula, Helena, or even out of state). For instance, a substantial portion of recreational use of the BCCA Core occurs during hunting season, and excellent hunting in the area draws users from far and wide.[2] Though hunters are differentially more numerous in comparison, there are many other recreational users that enjoy the BCCA Core, such as hikers, bicyclists, snowmobilers, horseback riders, and others. In practice, then, the "community" that uses and benefits from the BCCA Core is spatially broader than the Blackfoot watershed boundaries.

Further evidence for a broad definition of community is also visible in how past and current BCCA Council members defined the BCCA community, which had implications for answering to whom they thought the community involvement principle applied. Comments of past and current BCCA Council members suggests that, to them, the BCCA community is a diverse set of "stakeholders" with different interests. In 2016, the BCCA Council amended the BCCA Council structure by consolidating the private landowner and user group categories into "stakeholders" (BCCA Management Plan for the Core 2nd Edition, 2016). This reflects a view that one does not need to be a resident of the watershed to have an interest in, or benefit from,

[2] The BCCA Core has historically been one of the highest used Block Management Areas (BMA #27) in FWP's region #2 (Pers. Comm. CM13, 2016)

BCCA Core governance, but be a user and more importantly feel some connection, or stake, in how it is managed.

> You know there is a huge, stark hunting presence that is definitely not limited to the Ovando area. There are people who have come here for decades to hunt there from Missoula, from very far away – out of state. And obviously they're going to benefit from the presence of the BCCA Core (Pers. Comm. CM11, 2016)

> So a lot of times people say community, obviously being right there in Ovando. Obviously that's what it's going to affect the most because its people who live right there around the BCCA and in the Valley, but its open to anyone who wants to use it. So its broader than that. (Pers. Comm. CM5, 2016)

Though the above members saw that local residents living near the BCCA Core are its primary users, they noted that the BCCA Council's decisions affect a broad constituency. Other BCCA council members raised the fact that the BCCA Core was purchased largely through private donations, as well as public funds, that came from outside the watershed, which further widens the scope of the people for whom the BCCA should be managed by and for:

> The fundraising that went into this was huge…we have connections to people all over the country, wealthy people…and credit should be given where its due. (Pers. Comm. CM4, 2016)

> You call it a community forest, it begs the question, "who is the community?" Especially when there have been federal funds involved, and the [Nature] Conservancy involved…I think because of the fundraising campaign that came in part from outside of what you typically consider the community, it does broaden, it should broaden, who belongs to that community. (Pers. Comm. CM11, 2016)

Defining the BCCA community very broadly has led to the sentiment that decision-making should include, and account for, any person from within or outside the valley who simply has an interest in the BCCA Core.

> If there were people who wanted to be involved from further afield like Lincoln or even Missoula from some of the user groups like hunters, I think we should definitely involve those types of folks (Pers. Comm. CM6, 2016)

> You know everyone's invited everyone's welcome. Don't even have to be somebody who lives here, they're welcome. (Pers. Comm. CM7, 2016)

Though the BCCA Core is intended to benefit the Blackfoot watershed, many BCCA Council members felt that any and all individuals or groups interested in management, governance, and/or use of the BCCA Core are welcome to participate.

With this broad, multi-faceted definition of "the community", the question becomes how has the BCCA Council operationalized the community involvement principle in governing the area? What are the different ways to involve such a large constituency? What challenges have they faced in governing across a plethora of "interests"? How are different public interests and uses of the BCCA Core reconciled? Has the BCCA Council followed the "key strategies for community engagement," and are these viable strategies to integrate broad community feedback, proposals, ideas, and concerns into BCCA management decisions and actions? To explore these questions empirically, it is necessary to examine specific instances of the BCCA Council's approaches. Below, I present a conceptual diagram of community involvement that I subsequently use to guide my examination of community involvement in the BCCA in practice over the past decade.

## A Conceptual Diagram for Community Involvement in BCCA Governance

Figure 2 provides a diagram for conceptualizing community involvement. I distilled the diagram from the BCCA Management Plan for the Core, interview responses, and document analysis. The diagram entails four different dimensions of community involvement. Each dimension is defined by actions of the BCCA Council, and constitutes a different type or level of community involvement: 1.) Information-sharing, 2.) Perspective gathering, 3.) Decision-making and 4.) BCCA Council Membership. As the diagram progresses from Information-Sharing to BCCA Council Membership, the level of involvement and influence in BCCA governance increases. The dashed lines between each dimension are meant to show that they are not mutually exclusive, and often overlap in practice. Below, I provide the definition and characteristics of each dimension. I then turn to a specific case, the motorized use planning process, to illustrate how each one operated in practice.

The first dimension of community involvement is information-sharing. Information-sharing is a one-way flow of communication from the BCCA Council and Blackfoot Challenge leadership out. It occurs through posting announcements in newspapers, web pages, posters and

other publications as well as field tours and public meetings. Information-sharing is intended to keep the public at large apprised of what is going on in the BCCA. This entails providing updates on activities occurring on the BCCA as well as information on rules, regulations, and management of the BCCA, including providing information about how, when, and where one can become involved in BCCA-related activities. In short, information-sharing entails creating and sustaining an informed community.

The second dimension of the community involvement principle entails information also coming from the opposite direction – from the community as well as from the BCCA leadership. This is a two-way exchange and communication between the public and the BCCA Council. In this dimension, the BCCA Council seeks input on topics that include, but are not limited to, rules, regulations, and standards for public access and use, and resource management actions on the BCCA Core. Perspective-gathering requires that the BCCA Council

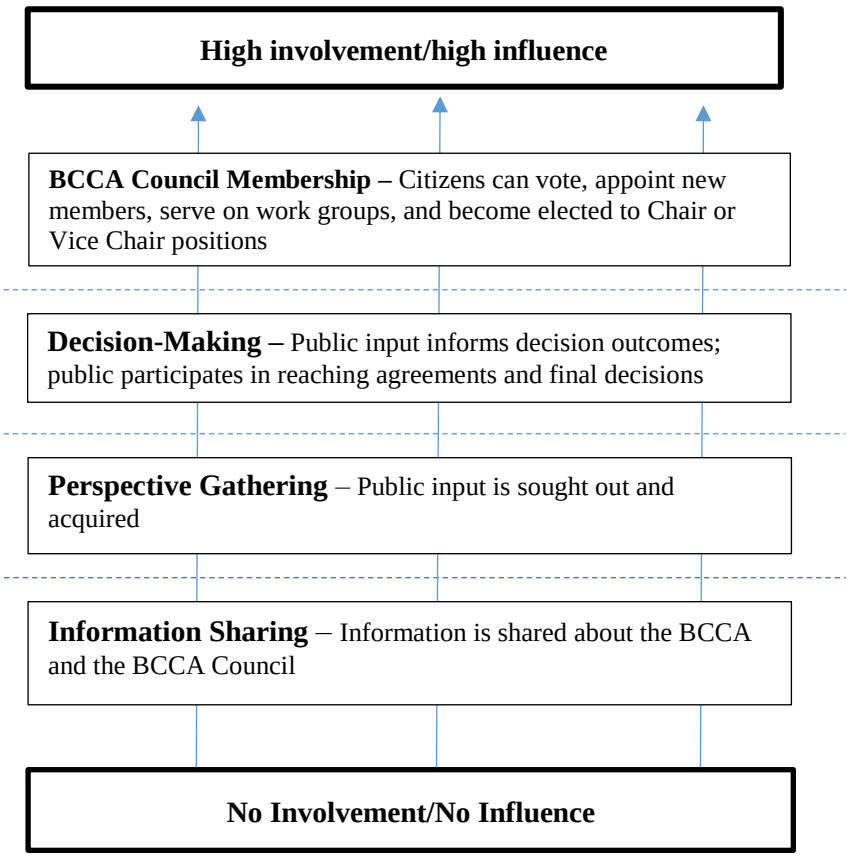


*Figure 2. A conceptual diagram for community involvement in BCCA governance that shows increasing levels of influence*

provide multiple venues in which public input can be given. Perspective-gathering venues include public meetings, BCCA Council meetings, work group meetings, the Blackfoot Challenge office, and local restaurants where informal conversations and interactions occur. Perspective-gathering enables the public to contribute to BCCA Council discussions in a timely manner through one or more different venues.

In the third dimension, exchange of input and discussion can influence actual decision-making about the BCCA Core and, to a lesser extent, the larger BCCA. As labeled, the decision-making dimension entails integrating public input into the development of rules, regulations, and standards for public access and use, as well as resource management of the BCCA landscape. Here, the BCCA Council decides upon future courses of action in light of public input and proposals, which includes considering trade-offs and compromise between differentially valued resources. In practice, we will see that the BCCA Council delegates some decision-making responsibilities to resource-specific work groups that analyze public input and formulate recommendations. Decision-making is an iterative process that occurs over time. In short, this dimension entails strategies and processes for accounting for public input when making official decisions.

Finally, as members of the BCCA Council, interested citizens can have a formal role in determining all aspects of governance and management of the BCCA Core. Council membership entails the ability to vote, both on management actions and on new member appointments, to serve on one or more BCCA Council work groups that have influence in decision-making, and eligibility for leadership positions. As noted above, the Blackfoot Challenge Board of Directors (BC Board) delegated broad decision-making authority to the BCCA Council. Within certain limits, the BCCA Council has the authority to modify, eliminate, or add to existing rules, regulations, and standards, as well as to set short- and long-term management policies and work plans for the BCCA Core, and to some extent, surrounding lands. The composition of the BCCA Council is dynamic, as term rotation procedures ensure open seats become available to interested citizens. Furthermore, the BCCA Council ultimately decides how the three other stages of community involvement are carried out. Thus, BCCA Council membership is the most consequential and actually empowered form of community involvement in governance and management of the BCCA Core.

## Case Study: Community Involvement in Motorized Use Planning

In this section, I turn to the planning process for wheeled motorized use (hereafter, "motorized use") to illustrate how all four of these dimensions of community involvement were involved in developing a plan. The BCCA Council's approach in this case illustrates that citizens that are interested in governance of the BCCA Core can reasonably expect that their voices will be respected and heard, discussed, and influential in official decisions. The timeline of this case begins before the official completion of the BCCA Management Plan for the Core in 2008, and ends in 2017 with the adoption of the third motorized use plan.

I begin this section with a brief historical background of ownership and recreational use prior to the Blackfoot Community Project (BCP) to set this case in its historical and cultural context. I do so because the primary challenge of motorized use planning has been to reconcile past motorized use access in the area with the conservation objectives of BCCA ownership and management. Following the background section, I then present examples from developing the motorized use plan that illustrate how the BCCA Council has acted upon the community involvement principle.

### Background: Historical Ownership and Recreational Use in the BCCA

The BCCA Core and outlying areas have a long history of varied land use and ownership. Before European and Euro-American infiltration into the American west, indigenous peoples of western Montana had occupied the Blackfoot Valley for thousands of years. The Ovando area was an important travel corridor for the First Nations, connecting trails to the north in what is now the Bob Marshall Wilderness and to the south toward the Clark Fork River. The first known Euro-American settler to the Ovando area was Ovando Hoyt, a merchant and rancher who became the first postmaster of Ovando in the late 19$^{th}$ century. Several other families followed, and some descendants of the original settlers are current residents, including two sitting BCCA Council members who operate a grazing lease within the BCCA Core that dates prior to Montana statehood.

Early in the 1900's the Blackfoot National Forest (now the Lolo National Forest) was headquartered in Ovando, and logging camps were scattered across the Blackfoot Valley's

timbered slopes (Ovando Historical Society website, 2017). In the early 20th century, railroad companies that had been granted alternating sections of the public domain in the west began selling their holdings to industrial timber companies. As a result, approximately 20% of the Blackfoot watershed was in timber company ownership for much of the 20th century (Hartmann, 2004). Timber lands were treated as "de facto" public lands by neighboring communities, and public use of all kinds was lightly regulated (Goetz in Duvall 2006). Motorized and non-motorized livelihood and recreational uses were common in these areas, including hunting, trapping, fishing, camping, foraging, and firewood gathering among others. However, towards the latter part of the 20th century, timber companies began adopting and enforcing tighter regulations.

Plum Creek Timber Company (PCTC) purchased Champion Timber's land holdings in the watershed in the early 1990's. In 1994, they closed their gates to vehicles due to resource damage and wildlife impacts (Duvall 2006). These closures included gates into what is now the BCCA Core. When TNC purchased the property as part of the Blackfoot Community Project (BCP) in 2004, they maintained PCTC's closed gates policy.

Given the history of public access to the BCCA Core during the period of timber company ownership, the question of how it would be administered in the newly created BCCA arose soon after the BCCA Council was formed in 2005. Specifically, many wondered if the BCCA Council would (or could) revert motorized vehicle access back to pre-1994 conditions. As early as the second meeting of the BCCA Council in October 2005, minutes show members anticipated that motorized access would likely be the most challenging and contentious decision they would have to make in creating the BCCA Management Plan for the Core (BCCA Meeting Minutes, Oct. 2005).

## Informing the Public

At the same meeting in October 2005, the BCCA Council decided to hold an annual public meeting each January to "disperse information to the community, at large" (BCCA Meeting Minutes, Oct. 2005). Between 2005 and 2008, the BCCA Council held four public meetings (one in 2006, two in 2007, and one in 2008) that largely entailed updates about the evolving management vision and priorities for the landscape. By the annual meeting in January

2007, they had created a fairly comprehensive first draft (BCCA Council Meeting Minutes, Dec. 2006). Attendees to the meeting were given a packet of materials, which included a: "Draft Table of Contents for Management Plan, Vision Statement, Management Goals/Objectives, Public Use and Recreation Policy, [and] BCCA Map" (BCCA Council Meeting Minutes, Jan. 2007). These drafted items included the BCCA Council's intent to maintain PCTC/TNC's motorized use policy on the BCCA Core following its acquisition by the Blackfoot Challenge sometime in 2008. Annual public meetings were a popular way to generate information-sharing in the planning process, as hundreds of individuals from all over the watershed and beyond came to hear about the BCCA Council's progress each January.

In order for people to become informed at public meetings, they must be made aware of when and where they are held. The majority of Council members interviewed for this research said that the BCCA Council (through the Blackfoot Challenge) made concerted efforts to distribute meeting dates, times, and locations in a variety of public venues up and down the valley. These include email lists, public bulletins in the watershed, and local newspapers (Pers. Comm. BC2, 2017).[3] Information about the BCCA is available at the Blackfoot Challenge office, and the BCCA is also featured in the Blackfoot Challenge annual report and e-newsletters. Many judged that with these efforts in place the BCCA Council has done well to notify the public about meetings and other opportunities to become involved

> I don't think there is anybody that is within Deer Lodge or Missoula that isn't aware of this. I think everybody knows about it. I'm sure if they wanted to show interest or ask questions we'd definitely hear from em. There have been quite a number of stories and newspaper things about it (Pers. Comm., CM8, 2016)

> Whenever we've had meetings or minutes or announcements about anything going on in the BCCA whether its work group meetings or anything, it goes out to that whole (email) listserv that now (the Blackfoot Challenge BCCA Coordinator) maintains so there's a lot of people on that… I mean we make it as publically available, our process, as we can. (Pers. Comm. CM6, 2016)

> I think it's actually a little farther along, or it is doing a better job of involving the community in terms of advertising things. The notices that come out – the Blackfoot Challenge sends out notices. There are notices in the email list when

[3] Over the course of this study, there were two articles in the Seeley Lake Pathfinder regarding the BCCA. One in January 2016 entitled, "BCCA Draws Community and Agencies Together"; and, a second in October focusing on the BCCA's successful application to DNRC's Forest in Focus grant program entitled, "Forest in Focus – Doing More than Restoration." Articles can be found at http://www.seeleylake.com/

> things are going to happen, so I think there's a pretty good job of getting those notices out. (Pers. Comm., CM12, 2016)
>
> Whether it's you know the forestry work group or whoever…Its all posted and people show up if they wanna show up. (Pers. Comm. CM7, 2016)

The above comments illustrate how most BCCA Council members saw the organizational resources of the Blackfoot Challenge as a major asset to information-sharing. In their view, the Blackfoot Challenge enables the BCCA Council to reach a broad audience. Leading up to the January 2007 meeting, the Blackfoot Challenge sent a mail notification to four hundred and sixty-four households that advertised it as an "update on the management direction" for the BCCA Core (BCCA Public Meeting Announcement, 2007). A total of ninety-five people from within and outside the watershed attended the meeting (twelve came from outside of the watershed).

## Perspective Gathering in Management Planning

Though the BCCA Council was charged with taking in public input in the planning process, perspective-gathering for the plan preceded the creation of the BCCA Council. For instance, public meetings in Ovando as part of the Blackfoot Community Project (BCP), where the idea for the BCCA originally surfaced, involved initial scoping. Further, the BCCA Survey of landowner values, uses, and interests helped assess local management priorities (Belsky and Duvall 2005). Data from the BCCA Survey set the course for the BCCA Council's initial discussions regarding valued resources and uses, management goals and objectives, and the overall vision for the landscape (BCCA Council Meeting Minutes, Aug. 2005). The survey results were the basis for the BCCA Council's proposal to maintain PCTC/TNC's motorized use policy, as only 14% of respondents had reported that vehicle use was "Very Important," and the majority were in favor of non-motorized forms of recreation (Belsky and Duvall 2005). In this way, BCP meetings and the BCCA survey were early perspective-gathering activities for those who participated.

The BCCA Survey was designed to gather baseline data on local preferences early on to initiate discussion about the future content of the management plan. This emphasis on early involvement reflects the view of the Executive Director of the Blackfoot Challenge. Speaking

on public land management in general, he insisted that true participation in planning requires land managers to make an up-front effort to involve citizens in defining fundamental questions about management of the landscape in question. He summarized his point in saying,

> You need to be much more open about what the purposes of what our land should look like on the front end. Not halfway through or at the end of the process. Don't come in at the end and say stamp this. Right at the beginning of the process, say "what do you think this land should look like?" (Pers. Comm. BC3, 2017)

Simply requesting public comments in the final planning stages, for instance, would not amount to what he viewed as community involvement. Rather, the public should be empowered to contribute to the planning process early on.

As soon as the BCCA Council was formed, they established ground rules for discussion meant to foster perspective-gathering in the planning process. The first was that regular BCCA Council meetings would always be open to the public, and that time would be set aside at the end for public comments (BCCA Council Meeting Minutes, Aug./Oct. 2005). The second did away with the formal public comment period, inviting comments during the course of discussion (BCCA Council Meeting Minutes, Nov. 2005). The BCCA Council felt that saving public comments till the end of the meeting did not support "effective communication" (BCCA Council Meeting Minutes, Nov. 2005). In this sense, regular BCCA Council meetings enabled open discussion between the BCCA Council and citizens present about the future management of the BCCA Core. Several BCCA Council members suggested that community involvement entails the ability to voice opinions and affect discussions at BCCA Council meetings and through other venues.

> It's set up as a community conservation area, so the community should have a say in something if they wanted to, which they can. It's wide open for anyone to come in a voice their opinion (Pers. Comm. CM8, 2016)

> You've got to have an open dialogue with the public, not only the people in Ovando, but anyone who wants to use it… If we closed it off to the community and made decisions ourselves, well you ask for it to be corrupt…You gotta have input to keep it operating as it should. (Pers. Comm. CM5, 2016)

These comments illustrate how many BCCA Council members saw open communication with the public as a pivotal part of community involvement. Accordingly, by the time the BCCA Council shared their packet of drafted items at the public meeting in January 2007, there had

been fourteen previous meetings in which community members could express their views and communicate with the BCCA Council, on motorized use or other topics (BCCA Council Meeting Minutes, 2005-2007).

In addition to data from the BCCA survey and public comments offered at monthly meetings, the BCCA Council also embraced traditional techniques for receiving comments on the management plan. These included public hearings on preliminary and final drafts, and sixty-day public comment periods. In October of 2005, BCCA Council meeting minutes read that the BCCA Management Plan, "[would] have to go to the community and the Challenge Board for approval" (BCCA Meeting Minutes, Oct. 2005). Further, they announced at the January 2006 public meeting that they would hold public meetings to "gather public reactions to the preliminary draft plan" (BCCA FAQ, Jan. 2006). Thus, even with a transparent meeting schedule and a basic understanding of community priorities from the BCCA survey, the plan would only be fully approved once the public was able to review comprehensive drafts, submit comments and suggested revisions, and offer support.

The BCCA Council decided the most effective venue for public review and input was the public meeting setting. In this sense, the public meeting in January 2007 is evidence of both information-sharing and perspective-gathering. It was the first large meeting at which the BCCA Council presented preliminary drafts of the management plan, and the Blackfoot Challenge advertised the meeting in public posters and notices as including "updates and *your feedback*" (BCCA Public Meeting Poster, Jan. 2007; emphasis added). In addition to the packet of draft materials, the BCCA Council provided the ninety-five individuals present with their contact information, as well as a comment sheet to submit to the BCCA Council (BCCA Meeting Minutes, Jan. 2007). Moreover, the BCCA Council invited counter proposals on any aspect of their drafts, and attendees were given an opportunity to raise questions or concerns at the meeting (BCCA Public Meeting Minutes, Jan. 2007). Additionally, the BCCA Council hosted an after-meeting social hour at a local restaurant to meet and hear public reactions in an informal setting (BCCA Public Meeting Minutes, Jan. 2007). As the BCCA Council had no official deadline for completing the management plan, community members were assured their feedback would be addressed at subsequent meetings (BCCA Council Meeting Minutes, Jan. 2007). From initial feedback, the BCCA Council learned that their proposal to maintain PCTC/TNC's closed

gates motorized use policy was extremely contentious, especially among ATV users (BCCA Council Meeting Minutes, Feb. 2007).

The record of subsequent BCCA Council meeting minutes following the public meeting illustrate their central role in perspective-gathering. Monthly meetings provided a venue for more detailed public input and an opportunity for community members to have informed discussion with the BCCA Council; and, the most prominent issue was the proposed motorized use plan. In total, eight BCCA Council meetings in 2007 (out of ten) involved motorized use, and were highly attended (~51 non-BCCA Council attendees, not accounting for individuals who attended more than one meeting) (BCCA Council Meeting Minutes, Feb.-Nov. 2007). Meetings regularly featured public input from those who further advocated their different positions on motorized use, e.g., in formal presentations and proposals, letters, and spoken comments.

In April and May of 2007, the BCCA Council heard two separate presentations from organized citizen groups advocating for and against their proposal to maintain PCTC/TNC's closed-gates motorized use policy. In April, the first group, comprised of one BCCA Council member, several individuals from surrounding towns (Seeley Lake and Lincoln), and a few other Ovando residents presented their, "BCCA Motorized Trail Use Recommendations" (BCCA Council Minutes, April 2007). This group requested that the BCCA Council develop a system of marked motorized use loop trails and routes (open from June 1$^{st}$-August 31$^{st}$), and implement a fee-based daily permit system to finance its administration, including repairs, maps, educational materials, and signage. They cited that due to increasing demand for motorized vehicle opportunities and increasingly constricted motorized use access elsewhere, the BCCA Council should expand motorized use on the BCCA Core rather than limit it (Public Proposal #1, April 2007; Appendix J).

Following this proposal, other people (i.e., "stakeholders") interested in the topic attended BCCA Council meetings or sent letters in response. By the summer of 2007, the BCCA Council had received a total of nine letters and an additional presentation in opposition to the "BCCA Motorized Use Trail Recommendations." In May 2007, the second citizen group highlighted that motorized use was incompatible with other recreational uses of the property, and conservation values like wildlife habitat and native rangelands (Public Proposal #2, May 2007, Appendix J). They contended that despite the pleas of the motorized use advocates, there were sideboards on the management of the BCCA Core that barred motorized use. For instance, the

results of the BCCA survey were clear in showing that wildlife habitat conservation and ecological restoration were of greater importance than motorized access to local landowners (Public Proposal #2, 2007; Belsky and Duvall 2005). Moreover, they worried about alienating past financial contributors, as the BCCA acquisition was sold primarily as a conservation and restoration initiative (Public Proposal #2, May 2007). This group presented the BCCA Council with research on the incompatibility of motorized use to other recreational and conservation values to support their position.

As the above proposals demonstrate, requesting feedback enabled groups with different perspectives, values, and policy preferences to interject in the course of the BCCA Council's planning process. An outcome of perspective-gathering was the lesson that the BCCA project meant different things to different people, all of whom were passionate about how the BCCA Core should be stewarded. For instance, the majority of motorized use advocates were long-time residents of the area who had fond memories of motorized access prior to Plum Creek's 1994 gate closures. They were wary of the influx of new residents into the watershed, and associated the BCCA Council's decision to maintain PCTC/TNC's gate closures with "outsiders" who felt they needed to "save the BCCA from the locals" (Pers. Comm. CM10, 2016).[4] In their view, the creation of the BCCA Core was framed as an opportunity to reinstitute past motorized access that they felt they had been denied, and to which they felt they had a right. Indeed, one of the guiding principles of the BCP Disposition Plan was, "[To] assure continued public access to and recreational use of those lands that have historically been available to the public" (BCP Disposition Plan, 2003). Moreover, many saw an opportunity to enable economic benefits to local businesses by enticing motorized users into the area that would patronize local shops and restaurants, and the local hotel (See Appendix H for coded quotations).

As shown, others were opposed to the "BCCA Motorized Use Trail Recommendations" for several reasons, though ecological risks and impacts were at the heart of their concerns. Some long-time residents believed that the loose policies of past timber companies had led to

[4] Between 1990 and 2016, total housing outpaced growth in total population, which is likely due to the influx of seasonal residents and second-home owners. Population increased in Powell, Lewis and Clark, and Missoula counties of the Blackfoot Watershed by 3.5%, 42%, and 48%, respectively. Total housing units increased by 10%, 45%, and 56%, respectively. (Source: Montana Census of Population and Housing, 1990, US Census Bureau; https://www.census.gov/quickfacts/fact/table/lewisandclarkcountymontana,powellcountymontana/HSG030210#viewtop)

significant resource damage and abuse that should not be tolerated in the new conservation area. Public comments reviewed for this study showed that many were sent by financial contributors to the BCP acquisition (some of whom did not live in the watershed), who thought motorized use was at odds with the conservation objectives toward which they contributed dollars. Furthermore, those against motorized use were unsure that the BCCA Council would be able to monitor and enforce motorized user compliance even if they wanted to. They observed that the motorized user group was growing in number, inherently abusive to natural and aesthetic resources, and liable to ride off-road and behind closed gates (See Appendix H for quotations). Providing venues for acquiring and sharing perspectives enabled this detailed input to arise, and thus, inform discussion.

As the disagreement heated up, the BCCA leadership played a key role in facilitating productive dialogue between opposing parties. Leaders demonstrated and insisted that the BCCA Council must listen to unpopular views on motorized use and treat them with respect. For instance, Jim Stone of the Blackfoot Challenge supported the motorized user group in asking that the BCCA Council just "give it a chance…that 14% may be small but they are still a part of the community" (BCCA Council Meeting Minutes, April 2007). Further, some BCCA Council members remembered that Hank Goetz, then leader of the BCCA Council and Lands Director of the Blackfoot Challenge, made extra efforts to meet with people on both sides of the issue at their homes to fully understand their concerns.

> The people pushing hardest for less motorized use, most of those people (probably half) were not on the BCCA Council…Hank Goetz was in charge of sort of guiding the Council. He was the person that was running around talking to everybody trying to get all sides to agree. He tried really, really hard to include everybody in the community. So whether you were on the Council or not he made sure that all interested people…were heard (Pers. Comm. CM12, 2016)

> I will give a lot of credit to Greg Neudecker (co-founder of the Blackfoot Challenge) and Hank Goetz for creating the mood to air out concerns and to address those concerns – that's why I feel a lot of those things started to change (Pers. Comm. CM2, 2016).

> We commend Hank for his efforts one-on-one to deal with many of the people in the Valley (Public Comment #9, June 2007)

This evidence suggests that leaders were committed to and able to promote an inclusive process, and to ensure that the requests of motorized user advocates, which one public commenter

referred to as a "vocal minority," were considered legitimate (Public Comment #7, 2007). BCCA Council members and Blackfoot Challenge staff often said that, in general, listening and inclusive dialogue were an important part of the culture of the BCCA Council, especially in light of disagreement.

> The argument doesn't mean it's bad. I should say debate more than argue, but bringing up different viewpoints and ideas that hadn't been thought about before. I think that's what it's all about is bringing up different viewpoints and talking it through (Pers. Comm. BC1, 2016)

> Anybody that's interested can come to those meetings and everybody's welcome and everybody – I don't know of anyone ever being told to basically "shut up, we're tired of listening to ya"…We're all able to voice our opinions and all our opinions are taken into consideration (Pers. Comm. CM7, 2016)

> Diversity of perspective is paramount in my opinion. It does not mean, trust me, that I will agree, but if I do not they will know…Nobody knows everything about everything…You can enlighten other people through that if they're willing to listen. (Pers. Comm. CM10, 2016)

> This process does rely on being able to voice your opinion and know that other people are going to hear you out and be able to listen to what you have to say (Pers. Comm. BC2, 2016)

These values are cemented in the culture and structure of the BCCA Council: one qualification for appointment is "an ability to listen to opposing views" (BCCA Membership Application Form). As the above comments and acts of leadership suggest, perspective-gathering entails a deeper effort to engage in inclusive and respectful dialogue, rather than solely to catalogue a list of community preferences and rank them by proportion of the total.

The BCCA Council worked to reach compromise on the motorized use issue over several months of deliberation, and finalized a comprehensive draft plan in November. The BCCA Council held a second public meeting to present the draft for public comment (BCCA Council Meeting Minutes, Nov. 2007). The full draft was posted to the Blackfoot Challenge website and the BCCA Council notified the public that there would be a two-month "public comment period" in which they would receive and address emails, written letters, or in person comments at the December and January BCCA Council meetings (BCCA Council Meeting Minutes, Nov. 2007). Minutes from the public meeting show that those in attendance thanked the BCCA Council for addressing the issue in, "such a thorough and inclusive fashion," and the BCCA Council

approved the final BCCA Management Plan for the Core in January 2008 with no amendments (BCCA Public Meeting Minutes, Nov. 2007; BCCA Council Meeting Minutes, Jan. 2008).

## Integrating Perspectives in Decision-making

The BCCA Council ultimately amended their proposal to maintain PCTC/TNC's policy following extensive deliberation and perspective-gathering in 2007. Since 2008, they have amended the motorized use plan on two other occasions (Appendix I) and each change was spurred by public proposals requesting more accommodation for motorized use (Appendix J). Therefore, this case shows that making requests and offering input can translate into substantive effects on governance of the BCCA Core. In this section, I describe how the BCCA Council incorporates public input into decision-making, which I present as three sub-dimensions: delegation, cooperation, and adaptation.

### *Delegation*

The BCCA Council delegates decision-making responsibilities to BCCA Council work groups. In general, work groups are responsible for analyzing costs and benefits of possible actions, associated risks and uncertainties, and providing concrete recommendations to the BCCA Council. They enable what the BCCA Land Steward called the ability for the BCCA Council to "get more into the weeds," on challenging or complex topics (Pers. Comm. BC1, 2016). Because work group meetings are held on an ad-hoc basis, they allot extra time for deliberation and negotiation between those with conflicting perspectives and priorities. As meeting minutes from January 2009 read, "work groups are where the real work of the BCCA gets accomplished" (BCCA Council Meeting Minutes, Jan. 2009). Though the full BCCA Council must vote to approve work group recommendations, by design, they hold significant weight in decision-making.

In response to each public proposal to change the motorized use plan, the BCCA Council has scheduled multiple Recreation (and, later renamed "REW" for "Recreation, Education, and Wildlife") work group meetings. There were two work group meetings to develop Motorized Use Trial #1, four meetings for Motorized Use Trial #2, and, as of January 2018, two meetings for Motorized Use Trial #3 (Appendix I). Examining work group minutes from September 2007

to April 2017 shows that work groups discussed implementation strategies and challenges, analyzed the strengths and weaknesses of motorized use proposals, and risk-mitigation tactics. For instance, in September 2007, the work group considered using the summer of 2008 as a "trial-balloon with a limited time-frame," "establish[ing] a permanent Recreation Committee," and how to conduct monitoring, define appropriate limits on trips and group numbers, and ways to minimize impacts to wildlife (BCCA Council Work Group Minutes, Sept. 2007). These general areas of discussion, especially risk-mitigation, have appeared in all work group minutes reviewed for this study.

In each case, the BCCA Council approved the work group's recommendations. In 2007, the work group recommended adding a provision for guided vehicle tours on the BCCA Core for the summer of 2008 within a limited timeframe, and with vehicle and weekly trip limits (Motorized Use Trial #1, Appendix I). Though it was a limited provision, it was a trade-off, as motorized use would be allowed but only with supervision. With these caveats, those concerned about overuse and ecological risks supported the plan. In 2011, in response to Public Proposal #3, the work group devised the permit-system where motorized users were required to visit the Blackfoot Challenge office to receive a free permit with a lock combination, map, and a list of rules and expectations from staff. In April 2017, the REW work group recommended the Public Proposal #4 as written, pending any conflicts on public lands. In each case, work groups have been successful at generating consensus on recommendations that accounted for the public requests and that were supported by the full BCCA Council.

The BCCA Council intended work group meetings to serve as an opportunity for more interface between the public and the BCCA Council in crafting recommendations for motorized use. The BCCA Council assured anyone interested that work group meetings to discuss motorized use were "open to anyone," including non-members (BCCA Council Meeting Minutes, Nov. 2010). The BCCA Council made pleas for interested parties to attend work group meetings. In January 2011, the work group discussing Public Proposal #3, "STRONGLY encouraged [BCCA Council members] to invite anyone interested in weighing in on these issues to attend the February REW work group meeting" (BCCA Council Work Group Minutes, Jan. 2011). Indeed, stakeholders on both sides of the motorized use issue have historically attended work group meetings, and BCCA Council members remembered meetings as having been well attended.

> It's been quite a few years since we had those sort of knock down drag out REW meetings about Travel Management, and those were fairly well attended…to talk about Motorized Use in particular. We had a high level of interest and there was even a little involvement from Seeley Lake ATVers during that process. They were campaigning for more ATV access (Pers. Comm. CM6, 2016)

> That fire hall was packed with people, absolutely packed. It was people spilling out the door. It was quite contentious. It was a lined meeting…all sorts of interested community members from one camp or another (Pers. Comm. CM11, 2016)

Additionally, at the REW work group meeting in April 2017, three non-BCCA Council members attended to weigh in on Public Proposal #4, including one local hotel owner (who is the husband of a BCCA Council member) who had an interest in local recreational opportunities for their guests (BCCA Council Work Group Minutes, April 2017). Therefore, holding special work group meetings to discuss alternative motorized use plans has created an opportunity for individuals who have an interest in the BCCA Core to directly participate in decision-making.

*Cooperation*

Efforts to incorporate community proposals and input into final decisions for motorized use have benefitted from the cooperation of BCCA public and private landowners. There has been a technical and practical benefits associated with cooperation, as in the ability to learn resource management techniques and apply them. In these ways, the BCCA partnership enabled the BCCA Council to learn from the existing technical and administrative agency expertise regarding motorized use, and to entertain possible motorized use plans that required multi-landowner coordination.

The cumulative experience of agency personnel in travel management was an asset to the BCCA Council as they analyzed possible accommodations for motorized users on the BCCA Core. At the BCCA Council meeting in February 2007, each agency representative provided a review of the motorized use rules and regulations on their respective parcels. In effect, each provided a model for the BCCA Council to consider. Agency representatives also serve on the REW work group, where their professional opinions have often been consulted, especially those of wildlife professionals (BCCA Council Work Group Minutes, April 2017). One past agency member reflected that he felt a large portion of what he could contribute to the BCCA Council was his familiarity with the challenges and complexities of multiple use management.

> I think they were interested in how does the forest service handle these conflicts…The good thing is in having agency people there was, because of our backgrounds, we could provide advice and examples and ideas on what to do. Whether it was recreational use, camping restrictions, travel management planning, land-use designations, that's something I felt that we could offer to that group (Pers. Comm. CM19, 2017)

Indeed, the BCCA Council draws from the cumulative experience of public land managers when making decisions about management and governance of the BCCA Core, in general.

Moreover, the BCCA Memorandum of Understanding (MOU) encourages the use of cooperative resources to address policy matters of mutual concern for all landowners. One of its key objectives is to establish a cooperative written policy for Recreational Use (Appendix C). Accordingly, to strike the agreement on the Motorized Use Trial #1 in 2008, the BCCA Council coordinated with USFS and DNRC to allow motorized use access over their parcels. The USFS representative arranged for guided tour groups to access USFS roads in the north of the BCCA Core through a previously closed gate. Later, when the BCCA Council adopted the permit system, the USFS fitted the gate with a lock that could be opened by permit-holders. The BCCA Council also acquired a Land Use License from DNRC to allow recreational motorized use on DNRC roads in exchange for DNRC administrative access through the BCCA Core. These arrangements expanded the number of recreational access points to the BCCA Core (adding access points on the west and north), and increased the road miles available to guided tour groups and, later, permit holders (BCCA Council Meeting Minutes, April 2008). Had motorized users not expressed their interests in increased motorized use opportunities on the BCCA Core, there would have been no impetus for this level of coordination at the time that it occurred. Despite the objective of the BCCA MOU, the BCCA Council original proposal for motorized use in January 2007 did not include any coordination with adjacent landowners, at that time (See Map in Appendix I)

*Adaptation*

This case shows how the BCCA Council has tailored the motorized use plan to accommodate increased access over the last decade. Though the actual requests of motorized users have been roughly the same since 2007, the BCCA Council has modified the plan in successive phases. The trend has been toward fewer or less strict caveats on motorized use, i.e.,

on limits, modes of access, and designated roads. In effect, the Motorized Use Trial #3 is more generous, or lenient, than what motorized users had originally advocated in the "BCCA Motorized Use Trail Recommendations." Thus, to understand how the BCCA Council has sought to involve community, and community defined as the interested public, in the BCCA governance, it is necessary to look at how decisions evolve over time.

The BCCA Council's approach to motorized use planning has been to take precaution, emphasize that their decisions are subject to reevaluation, and make incremental changes as new information is acquired. Given the perceived risks associated with motorized use, the BCCA Council has treated each motorized use plan as "provisional", or as a "trial" (BCCA Council Meeting Minutes, Nov. 2007; BCCA Council Work Group Minutes, Feb. 2011; BCCA Council Work Group Minutes, April 2017). The BCCA Council wanted to avoid drastic changes, preferring to go slow, as one Blackfoot Challenge staff noted, "we didn't open it wide open because that would take it too far one way" (Pers. Comm. BC1, 2016). A comment of a past BCCA Council member captures how the BCCA Council has taken a precautionary, evidence-driven approach to contentious decisions, or complex situations.

> There were a number of times that I recall where the group was unsure on how to proceed or what's the best way or if there is a significant disagreement amongst the BCCA Council members or others, where the decision was, 'okay, lets try the thing for the short period or try the thing in a smaller footprint and we'll agree to these evaluation criteria in this evaluation period, and we'll revisit the decision after we've had some experience'…that was true for travel…where it was difficult, where people agreed beforehand to set up some evaluation criteria…whatever it was, and then to agree on a time when you would formally revisit that decision and evaluate (Pers. Comm. CM13, 2016).

As this comment illustrates, the BCCA Council has opted to loosen motorized use restrictions in a stepwise manner in order to evaluate uncertain outcomes. Through this process, they have been willing to accept more risk over time. Likewise, others noted that decision-making is an iterative process, and adaptable to new conditions and information.

> If you get a better idea in the meantime or you learn something else you can change it and adapt it and improve what you're doing. There are just multiple ways to reach the goal. And even the goals and objectives aren't in stone, they can be looked at and you can say, "that didn't make sense to do that" (Pers. Comm. CM8, 2016)

> Ya, we're always changing as we go. Every policy we have can be changed every year if we want. (Pers. Comm. CM1, 2016)

> They usually pick a small area and say, 'well let's try it for 5 years or 10 years or whatever,' and they stick to it and they have results one way or another...and maybe it's not good but they've tried it. (Pers. Comm. CM19, 2017)

These comments illustrate that many BCCA Council members view their decision-making process as necessarily flexible and geared toward learning; both improve decisions over time.

A cornerstone of this strategy has been to develop monitoring protocols and infrastructure that apply insights from each successive motorized use plan. The BCCA Council has been able to reevaluate each motorized use plan based on empirical evidence of its outcomes, good or bad. In 2009, the BCCA Council was awarded a grant from the National Forest Foundation with the objective of "better monitoring and managing the impacts of motorized use on wildlife habitat" (BCCA NFF Application, 2009). A part of the grant funding went toward conducting "intensive elk population and distribution monitoring" using aerial and ground-based tactics in cooperation with MT Dept. of Fish, Wildlife, and Parks (FWP). Other funding went toward "baseline data collection" to identify areas of conflict (i.e., high levels of motorized use that overlapped with high elk use). With this grant, the BCCA Council acquired three digital vehicle counters, and installed them at entry points to the BCCA, popular public trails, and linkage routes to and on the Lolo National Forest (BCCA NFF Application, 2009). In addition, as part of implementing the permit system (Motorized Use Trial #2, Appendix I), the BCCA Council required permitted users to sign in at trail registries located at locked gates. With the permit records and sign-in boxes in place, the BCCA Land Steward could effectively track the number of users and location of vehicle entries throughout the season and make reports to the BCCA Council.

The information gathered through these methods influenced negotiations and analysis of each public proposal to change the motorized use plan. In October 2010, when motorized use advocates proposed a change to Motorized Use Trial #1, the BCCA Council had only hosted a handful of guided tours over the three prior seasons (Public Proposal #3, Oct. 2010, Appendix J). At the time, motorized users contended that administrative vehicle use was, by far, more extensive and had a greater impact than recreational use. Upon their request, the Land Steward provided a report on the amount of vehicle use in the BCCA Core during the previous year. In the report, their suspicions were confirmed. Of 732 vehicles behind the gates between June and October of 2010, 94% were for either wildlife management, forestry, stream restoration, road maintenance, grazing and weed management, or planning/inventory, and only 6% were for

recreation or educational purposes (REW Meeting Minutes, Jan. 2011). These data based the complaints of motorized use advocates in real evidence, and prompted the BCCA Council to reconsider Motorized Use Trial #1 and develop Motorized Use Trial #2.

Furthermore, in April 2017, the BCCA Council had access to vehicle use data over the six prior years of the permit-system. The BCCA Land Steward reported that recreational use had been declining (averaging seventeen users annually between 2014-2016 compared to forty-three users between 2011-2013) (REW Work Group Minutes, April 2017). Further, the BCCA Council had allotted a maximum of fourteen weekly trips during Motorized Use Trial #2 (total 84 trips), and the documented trips between 2011-2013 had been roughly 8% of that (BCCA Motorized Use Season Summary 2011-2016). The BCCA Land Steward also reported that there had been few instances of non-compliance, i.e., riding off-road or around gates (BCCA Council Work Group Minutes April 2017). Based on these data, and on the condition that a change would be "experimental" (Pers. Comm. BC1, 2016), the work group decided to recommend Motorized Use Trial #3 for adoption by the BCCA Council.

This evidence suggests that the council made use of new information on the impacts and risks of motorized use in its actual decision-making process. In effect, the motorized use plan has been an ongoing, iterative fact-finding process over many years. It has resulted in increasing consensus, at least among the BCCA council, that motorized users can be reasonably accommodated on the landscape. Consensus can be seen in the decreasing difference between the public proposals and the actual decisions of the BCCA Council, and that over time fewer meetings have been needed to strike compromise (Appendix I). The data suggests the trend over the past decade has been toward a motorized use plan with fewer restrictions (and ironically one that closely resembles the plan proposed in 2007). In this way, motorized users' requests have been slowly heeded through successive, incremental stages of decision-making, implementation, evaluation, learning, and adaptation.

## BCCA Council Membership

Serving as a member of the BCCA council is the highest level of involvement in BCCA governance. As noted above, the Blackfoot Challenge Board of Directors has devolved considerable management authority to the BCCA Council. Though the BC Board retains the

right of final approval of new BCCA Council members as well as any revisions to the BCCA Management Plan for the Core, they have never exercised their veto power for any appointment or policy change. One Blackfoot Challenge staff noted that "the BC Board] are very hands off. They're very hands off with the Council. This is an autonomous thing" (Pers. Comm. BC2, 2017). The use of autonomy, here, refers to the ability of the BCCA Council to create, amend, and/or eliminate rules based primarily on deliberation and consensus-building over time. To this point, the Executive Director of the Blackfoot Challenge insisted that,

> The Blackfoot Challenge's job is not to tell or even have the appearance that we're telling the BCCA Council what to do… The board has retained administrative, legal, and financial oversight. So management is not the purview of the Board of Directors, it's the purview of the Council. We're very clear about that…we do not intend to manage this property. We intend for the community to manage this property. (Pers. Comm. BC3, 2017)

These comments help explain why the BCCA Council is framed as the "key strategy" for engaging the public. One past agency member noted that some community members would seek to join the BCCA Council in order to have more of an impact in decision-making.

> It seemed like if somebody really had an issue they would join the BCCA Council…if there was something big that people really wanted pushed through they would just join. If they had an issue that was big enough they just wanted to be part of it (Pers. Comm. CM16, 2017)

Therefore, holding a seat on the BCCA Council is seen as an important, and direct form of involvement, conferring a significantly influential role for interested citizens in managing the BCCA.

Given their large degree of autonomy, the composition of the BCCA Council, in terms of interests, personalities, and preferences of individual members, influences what decisions are made and how decisions evolve over time. Because of term limit and rotation procedures, approximately forty agency and non-agency members have served on the BCCA Council since it was originally formed. BCCA Council members and Blackfoot Challenge staff described that as the make-up of the BCCA Council changes, so too do the groups' priorities, including regarding motorized use. Two of the three comments below make the direct association between past BCCA Council members and the firm original stance against motorized use.

> When the BCCA Council was first formed a lot of people on the recreation committee leaned a little more toward absolutely no vehicles. But I think it's

> coming more to a medium... As the BCCA Council changes, the policies are going to change. (Pers. Comm. CM2, 2016)

> Some people that were originally on [the BCCA Council] – they're no longer here. Don't even live in the valley anymore. They were very adamant about what they wanted (Pers. Comm. CM3, 2016)

> The selection of the initial BCCA Council was really well done. Hank did a really good job of balancing what I'll call the old-school resource extraction focused people (cattle, timber, etc.) with people more interested in wildlife conservation and forest improvement…right now the committee is highly weighted toward old-school resource extraction people. (Pers. Comm. CM12, 2016)

In this way, many said that the composition of the BCCA Council has consequences for how different uses and management approaches to the BCCA Core are viewed. At least one highly involved motorized use advocate from the 2007 debates has since joined the BCCA Council, and has been vocal on increasing motorized use. Two initial members who were early advocates for motorized use had stepped off the BCCA Council but have since rejoined, in 2009 and 2016. Some noted that the interpersonal dynamics also affect how much influence an individual has in the BCCA Council.

> If your squeaky and loud and sometimes you get action but is that representative of the overall community, might not be. That could be a disadvantage of the council is that if someone is loud and heavy handed for one thing they might not represent everybody (Pers. Comm. BC1, 2016)

> Then there's the core where all of a sudden depending on how much influence you have, you can write whatever policy you want. (Pers. Comm. CM11, 2016)

Thus, the evolution of the motorized use plan toward looser restrictions since 2007 must also be viewed in relation to the evolving composition of BCCA Council membership.

Despite the significant opportunity of BCCA council membership to have influence, it has become increasingly difficult to attract new applicants to the BCCA Council over the last several years. This has caused many BCCA Council members to serve several terms and, as shown above, past BCCA Council members to rejoin. Most council members attributed these challenges to the small population size of local communities, which is compounded by the transaction costs of active participation on the BCCA Council, and stretched local capacity for voluntarism. Or, to disincentives for those living far away to travel to Ovando where meetings

are typically held, especially in inclement weather conditions. Others related the lack of applicants to a lack of controversy, and general public satisfaction with how the BCCA Core is being managed. In any case, in March 2014, the BCCA Council adopted a looser term rotation policy to retain members. Originally, members were eligible to serve two, two-year terms consecutively with the option to reapply after one full term had elapsed. Under current rules, members may serve two consecutive three year terms with the option to reapply immediately. Some members have expressed concern about the impact that this policy change may have on the ability of the BCCA Council to embody diverse interests.

> You know, you get a group of people that are on the BCCA Council forever, they just vote in their buddies and reelect themselves…I think that's a threat to the functionality and collaborative nature, you know they can all collaborate because they can all agree but is that really representative of the community as a whole? (Pers. Comm. CM6, 2016)

> I think the current scheme, by not having term limits, makes it easier to have a cronyism sort of situation…My personal feeling is that for balance, if what you want is a diverse community, you need to try and get some of that diversification by appointing new members. (Pers. Comm. CM12, 2016)

As these comments make clear, the dearth of applicants to the BCCA Council is problematic for some, especially insofar as it impacts the ability of the BCCA Council to representative of community interests. Some fear the possibility that the BCCA Council will become a revolving door of like-minded individuals, who favor applicants that support their own agendas. In consequence, potential applicants that would offer a different perspective may feel unwelcome. To my knowledge, there has been no comprehensive effort on the part of the Blackfoot Challenge or the BCCA Council to analyze the source of these challenges, or to identify possible approaches to address them. However, the Executive Director of the Blackfoot Challenge offered a perspective that demonstrates an openness to such an effort:

> We should probably go through a sort of introspective process…maybe it'd be good for the BCCA Council to do that, to go through some sort of strategic process to look at themselves and rate themselves about how they're doing…and that could be the question: do we think we represent diverse values? Do we think our process respects those diverse values and looks for consensus on how to operate? (Pers. Comm. BC3, 2017)

**Summary: Community Involvement**

The principle of community involvement in governance of the BCCA Core derives from the mission of the Blackfoot Challenge, and the precedent set in the Blackfoot Community Project (BCP). Though the BCP was promoted as a community-driven effort, which may suggest that they achieved broad consensus as to how former Plum Creek lands were to be disposed and managed, the above results indicate how the "community" of stakeholders in the BCCA is not a homogenous whole, especially on an issue-by-issue basis. Deciding on a policy for motorized use highlighted underlying conflicts among those with varying interests in BCCA lands. Motorized use was an especially challenging topic because the guidelines for BCP dispositions conveyed a conflicted message about the purposes for acquiring former Plum Creek lands. On one hand, motorized use advocates made claims based on the intention of the BCP to restore "traditional access," while, on the other, opponents echoed the ecological conservation and restoration objectives that drove the BCP in the first place. At base, this indicates that the appearance of a unified front in the BCP belied a more complex picture of community values.

Defining the contours of the community has proven to be complex in this case. This study shows that stakeholders in the BCCA project include residents and non-residents who have diverse personal, financial, and historical connections to lands in the BCCA. The private fundraising campaign necessary for the Blackfoot Challenge's purchase of the BCCA Core generated a longer list of stakeholders with a vested interest in the landscape, not all of whom are residents of the Blackfoot watershed. Many contributors couched their opposition to motorized use in light of their donation, i.e., that they would not have donated had they known that motorized use may be allowed. As shown, alienating contributors was a concern of some BCCA Council members during the early years. Moreover, this study showed that not all residents of the watershed are perceived on equal footing. Some BCCA Council members expressed that proximity to the BCCA affected the weight of a person's input, while others saw new residents as "outsiders" with a less legitimate stake in BCCA governance. That the BCCA Core is open for public recreational use has complicated this question further, and raises additional questions about how (and whether) to include and evaluate the input of non-resident users.

The complexities and politics of defining community notwithstanding, this study also shows that the BCCA Council has developed a well-rounded institutional approach that has

enabled them to reconcile differences and resolve conflict. This study showed that, in practice, community involvement entails actions taken by the BCCA Council in four key areas. Together, these constitute an overall strategy for incorporating public input into governance of the BCCA Core and, to some extent, surrounding public lands. Perhaps unsurprisingly, Council members and Blackfoot Challenge staff expressed that the BCCA Council itself, which was initially created to institutionalize the community involvement principle, was the most direct form of involvement. Selected interview quotations and examples from the motorized use case show that community involvement starts in the BCCA Council, and moves forward in information-sharing, perspective-gathering, and decision-making activities. As shown, information-sharing is intended to keep the public apprised of opportunities to participate in discussion, and perspective-gathering to provide channels for communication between the BCCA Council and users, residents, and others with an interest in the area. The conceptual diagram of community involvement (Fig. 2) recognizes that there is considerable overlap between the four dimensions. For example, evidence from motorized use planning illustrated that perspective-gathering and decision-making processes are closely related, as the BCCA Council's emphasis on inclusive dialogue, listening, and respect during perspective gathering also makes possible the consensus-building that occurs in delegated work group sessions. The common view that disagreements are natural and expected, and that opposing views are valid, underlies the BCCA Council's ability to both listen and problem-solve effectively.

Lastly, these results highlight how the BCCA Council has exceeded the charges set out in the BCCA Management Plan for the Core. Indeed, the plan provides the BCCA Council with clear expectations for information-sharing and perspective-gathering, particularly in the "Key Strategies for Community Engagement." However, decision-making processes have evolved organically over time; that is, the BCCA Council's strategy to delegate, cooperate, and adapt as a means to incorporate public input and stakeholders has been honed through experience over the last many years. In this sense, these results indicate that the BCCA Council has developed a more complex view of the BCCA community while simultaneously building their capacity to accommodate diverse views and resolve conflict.

## PART B: LANDSCAPE CONNECTIVITY THROUGH PUBLIC-PRIVATE PARTNERSHIPS

### Introduction

A key principle that guides the management of the Blackfoot Conservation Area (BCCA) is landscape connectivity through public-private partnerships. The BCCA Council is in charge of translating the concept into concrete management decisions and actions across the BCCA Core (approximately 5,600 acres) and the surrounding properties that together comprise the total BCCA (totaling 41,000 acres). The surrounding area includes two private properties and public lands administered by four different state and federal agencies that own land and/or easements in the BCCA (MT Fish Wildlife and Parks - FWP, MT Department of Natural Resources and Conservation - DNRC, US Forest Service - USFS, and US Fish and Wildlife Service -USFWS). At the broadest level, the BCCA Council defines landscape connectivity through public private partnership to mean the coordination of management across these different ownerships, including cooperation in decision-making and management to collectively produce better ecological outcomes and synergy than could be enacted by managing each parcel separately.

As described in the literature review, the concept of landscape connectivity is rooted in landscape ecology and conservation biology. To ecologists, the concept refers to the interconnectedness of structural and functional components of natural systems. Ecological functions and processes like animal migration, nutrient cycles, and hydraulic flows, for instance, occur within and among the landscape's structural components, such as geological features, soils, and terrestrial and aquatic habitats. Together, these comprise the ecosystem, and connectivity refers to the degree to which ecological functions and processes flow unimpeded within and across it.

However, in recent decades, understanding of connectivity has broadened to include governance. Governance refers to the various rules – formal and informal – in which landscapes are used and managed by different actors and their interests. The union of these two concepts is reflected in trends in the natural resource management sector. Over time, the theory of landscape connectivity has informed theoretical and technical literature and practice under many names including ecosystem management, an all-lands approach and collaborative management. Governance that integrates landscape connectivity emphasizes cooperation across land

ownership boundaries to manage for and support the connectivity of ecosystem structures and processes across spatial and temporal scales. Attempts to manage for landscape connectivity have become increasingly prevalent in the US in diverse institutional circumstances and at various scales (Keiter 2003; Trombulak and Baldwin 2010)

The Blackfoot Challenge envisioned the BCCA as a "demonstration area" for practicing landscape connectivity as applied to cooperative management of its forests, water, range, and wildlife resources. The questions are how the concept has been specifically defined for the BCCA and how has it been translated into real actions over the past decade on the BCCA landscape?

## Landscape connectivity in the BCCA Management Plan for the Core and MOU

### Governance Institutions and Nested Rules

The origin of the landscape connectivity concept in managing the BCCA begins with the Blackfoot Challenge mission to further "ridge-to-ridge" land stewardship across the Blackfoot watershed. The "ridge-to-ridge" approach underlies all of their activities as a landowner-based watershed organization. When referring to the public-private partnership that the BCCA Council represents, the Executive Director of the Blackfoot Challenge from 2007 to early 2018 has said that the BCCA Council is, "the best example we have of the process, in process. It is the most visible way to describe how the Blackfoot Challenge operates" (Pers. Comm. BC3, 2017). As such, the BCCA serves as a "demonstration area" for understanding how in practice the organization has tried to implement landscape connectivity on the ground.

This is reflected in the resolution that created the BCCA Council in 2005, where the Blackfoot Challenge Board of Directors (hereafter, the "BC Board") charged the council to "develop and implement cooperative management on the BCCA" (BC Board Resolution, 2005). As stated above in the Part on community involvement, it was charged with the "establishment of administrative procedures for administration of the BCCA Core, and collaborative mechanisms for administration of the larger 41,000 acre BCCA."

Landscape-scale governance in the BCCA would be approached as a three-tiered, nested, framework (Figure 3). At the highest level (i.e. with which all lower levels must comply) are legal authorities, policies and regulations that pertain to management of public lands. These

include federal and state laws, such as agency organic acts and other relevant statutes that govern public lands in the U.S. This tier also includes the land-use plans of each landowner within the 41,000 acres, including the BCCA Management Plan for the Core for the Core, the USFS Lolo Forest Plan, and other land-use plans and sideboards pertaining to state agencies. The respective management goals and objectives for each ownership dictate the land management actions that are permissible in them, and hence the boundaries for action in which each landowner can cooperate with neighbors.

The second planning tier must abide by the rules of the higher tier but enables cooperation through the form of a Memorandum of Understanding (MOU). In 2008, the BCCA Council prepared a MOU with the additional landowners in the BCCA to lay out terms for managing the entire 4100 acres cooperatively for "mutual benefit and interests" (BCCA MOU, 2008:1). The MOU is intended, "provide the legal framework for public agencies and private landowners to partner in cooperative cross-boundary ecosystem management" (BCCA Management Plan for the Core 2008:6). It also represents the intention of the entities to develop and work toward a shared agenda, but one that abides by the highest legal mandates, authorities, and concerns of each landowner in the highest tier.

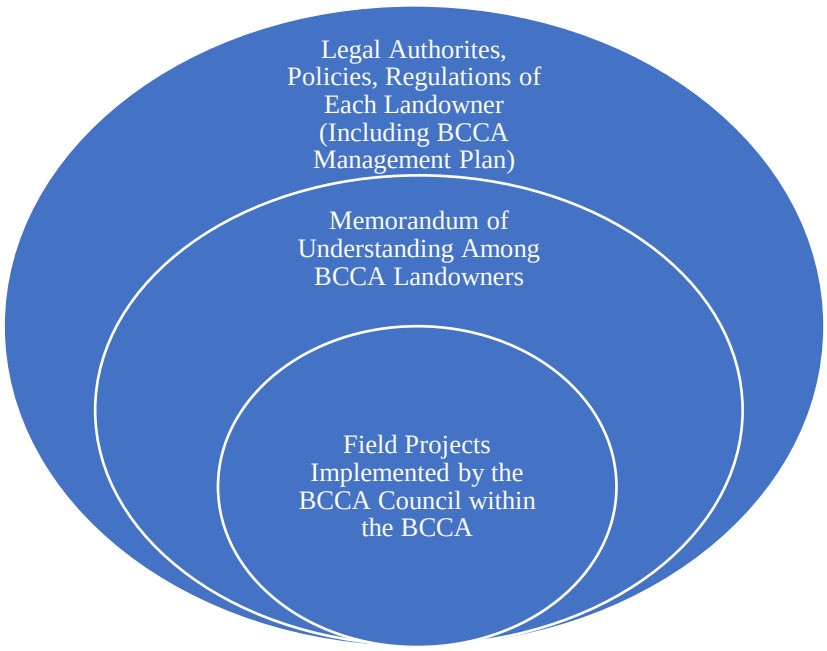


*Figure 3. Three-tiered nested framework for cooperative planning in the BCCA*

The third tier refers to the site-specific or project-level cooperative actions developed to manage specific resources on individual ownership parcels, which must comply with the above two tiers. At this tier, the BCCA Council analyzes and negotiates options for collaboration on matters of mutual concern in light of the constraints and boundaries imposed by the above levels. The examples of management of the focal resources that I present in this chapter are located at this tier.

## Cooperative Principles in the BCCA Management Plan for the Core

The BCCA Management Plan for the Core was developed with a clear commitment to landscape connectivity through cooperation among adjacent landowners. The Executive Summary of the plan opens by stating that, "The BCCA is an innovative effort involving community forest ownership and cooperative ecosystem management *across public and private lands*" (BCCA Management Plan, 2008:6; emphasis mine). The words, "innovative," "partnership," and variants of "cooperation," were used to emphasize that the BCCA model was to demonstrate something new and novel. The management plan states that the BCCA, "pioneers innovative governance structures…to include surrounding public and private lands" (BCCA Management Plan, 2008:40). Furthermore, the "Community Vision for the BCCA Core," ends by asserting that all management activities that the BCCA Council carries out, "will be complimented through *working cooperatively with the surrounding agency and private landowners"* (BCCA Management Plan 2008:15, emphasis mine).

The cooperative guidelines were further established in the principles of "Landscape Connectivity and Ecosystem Management" and "Public-Private Partnerships" (BCCA Management Plan 2008:15). The definitions of these principles from the BCCA Management Plan for the Core are provided in Appendix B. These principles demonstrate the BCCA Council's intention to cooperatively manage the BCCA Core in the ecological and management context of surrounding public and private lands. Below, I describe how the BCCA MOU defines the principle of landscape connectivity, and then document how it was translated into significant action through financial and technical resource sharing.

**Landscape Connectivity as Cooperating across Boundaries in the BCCA Memorandum of Understanding (MOU)**

The BCCA Council developed a MOU among BCCA partners, including the Blackfoot Challenge, USFS, USFWS, FWP, DNRC, and three private landowners, in meetings and work group meetings between 2005 and 2007. The final MOU was approved for addition to the BCCA Management Plan for the Core in 2008. The MOU outlines the signatories' commitment to cooperative management and their mutual benefits and interests in the conservation and management of the BCCA at a landscape scale. It includes four important sections: 1.) Purpose; 2.) Statement of Mutual Benefit and Interest, 3.) Goals and Objectives, and 4.) Organization and Procedure (MOU 2008: 2-3). Importantly, as stated in the MOU, one of the primary purposes of the partnership is, "to develop and implement a policy management plan for the BCCA" (BCCA MOU 2008, 2013:2). This charge refers specifically to not only creating a management plan for the BCCA Core, but creating a "BCCA Policy Plan" for the entire BCCA (total of 41,000 acres).

The goals and objectives of the MOU are provided in Appendix C. Objective B.1 identifies a set of resource areas that it considers as of interest to all parties and targeted cooperative actions. Objectives B.3-B.5 set out a plan-making process for the entire 41,000 acres pertaining to these resource areas (Appendix C). In accordance with the, "specific recommendations" for these resources on all BCCA lands, the BCCA Council could draft and implement "joint-operating plans on a project by project basis" (BCCA MOU 2008, 2013:3). Actions to meet the specific goals and objectives detailed in the "cooperative written policy" would then help to meet the broader goals of the partnership (A.1-A.5), most notably to "[t]reat the 41,000 acre BCCA as one land management unit with a number of common management objectives" (BCCA MOU 2008, 2013:3; Appendix C).

The MOU was created with consideration of the nested tiers of authorities noted above. While acknowledging that the BCCA Policy Plan would "reflect the wishes of the community and the interests, concerns, and decisions of the participants," the MOU clearly states that the parties work within their respective jurisdictional parameters, such that, "decisions made on projects on federal or state lands are made by the individual agencies following their existing policies and procedures" (BCCA MOU 2008, 2013:3). Indeed, the MOU does not force the hand of any partner nor create any "binding commitments" that would abdicate, transfer, or dissolve the powers and responsibilities of any individual landowner within the BCCA (BCCA MOU

2008:2). Instead, it is intended to act as a catalyst to support cross-boundary cooperation, and encourage the use of existing authorities to experiment with cooperative solutions to management problems at the site-level. Many agreed that a part of the value of the MOU is in the inertia it generated.

> If you can't agree that you're going to work together through an MOU, then nothing else is going to happen… You don't really need [an MOU] but it's a good step. It warms the agency up…it's better to break that ice and have that experience; and, the people that are responsible for putting agreements together are the ones that crafted the MOU, so they've already got some comfort with that organization (Pers. Comm. CM19, 2017)

The BCCA MOU articulates the parties' mutual interest and intent to jointly manage BCCA land and resources. The MOU states that, "all of the parties have responsibilities and interests in the conservation and management of the BCCA" (BCCA MOU 2008:3). Its objective is not to generate novel agency interests in off-agency lands, but rather to reveal and encourage the use of existing institutional incentives and capacities. Multiple agency personnel, especially in the case of both state and federal wildlife managers, for instance, described that their interests in lands outside of their jurisdiction stemmed from the necessity to extend their management approach to adjoining lands in order to be effective. One BCCA Council member's testimony was explicit in this regard.

> Our [agency] interest in wildlife carrying capacity and health of that resource, depended on…the health and productivity of all the land within the BCCA Core to support that resource. So we went so far as to actively invest in adjacent ownerships, and in some cases had our own staff treat weeds on private land, on BCCA Core land, on DNRC land because we saw that benefit. (Pers. Comm. CM13, 2017)

He went on to comment that through the MOU, his agency has worked in the BCCA in sometimes unique ways.

> I've seen it with USFS…and DNRC that when they had to, a lot of participants in their leadership allowed them to operate at the ragged edge of their authority, in some cases. Not in a bad way, but to experiment and pilot some other projects. To go out of their traditional or comfortable zones to get things done on the ground that in other places, and with other partners, you wouldn't have been able to get done. (Pers. Comm. CM13, 2016)

Financial and administrative efficiency for all parties is a primary target of the partnership. One of their goals is to, "Develop strategies that will enhance and promote support

and funding of interagency/private projects" (Appendix C, MOU 2008:3). Parties to the MOU are encouraged to create "participating agreements and cooperative agreements…to leverage resources" (MOU 2008:2). To this point, two agency Council members described how their interests in the BCCA lands also stem from the financial efficiency and incentives associated with cooperation. As one BCCA Council member succinctly stated, investing in off-unit lands can help to "meet our mission and if we meet our mission, it helps gather funding" (Pers. Comm. CM17, 2016). Another member emphasized that, "you're funded for your targets. If you don't meet your targets, after a while there's no funding or your funding is going to be reduced accordingly" (Pers. Comm. CM19, 2017). In this way, members expressed how the BCCA creates additional action space for agencies to reach their goals by leveraging resources across boundary.

In 2008, following the completion of the BCCA Management Plan for the Core and MOU, the BCCA Council tried to create a BCCA Policy Plan, but was unsuccessful. Nearly a decade later, the BCCA Council voted to table developing one indefinitely (BCCA Meeting Minutes, March 2017). At the March 2017 meeting, BCCA Council members agreed that the MOU was sufficient to accomplish cross-boundary resource management and encouraged the cooperative actions necessary to do so. One BCCA Council member offered that, "the MOU serves as that document and might be preferable to a policy plan because it allows more freedom for agency representatives and the BCCA Council to work across boundary" (Pers. Comm. CM4, 2017). Other BCCA Council members echoed this sentiment; they were skeptical that a formal plan would be a worthwhile investment of time and energy given that the MOU was already in place.

Indeed, a wide variety of cooperative actions in accordance with the language of the BCCA Management Plan for the Core and MOU have been set in motion without a formal BCCA Policy Plan in place. Despite the absence of a formal "policy plan," public agencies and private landowners in the BCCA commit to adhere to their agreement that they will, in good faith and through ongoing discussion with the BCCA Council, incorporate the goals and objectives of the BCCA Management Plan for the Core into their own respective projects within the BCCA. Interviews with the partners suggest that all agreed to this "plan":

> We are a part of a collaboration of management…We just manage our area and then in cooperation with everybody…we've got a handshake agreement that says

> we'll help you and you'll help us, and you know, neighbors be neighbors (Pers. Comm. CM7, 2016)
>
> [The MOU is] an agreement between all the different agencies in the BCCA that we're going to try to include those goals and objectives of the BCCA (BCCA Core) within the goals and objectives of the Wildlife Management Areas (WMAs) or Forest Service or state DNRC lands. (Pers. Comm. CM15, 2016)

The record of past management experience and cooperative outcomes demonstrate that a formal BCCA Policy Plan with strict guidelines may not have been necessary, and that cooperation across boundaries was enacted, especially via coordinating funding, administrative resources, and expert knowledge. This is documented below through review of financial strategies for cooperative noxious weed management and technical design and support-based approaches to forest connectivity.

## Practicing Cooperative Noxious Weed Management

Noxious weed management plans, targets, and financial resources vary among local, state, and federal entities in the BCCA. For instance, public land managers within the BCCA work within their own respective parcels based on guidelines that vary in their specificity and strategic approach. Despite variations between landowners, official noxious weed management protocols commonly include an emphasis on coordination as a prerequisite to effective weed management. This can be seen in the guiding documents of federal, state, and county managers.[5] Coordination is widely associated with reducing costs to individuals while creating collective benefits. In parallel, the Blackfoot Challenge has advocated a cooperative stance on noxious weed management since its founding, and has encouraged public and private landowners to form cooperative weed management areas (CWMAs) though the county weed districts. Accordingly, the Blackfoot Challenge is enrolled as a landowner (of the BCCA Core) in the Middle Blackfoot CWMA of the Powell County weed district, which also includes state agencies. Though techniques and targets may differ, cooperation on noxious weed management is an accepted goal in the state, and has a strong precedent in the Blackfoot watershed and in the BCCA.

[5] Montana Weed Management Plan 2017; FWP Statewide Integrated Weed Management Plan 2017; DNRC Montana Invasive Species Framework 2016; Powell County Weed Management Plan 2014; Noxious Weed Management Lolo National Forest Plan amendment – News Release 2007

The principal noxious weeds within the BCCA are spotted knapweed, houndstongue, common toadflax, sulfur cinquefoil, common tansy, Canada thistle, and St. Johnswort. Spotted Knapweed is the most widespread, especially common along roadways, disturbed areas, and in interior forested sites. The BCCA Council's approach has been primarily to conduct broad-cast herbicide treatments on road corridors, and spot-spraying in native grasslands, riparian areas, or in areas with disturbed soils resulting from other management activities, e.g. forest thinning. They have also pursued biocontrol options, that is, seeding infestations with beneficial insects that feed on herbaceous weeds and (hopefully) propagate naturally. Biocontrol methods are preferred in heavy infestations occurring further from roads and open fields, in dense forested sites where vehicle access is limited, and/or where there is sensitive native vegetation.

BCCA Council members and Blackfoot Challenge staff were unanimous in describing that noxious weeds are a transboundary social-ecological problem affecting all landowners. They articulated that noxious weed spread impacts important wildlife habitat and cattle forage, riparian areas, general aesthetics, and ecological health. BCCA Council members echoed that to be effective, both in terms of cost and outcomes, synchronized management efforts are required, that is, all BCCA landowners have to work together.

> Say we're working on weeds on our side of the fence and you're not. Guess what? I'm going to be working on weeds on my side...every year. So that's real simple. [Cooperation is] a resource benefit and a financial benefit (Pers. Comm. CM19, 2016).

> McCabe Creek road (USFS) comes right into the BCCA Core road and they weren't spraying any of their roads. We're spraying our road and they were just carrying their weeds right on us. (Pers. Comm. CM8, 2016)

Some even framed noxious weed management as a moral duty: that not treating weeds is "basically wrong" because of its impacts to neighbors (Pers. Comm. CM7, 2016).

However, funding constraints limited the ability of BCCA partners to enact practices to reduce existing and emergent weed populations. Despite the agreement that noxious weeds need to be sprayed, picked, mowed, or seeded with beneficial insects on all parcels, they recognized that funding these treatments was the greatest impediment.

> I'd like to see more weed control on the big area (the 41,000 acre BCCA), but we only have so much funding to accomplish that. That's the biggest problem. (Pers. Comm. CM8, 2016)

> [Agencies are] woefully underfunded and understaffed. I don't know what their weed program has been…but that would be great if the USFS has some funds or cost-sharing opportunities for treating their areas in the BCCA. (Pers. Comm. CM6, 2016)

> [We need] a bigger weed budget. A more strategic weed budget to really be able to deal with all of it. (Pers. Comm. BC1, 2016)

Despite the common belief that funding for weed management is the greatest obstacle, the BCCA Council has had success garnering financial support from numerous private, state, and federal sources that has been leveraged to address weed infestations across the BCCA. Between 2008 and 2017, the BCCA Council applied for thirteen grants from public and private sources, and received twelve (See Appendix D). Of the five matching awards programs that the BCCA Council applied for, through which they demonstrated funding from multiple contributors, they received four (See #1, #2, #3, #9 in Appendix D). Seven of the twelve grants, including the four matching awards, have been applied to noxious weeds in one or more individual contracts (Appendix D). In addition to the four matching awards, two others have involved cost-sharing or contributions from agencies and private landowners within the BCCA, and five of these been applied on multiple ownerships simultaneously (#2, #4, #7, #9, #11). In this sense, their success at generating funding has translated into weed treatments, and the BCCA Council has administered eleven separate weed contracts using the above funding since 2009 (Appendix E).

The BCCA Council's cooperative strategy has been to treat two or more landownerships within a single contract. Cost-sharing involves multiple landowners choosing to contribute financial or material resources to augment a contract, or reduce costs to individual landowners. This allows a single contractor to visit multiple properties and treat more acreage on a timely basis. Several agency BCCA Council members pointed out that this strategy has characterized the BCCA Council's cooperative approach to weed management.

> The [Land Steward] simply just called me saying "hey we're going to treat that road, it goes through some neighboring (private) properties who have done well on their weeds. It goes through DNRC and DNRC has a lot of weeds, and it goes through FWP and…we could do better. He talked to all the different agencies saying, "hey could we pool our money together?" He's got a contractor to do the spraying so, 'can the agencies kick in a little money" and just continue to spray across all the landownerships. (Pers. Comm. CM15, 2016).

> When [the Blackfoot Challenge] had a contractor hired we'd contribute money to allow them to do more, and then we also brought our own staff in to treat, because

> they got their own equipment, chemical, and expertise and we did some of the work ourselves. So that's again another thing that just came naturally that just made sense to everybody that we do that (Pers. Comm. CM13, 2017)

> While the contractor is there we're not using one and DNRC using another…We've done that in a few spots where we go across DNRC and continue on the BCCA Core (Pers. Comm. CM17, 2016).

> That's why we have them agency updates…to help us figure out what the forest service is doing, what the FWP is doing, what the DNRC is doing, what FWS is doing so we have an idea when there might be a potential for a contractor working across the fence… You know give him a better deal – he's right there – instead of having somebody else have to mobile in for a small piece that might not be profitable, they can just add to it (Pers. Comm. CM7, 2016)

BCCA members believed that contributing dollars to a single contract in this way allows them to treat more acreage than might be expected otherwise. These comments show that the BCCA Council has been opportunistic in their approach, taking advantage of chances to collaborate as they arise or as funding becomes available. When they do arise, agencies have an incentive to contribute dollars, as they can record weed treatment outcomes (in % infested acres, for instance) against their respective targets.

Public agency representatives on the BCCA Council were explicit that this strategy saves costs they incur by carrying a contract through agency procedures independently. In these cases, rather than initiating two independent bidding processes to vet, hire, and schedule a weed contractor on BCCA Core *and* agency-administered lands, only one is required.

> Weeds are categorically excluded from MEPA, but we first have to invite bids, then write a contract which is reviewed, etc. It saves me hours of paperwork in the office when the Blackfoot Challenge runs a weed contract (Pers. Comm. CM14, 2016)

> When we can cost-share on a road rather than paying the full freight on a road, and other people are using that road…there is a savings to that person. And a savings to everybody because now you're all sharing costs. Versus one agency inheriting all the costs. (Pers. Comm. CM19, 2017)

Another agency member described when their contributions to a contract are under a certain legally prescribed amount (in this case $1000), the DNRC can reimburse funds to the Blackfoot Challenge for services rendered rather than open up a bidding process.

> If [the contract is] over a certain amount ($5000) we have to run through a bidding process... if we go over a thousand bucks we have to do something called

> a grey box, and we still have to get telephone quotes for that (Pers. Comm. CM16, 2017)

Agencies can save overall costs by contributing small dollar amounts to existing contracts. In one case, the Blackfoot Challenge modified a contract to allow a scheduled contractor to treat a post-harvest site on DNRC ground "concurrently with weed treatments on Blackfoot Challenge lands," for which they were reimbursed (#4, in Appendix E; BCCA EQIP Weed Spray Contract 2011-18, 2012). In the words of one BCCA Council member, the strategy to cost-share on weed contracts "makes sense to all parties involved, you get more bang for the buck" (Pers. Comm. CM17, 2016).

Another approach to facilitating landscape-level weed management across the total BCCA entails cooperating with the two grazing lessees. Grazing has been permitted on the BCCA lands through two long-term grazing leases. Cattle are permitted to graze on approximately 4500 acres of 5600 BCCA Core acres (approx. 80% of the total) and more than 400 acres of DNRC lands. Because cattle readily transport weed seeds, they represent a prominent vector for weed spread across BCCA lands. To address this problem, the BCCA Council provides an incentive for lessees to manage noxious weeds on the BCCA Core pastures in the terms of the grazing lease contract. The lessees are offered compensation at $20/hour against their lease rate in exchange for conducting weed control on their pastures, fences, and roads ($18/AUM is standard, but can be reduced to the base rate of $8.75/AUM)(BCCA Grazing Work Group Minutes, Feb. 2017). One of the two lessees who graze cattle in the BCCA Core said this financial incentive provides an added benefit.

> We do all of the spraying on our lease, and the BCCA pays for the weed spraying…In our lease, we are completely under control. We have to spray every year but it's all been treated. They pay for spray and I pay with time and fuel (Pers. Comm. CM8, 2017)

This incentive for grazing lessees is intended to create landscape scale ecological benefits for range and native grasslands, and cost-savings to adjacent landowners and the Blackfoot Challenge, who incur weed management costs. In effect, it is a strategy aimed at sharing the burden of weed management with grazing lessees, who already have a livelihood interest in healthy rangelands.

Though it is not within the scope of this thesis to document actual ecological impacts of BCCA management, there is evidence that suggests ecological conditions have improved. The

BCCA Council has contracted treatment of over one thousand acres on the BCCA since 2008, including revisited sites, which are primarily road corridors and native parks. The BCCA Land Steward, who has been consistently on the property since 2008-2009, stated that he has, "noticed a big change over six years on the BCCA and we're cleaning up slowly but surely" (Pers. Comm. BC1, 2016). Indeed, all agree weed management will continue to be an ongoing effort for each individual landowner. Importantly, however, there has been notable effort to increase efficiency in weed management by coordinating financial resources, spraying together at proper times, and sharing tools and contractors.

In line with the Memorandum of Understanding (MOU) between BCCA landowners, the BCCA Council shared and leveraged financial resources to augment weed treatments across the BCCA. BCCA Council members are unanimous in their shared belief that noxious weeds are a landscape scale social-ecological problem, and that cooperation is essential to success. They also agree that funding weed management is the largest hurdle they all face. Both agency and non-agency BCCA Council members said that acquiring and sharing funding has been the primary way they have cooperated on noxious weed management. Examples have been provided above that document their success at leveraging funding for weed management, specifically through sharing costs and administrative burdens, to facilitate the weed management practices of BCCA landowners.

**Design and Support-Based Approaches to Forest Connectivity**

In contrast to multi-owner weed treatments, there are many reasons why designing and funding joint forest management treatments across boundaries in the BCCA is more difficult. First, administrative law requires land management agencies to initiate environmental analyses and public involvement processes for forestry activity (i.e., MEPA and/or NEPA) for any project without a categorical exclusion. These analyses can take several years to complete, which exceeds typical grant funding cycles the BCCA Council has used to manage forests (e.g., NRCS-EQIP, DNRC-Forests in Focus, FWP-UGBHP; Appendix F). Second, administering a forest management project is generally costlier for agencies than weed treatments, as contracts are more complex and operating costs are greater. And third, differing legislated mandates and administrative missions among agencies constricts the range of projects that would comply with

all partners' legal commitments. Indeed, the USFS, MT DNRC, and MT FWP each has unique purposes, pools of resource management expertise, and trust responsibilities. Most BCCA Council members noted that these were the primary obstacles to cooperative forest management across the BCCA. The following comments demonstrate these concerns.

> When you deal with agencies like DNRC and the USFS, there are a lot of things they just can't do. You can't really do forest treatments across boundary, it just doesn't work because they have MEPA and NEPA. They have their own policies and procedures and laws. (Pers. Comm. CM6, 2017)

> There really isn't much [cooperation] on forests. We basically all kind of manage our own timber the way we manage our own timber (Pers. Comm. CM7, 2016)

> It's tough to manage. We can't physically manage the USFS or DNRC. We can make suggestions and work with them, and they can work with us, but the state definitely has different objectives than the feds. And our objectives up there are probably close to the states, but still not the same. (Pers. Comm. CM10, 2016)

In particular, BCCA Council members recognized that forest management actions on public lands must follow state and federal establishment and other laws proscribing agency authorities and priorities (e.g., USFS – NFMA of 1976; DNRC – MCA 77-5-301; FWP, MCA-87-1-201). Moreover, the BCCA Council does not have any special authority to steer public land management actions, nor do agencies have any more discretion in the BCCA than in other lands they administer.

Despite limitations, the BCCA council has been able to conduct what can be called landscape-level forest management on the BCCA mainly through seeking opportunities to create synergy between distinct projects. The BCCA Council approaches this goal through the use of two approaches. A conceptual diagram of these two approaches is provided in Figure 2. The first, which I term a "design-based approach," involves treating forest stands on the BCCA Core in consideration of past project activity and ecological conditions on adjacent lands. This is the most prevalent strategy the BCCA Council uses to manage the BCCA Core as a cohesive part of the mixed ownership landscape. With this approach, the BCCA Council attempts to meet cross-boundary objectives by adapting priorities and the design of treatments on the BCCA Core to blend with those across the border. This approach demonstrates a pragmatic response to agency actions in management of the BCCA Core. Contact and exchange with agency personnel are key

to this approach, as they often share their technical expertise to assist the BCCA Council in project design for BCCA Core projects.

The second strategy, which I call a "support-based approach," involves the BCCA Council's forest projects on public lands. Though there have been relatively few public agency-led forest projects in the BCCA, the BCCA Council has provided various kinds of support to public agencies to facilitate the forest management they have done. This is especially true when an agency's project goals and objectives mirror or complement those detailed in the BCCA Management Plan for the Core (See Appendix A). The support-based approach demonstrates a pragmatic form of engagement with the public agencies, which are otherwise constrained by laws and rules over which the BCCA Council has little control.

Below, I provide two examples to illustrate each of these two approaches. The first example involves how the BCCA Council was able to implement forest treatments on the BCCA Core that abut harvests on adjacent DNRC lands. The second involves the BCCA Council's direct participation in the inventory, design, and administration of one of MT FWP's first ever large-scale forest restoration projects within the Blackfoot-Clearwater Wildlife Management Area (BCWMA) within the BCCA.

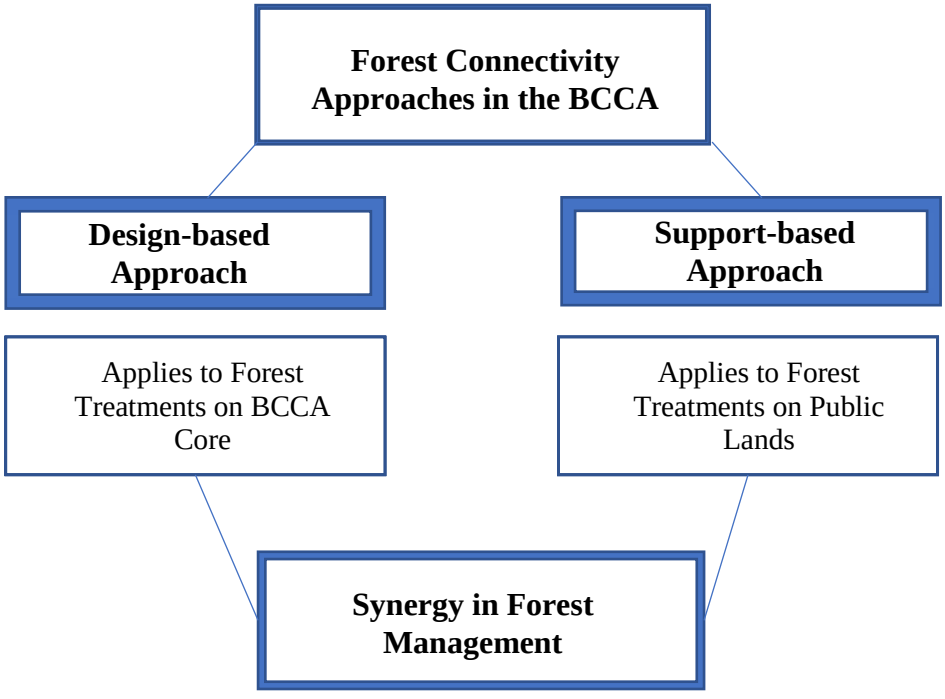


*Figure 4. Conceptual map of two primary approaches to management for forest connectivity across BCCA Core and Public lands*

## Design-based Approach to Forest Connectivity

In the design-based approach, the BCCA Council works to design forest management treatments on the BCCA Core to generate conservation benefits across boundaries. Connected systems like forests and wildlife populations are often the target of the BCCA Council's design-based approach. In practice, the design-based approach means applying complementary forest treatments in similar locations to reduce the "checkerboard effect" that occurs when adjacent landowners manage their forests differently. In the example below, I show how the BCCA Council adjusted their priorities in response to harvests that occurred on MT DNRC managed State School Trust Lands adjacent to the BCCA Core.

The BCCA Core is delineated by 48 forest stands as part of the BCCA Forest Management Plan. Of the 48 stands, 24 stands have been fully or partially treated as of the close of the winter 2016-2017. Of these 24, 10 stands share a border with adjacent landowners. Half of these adjacent stands are owned privately, while the other 5 stands are managed as DNRC State School Trust Lands (Appendix G). Here, of key interest are the five stands that border DNRC lands, as all five of these stands are stacked north to south along the western border of the BCCA Core and cover most of the acreage along this shared border.

Between 2009 and 2012, the DNRC conducted four timber harvest and salvage projects on five sections of their ownership within the BCCA, totaling more than 1000 acres in total (Sec. 4, 5, 9, 16 T15N R12W and Sec. 16 T15N R11W). In the fall and summer of 2009, two timber sales on DNRC sections were completed in the area ("Jumpstart Jones" in Sections 4 and 9 T15N R12W and "Jumpstart Doney" in Section 16 T15N R11W). The following March, the DNRC submitted an Environmental Assessment (EA) for the Shoup-Jones forest management project, which was intended to mitigate impacts from mountain pine beetle infestations, and generate revenue for the Trust (DNRC Shoup-Jones EA, 2010). The Jones section fell within the BCCA (Sec. 16 T15N R12W) and involved silvicultural treatments on the entire 640 acres of this section. In 2011, the most recent project, entitled the Monture Project, again treated roughly 300 acres in Secs. 4, 5, and 9 T15N R12W falling on the western border of the BCCA Core (DNRC Monture EA, 2011). This intensive management left a stark contrast along the border between the BCCA Core and DNRC lands. In response, the BCCA Council initiated forest restoration treatments along the border.

> I know one of our goals was a cooperative timber harvest example. DNRC did a cut, and when you stood at the fenceline you could see the difference. And so it would be the same habitat type, and…we can avoid that sort of black and white boundary management (Pers. Comm. CM17, 2016)
>
> Some intensive forestry treatments have gone on in that area – Rodeo Park all the way up to Mollet Park – DNRC did a lot of forest management, and we did a lot of forest management (Pers. Comm. CM6, 2016).

Between 2009 and 2016, the BCCA Council was awarded two large grants (Jumpstart II and Forest in Focus I) and applied for funds through NRCS' Environmental Quality Incentives Program (EQIP) for forest treatments. These funding mechanisms supported restoration work in twenty stands within the BCCA Core, including the five of focus here (Appendix F, X-). With funding from Jumpstart II (2009-2010) and Forest in Focus I (2015-2016), the BCCA Council treated a total of 182 acres in three separate stands adjacent to DNRC sections (Dick Creek Park, East Rodeo Park, and Mollet Plantation; Appendix F). The West Ridge and Mollet N. units were funded by NRCS-EQIP dollars, adding an additional 157 acres of treatment to the border sections.

In these projects, the BCCA Council adjusted their management efforts on the BCCA Core both spatially and prescriptively to correspond with those on the DNRC border. Their response to the DNRC harvests demonstrates a focus on addressing cross-boundary forest goals. One comment from the BCCA Land Steward was indicative of the BCCA Council's design-based approach to manage BCCA Core forests in the ecological and management context of surrounding lands: "if DNRC is treating one side, we can treat similarly on our side. Maybe it's not cooperative funding, but similar treatments. You might try and mimic them on one side" (Pers. Comm. BC1, 2016). This comment describes a pragmatic responsiveness to adjacent landowners' actions. Though the BCCA Council had no management control over the DNRC's project, they used their management authority over BCCA Core forests to promote ecological connectivity.

A significant mechanism to blend post-project forest conditions involved the sharing of knowledge and expertise, entailing close interaction between the DNRC and the BCCA Council. Through meetings and field visits, the BCCA Council was involved early on in scoping the DNRC projects, which fed back into the BCCA Council's decision-making on the BCCA Core forests. Multiple BCCA Council members noted that the specific forest treatments in these five

sections were developed, in part, through consultation and site visits with DNRC on their project sites.

> We went on a couple tours up there too with everyone just to kind of show them what I was doing and explain that so they could either take it or leave it basically…We could go out there and look at it together and they could decide if that was something they wanted to carry across…and they could change it if there was something they didn't like about it. (Pers. Comm. CM16, 2017)

> So, what they call the plantation up there actually extends into [DNRC] lands. So the state lands come in and they did their thinning of it before the BCCA [Council] did theirs. And it actually looked pretty good…So we went and talked to them about what should we do and they said this is what we did and it don't look too bad (Pers. Comm. CM7, 2016)

Here, the BCCA Council setting enabled close interaction with agency personnel as part of traditional scoping processes, but also after the project had been completed. In a sense, the BCCA Council was able to evaluate DNRC's harvest and decide to what extent they would replicate it on the BCCA Core.

Council members and the document record indicate that a significant reason for similar treatment designs was the similarity of forest conditions, i.e., species composition, fuel loading, and susceptibility and history of disease and mountain pine beetle infestation. These ecological attributes and risk-factors made similar treatments on the border appropriate.

> Then we had the Pine beetle hit and we started doin' forest management…would we have done hundreds of acres of treatment as fast or as deliberate if the Pine beetle hadn't come? Probably not. (Pers. Comm. BC1, 2016)

> They had similar stands, their stands are pretty similar in general. And [the DNRC was] also trying to get away from shade tolerant species and [the BCCA Council] really are too with restoration. They're trying to get Ponderosa Pine and Larch where they have it. So, it kind of worked out that way, kind of just the nature of what it was. It blends better. (Pers. Comm. CM16, 2017)

Moreover, the BCCA Council's objectives for BCCA Core forests resonated with those of DNRC, in this case. A look at DNRC's objectives for the Monture project, and the objectives of the abutting West Ridge Unit on the BCCA Core provide additional examples of how their objectives aligned.

> to reduce fuels within the W.U.I., increase growth and yield of pre-commercially thinned trees, capture sawlog value of poor quality trees, and prevent future value loss (DNRC Monture EA, 2011:1).

> to reduce wildfire potential and address forest health concerns including insect infestations, overstocking, and depressed understory vegetation (BCCA EQIP Fuel Break Project, 2012:1).

Similar to the DNRC, the BCCA Council's forest management priorities are to encourage long-term growth of merchantable timber (BCCA Management Plan, 2008; Appendix A). With the apparent overlap among these objectives and forest conditions, DNRC's active management revealed an opportunity to treat forests similarly to increase structural and functional connectivity across the boundary.

> We do what we do regardless…it's Trust land and we're there to generate revenue. And what I did do that I haven't always done in other places is really try to make…these seamless boundaries so it doesn't look like a checkerboard when we're done. (Pers. Comm. CM16, 2016)

Interpretation of these various data sources (i.e., comments from BCCA Council members, interpretation of treatment prescriptions, and the temporal and spatial overlap between these projects) reveals an important aspect of the BCCA Council's effort to pursue landscape connectivity in forest management. This example illustrates how the BCCA Council is in a position to manage forests in close connection with surrounding landowners. By identifying compatibility in management objectives, utilizing the available expertise of public agency personnel, and assessing outcomes on adjacent lands, the BCCA Council smoothed the ecological transition across the border.

### Support-based Approach to Forest Connectivity

The second approach to implementing forest connectivity on the BCCA is a support-based approach. In this approach, rather than the BCCA Council leading the action, it supports public land managers on projects occurring on their respective ownerships, especially those that complement the goals and objectives of the BCCA Management Plan for the Core. I use an example involving forest activity on MT FWP lands to illustrate this approach. Unlike the DNRC harvests, this project did not abut BCCA Core boundaries, and no subsequent forest management activity on the BCCA Core was specifically framed, to the same extent, as a "response" to MT FWP's project. Rather, the BCCA Council, in this case, facilitated FWP's

project by providing a forum involving resource management professionals with technical expertise, which FWP relied upon to meet their objectives.

In 2009, the Montana legislature granted FWP the authority to operate a forest management account. Under this authority, FWP is required to implement a forest management program that, "addresses fire mitigation, pine beetle infestation, and wildlife habitat enhancement giving priority to forested lands greater than 50 contiguous acres…under the department's jurisdiction" (FWP Forest Management Authority, MCA 87- 1-201, 9, (a)(iv)). The FWP chose the BCCA as one of the first three sites across the state to pilot their new mandate. In 2009-2010, the FWP undertook a 350-acre forest restoration project on the Ovando Mt. Unit of the Blackfoot-Clearwater Wildlife Management Area (hereafter, the "game range").

> I ended up designing and implementing the first large-scale forest management project that the department had ever really put on in its almost hundred-year history. You know we hadn't ever really headed down that road. Historically we managed grass and winter range, and as we acquired more and more [land]… we decided to give it a try on the BCCA. It was a big effort. (Pers. Comm. CM13, 2016)

However, as FWP had never operated a contract of this kind, the new requirement opened a space for collaboration with other entities and agencies; it was not just advantageous but necessary. As one interviewee from FWP who was closely involved in the project stated, the project's success hinged on their administration of what was an altogether novel kind of forest management program.

> We had to develop an entire program that didn't exist before to wisely manage and restore forested habitats…we had no forester, we had no funding mechanism to deal with either expenditures or receipts from forest management projects (Pers. Comm. CM13, 2016)

This agency BCCA Council member considered the collaborative support of the BCCA Council essential to the success, and efficient execution, of what was ultimately a risky and novel project for the department.

The BCCA Council played a supporting role from the early planning stages through implementation. In 2008, FWP inventoried forests on the game range at the base of Ovando Mountain. When introducing the inventory to the BCCA Council, the agency framed it as an opportunity to benefit wildlife populations on the BCCA Core, as well as to gather important stand and habitat information on FWP lands in the BCCA (BCCA Council Meeting Minutes,

April/August 2008). As such, the BCCA Council helped financially support more than a quarter of the costs of the inventory ($2,500 of $8,500). The inventory was completed in 2009, and informed the *Ovando Mountain Unit-BCWMA Forest Habitat Improvement Plan*, which FWP used to design forest restoration activities under the new authority to increase or improve elk, deer, and non-game habitat (Paulu, 2009).

Though, the BCCA Council had not implemented much forest management on the BCCA Core by 2010 (Appendix F), nonetheless FWP's restoration plan for the game range synced with the wildlife-oriented forest and timber management objectives of the BCCA Management Plan for the Core. A look at the management objectives for "Wildlife" in the BCCA Management Plan for the Core illustrates their similar priorities, as most of these pertain to how, where, and with what considerations forests are managed on the BCCA Core (BCCA Management Plan for the Core, 2008; Appendix A). Due in part to their shared forest management goals and strategies, the BCCA Council continued to support FWP's project after the inventory was completed.

The BCCA Council's cumulative technical expertise assisted the FWP in carrying the project past the initial planning stages and into implementation. Indeed, an essential contribution of the BCCA Council was the interface it provided among multiple resource professionals with career experience and organizational resources. Council meetings served as forums for communicating between FWP and other agencies. Inter-agency consultation and technical support for forest treatment design, contract administration, and logistics were key to the project (FWP Forestry Program Legislative Report, 2017). As the key interviewee in this case noted, "DNRC literally volunteered their foresters to help us lay out the harvest prescription on the ground" (Pers. Comm. CM13, 2016). He went on to add that,

> The USFS worked directly with me to make some amendments to their road network, timber easements, administrative use permits to allow us to haul fiber and equipment across forest service lands, we had private landowners along the little Donney road that agreed…We went through the BCCA Core…and the scattered landowners on the east side. All that took lots and lots of work on the part of the BCCA Council and individuals on the BCCA Council to strike those agreements (Pers. Comm. CM13

The FWP has acknowledged their reliance on the support of other entities such as the BCCA Council, which was especially true in the early years, to carry out their new authority. As FWP noted in their report to the 2017 Montana legislature, DNRC's timber sale contract was used

early on as a template to develop their own administrative infrastructure for advertising, awarding, and administrating present and future timber contracts (FWP Forestry Program Legislative Report, 2017). The FWP highlighted that collaboration will continue to be key as they build capacity for forest management.

> A mix of private contractors, interagency agreements, and FWP timber sale contracts will continue to be used…to accomplish work under a variety of circumstances while also tapping into different areas of expertise to implement forestry projects (FWP Forestry Program Legislative Report, 2017).

In this light, the BCCA provided a testing ground and the BCCA Council served as an incubator for the technical and administrative aspects of FWP's new program.

Compounding their lack of technical or administrative infrastructure to carry out a forest treatment or timber contract, at this time, was also palpable uncertainty over how the public would react to managing forests for wildlife. As one FWP BCCA Council member noted,

> It's been slow to start, and I think that's to be expected. We're not in the timber management business. That's something that – you know wildlife and timber management have always kind of been at odds with each other but we see the ecological benefits to timber management and we're trying to find our ground on how to manage timber with wildlife objectives (Pers. Comm. CM15, 2017).

I interpret this comment to reflect awareness of the historical tensions underlying forest management and wildlife conservation, captured in the emblematic slogan "Owls vs. Jobs."[6] Given the paradigm shift in the agencies' mandate for broader ecosystem objectives, managing public perception was as critical as managing forest resources, especially in the early years of the new authority. Several BCCA Council members (agency and non-agency) I spoke with credited the BCCA Council with providing a nexus between the agencies and the public through an effective communicational platform that enables productive conversation, and trust-building that has mitigated conflict and facilitated public land management activities.

> [Agencies will] get less pressure from the fruit loops that are gonna litigate, file a lawsuit over the littlest things just to tie it up because they think loggin's bad…so ya I think its beneficial to them as much or probably more than it is to us. (Pers. Comm. CM10, 2016)

[6] A slogan which emerged out of the timber wars in the Pacific Northwest 80's and 90's, touched off by the listing of the Northern Spotted Owl as an endangered species and which resulted in the shutdown of the wood-products industry in large portions of the region. FWPs project to manage wildlife with forest management practices, then, is situated in a long history of conflict.

> If [my agency] would have scoped a project there before we had the Council, I think we would have less support and I think people would be more vocal about not really wanting to know what I want to say about our projects…it saved me a lot of time because up front I knew who might not like it…I think the BCCA allowed us to have that relationship already established so it wasn't a cold call (Pers. Comm. CM16, 2017).

> When you have partnerships its easier…say I come to the Council and say we're going to be working on a project and its NEPA…you have an instant forum to communicate to people…And it's a nice step and it helps to develop trust and understanding about your project and build support (Pers. Comm. CM 19, 2016)

To this effect, FWP's project received only one public comment, which was in support of the project (FWP Environmental Assessment, 2010). To say the least, this outcome was a surprise.

> If the USFS had unilaterally proposed a project of a tenth of that size anywhere else, especially in critical grizzly habitat, lynx designated critical habitat, upstream from Bull Trout, they would have been litigated or some version of an appeal. But that did not happen in our case and I think that is wholly to the credit of the collaborative work that went into designing it, scoping it, tour after tour after tour with the community, you know, it just worked. And it worked because of that groups efforts as well as our own. (Pers. Comm. CM13, 2017).

In summary, the above two examples demonstrate the BCCA Council's efforts to operationalize landscape connectivity in the forest sector. Each approach plays a unique role in furthering the implementation of the landscape connectivity principle, and is relevant under differing circumstances, i.e., where and by whom a forest treatment is put forward. In the case of the design-based approach, the BCCA Council responds to adjacent agency actions by adapting their forest management actions on the BCCA Core, over which they have direct management control. In the example offered above, through close-interaction with DNRC personnel, the BCCA Council designed forest treatments to reflect the ecological conditions and project activity across the border with DNRC. In this case, the BCCA Council and DNRC were confronted by similar management problems and objectives that made similar designs appropriate (i.e., spread of Mountain Pine Beetle infestation, increased fire risk, potential loss to timber value, and degraded wildlife habitat conditions). Though the forest treatments on the BCCA Core and DNRC sections were independently executed, the interactions in this case translated into connected ecological outcomes on each ownership. The example suggests that the BCCA Council has sought to minimize fragmentation in forests across boundaries using design-based

approaches specifically on the BCCA Core, which resulted in greater connectivity across a total of approximately 1,500 forested acres within the greater BCCA.

With regard to the support-based approach, the BCCA Council facilitates forest treatments on public lands that complement or sync with the forest management objectives in the BCCA Management Plan for the Core. This approach stands apart from the design-based approach specifically because the BCCA Council does not have direct management control over the segments of the BCCA that are public forests. Nonetheless, through technical and other kinds of support and input from the BCCA Council, the BCCA Council is able to facilitate complementary forest treatments on non-BCCA Core forests. In the example above, FWP designed treatments for 350 forested acres on the game range in an effort to reduce fire risk and improve the productivity of grasses and understory vegetation critical to ungulates and other non-game wildlife (FWP Environmental Assessment, 2010). These treatments were framed as an opportunity to reach cross-boundary forest management objectives, increasing biodiversity and reducing fire risk, and generate mutual benefit to adjacent landowners. Thus, the support-based approach is one avenue through which the BCCA landowners cooperate.

**Summary: Landscape Connectivity through Public-Private Partnerships**

This study found that the BCCA Council defines the principle of landscape connectivity to mean managing the BCCA as a cohesive unit to the extent practicable, namely through sharing resources and synchronizing actions. The origins of the principle are rooted in the "ridge-to-ridge" approach adopted by the Blackfoot Challenge. The Blackfoot Challenge pursued the BCCA project as an opportunity to operationalize this approach in the context of actual land ownership and management. The selection for the boundaries of the larger 41,000 acre BCCA reflect that landscape connectivity has undergirded the BCCA project since its formation. By design, the BCCA is a linkage zone between the mountain and grasslands from north to south, encompassing a land-use gradient stretching from near wilderness to privately managed farmland.

The boundaries of the BCCA circumscribe private, state, federal, and Blackfoot Challenge owned lands. In this context, the BCCA Council's actions are constrained by different

jurisdictions, which I displayed as a three-tiered nested framework. At the highest level are the authorities, laws, regulations, and unit-level management plans of each landowner, including the BCCA Management Plan for the Core. These components constitute sideboards that proscribe what actions are permitted on any given parcel in the BCCA, informed by the legislated mandates, missions, and goals and objectives of BCCA landowners. At the second level, the BCCA MOU is serves as the formal mechanism to encourage cooperation and coordination between jurisdictions for mutual benefit and interest, while honoring existing sideboards. As shown, how the BCCA Council cooperates at the project level is a function of where actions occur, who leads the project, and what goals and objectives are being addressed for which resources.

My research found examples demonstrating the BCCA Council has been able to coordinate both noxious weed and forest management in different ways. The BCCA Council's primary strategy for greater efficiency in noxious weed management has been to target contract level coordination, mostly through cost-share though they have also used single contractors on multiple ownerships. On multiple occasions, the Blackfoot Challenge has been reimbursed for weed treatments at dollar values small enough to avoid triggering more time-intensive agency procedures, such as competitive bidding. Additionally, agency personnel said they have contributed funding to adjacent ownerships because they saw the benefit. In the forest sector, the BCCA Council has navigated administrative constraints by using their own authority over BCCA Core forests to treat in the ecological context of surrounding ownerships, which I called the design-based approach. This approach is possible because the BCCA Council has been highly successful in funding forest restoration projects on the BCCA Core, utilizing several distinct authorities, programs, and funds from private, state, and federal sources. The benefits seem to flow in both directions, however. Agency personnel expressed enthusiasm about participating in the BCCA Council, as it confers numerous benefits. Key examples above show that the BCCA Council creates a direct channel for agency personnel to consult with other agencies, organizations, and local residents that contribute knowledge or other kinds of financial and logistical support.

In all of the examples of cooperation and coordination shown above, inter-organizational communication proved to play a central role. Results indicated that having an established venue for communication has been a catalyst for success in multiple ways. Whether for noxious weed

or forest management, scheduled and unscheduled updates at BCCA Council meetings often reveal opportunities for cost-sharing, productive consultation and sharing expertise, or for coordinating management responses to emergent concerns (e.g., mountain pine beetle, weed infestations). These results also suggest that regular interaction and communication between public agencies and local residents enables relationship and trust-building. This finding had special relevance for FWP as they implemented their new mandate to manage forests for wildlife, and needed to clarify and assuage local concerns about its implications and consequences.

In sum, the BCCA Council has interpreted and implemented the landscape connectivity principle over the past decade to entail sharing financial, technical and other administrative resources across the multiple BCCA landowners to generate social and ecological benefits. In lieu of a formal management plan for the entire 41,000 acres, the BCCA Council has adopted the BCCA Management Plan for the Core, complemented by the MOU, as the standard for cooperative actions. Together, these are considered to be flexible and useful, and perhaps more so in comparison to more prescriptive plans or policies for the larger area as a whole. The results show that the BCCA Council has achieved a level of coordination which would be unlikely without the BCCA's novel governance institution and the actions of the BCCA council itself.

## Chapter Summary

In this chapter, I showed that these key principles are firmly rooted in the mission and focus of the Blackfoot Challenge, and in the guiding documents and texts that detail the BCCA Council's responsibilities and authorities. These results indicate that the BCCA Council has acted in accordance with these principles by using different strategies in context- and resource-specific circumstances.

The BCCA Council understands the community involvement principle to mean a set of standard practices that enable citizens who use, or have any other interest in, the BCCA Core to access decision-making processes, and influence outcomes. As shown, they have developed a strategy employing several techniques meant to support ongoing involvement in decision-making and open, inclusive dialogue to build consensus on complex challenges they face. The BCCA

Council has incorporated and balanced diverse interests in decision-making processes and outcomes over time. However, this study revealed lingering ambiguity in defining who is a part of the BCCA community, and thus who should be involved or benefit most directly from the BCCA. Given present concerns about declining participation, which works against the long-term functionality of the BCCA Council model, this ambiguity may also have strong implications for the representation of diverse values, interests, and resource management concerns of watershed residents and BCCA users. The BCCA Council's successes in conflict resolution notwithstanding, increasing consensus on motorized use may indeed be a bellwether indicating less diverse representation. These findings, which I interpret in more detail in the following chapter, raise important questions for the BCCA Council going forward. Indeed, as the BCCA project enters its second decade, it may now be time for the BCCA leadership to investigate the definition of the BCCA "community," and innovate or expand upon community involvement strategies to be able to sustain local interest and volunteer support.

In this chapter, I showed how the BCCA Council understands the principle of landscape connectivity through public-private partnership to mean leveraging partner resources on the BCCA Core or adjacent public lands. In more than one case, doing so has generated mutual social and ecological benefits for cooperating landowners, and synergy in managing cross-boundary resources. This study shows that the BCCA Council's approach to landscape connectivity has been opportunistic, as they have capitalized on collective potential when and where it has been feasible. The above examples show that how the BCCA Council cooperates varies by project, and even by resource, in light of context-specific administrative and financial barriers. However, the above examples of cooperation on noxious weed suppression and joint forest management demonstrate pragmatism and sophistication in navigating these barriers, especially the confines of their own authority, and that of public agencies. In large part, this stems from the formal agency recognition and support the BCCA project has received, inter-organizational communication that occurs within the Fire Hall in Ovando and out in the field, and a sophisticated and multi-faceted funding strategy. Therefore, this study has revealed a strong potential for successful execution of shared goals now and in the future. In the following chapter, I interpret these findings in more detail, and offer what I consider to be the central components of a future strategy to operationalize, and improve upon, cooperative management across the BCCA.

## 5. CONCLUSION: REFLECTIONS AND RECOMMENDATIONS

This thesis examines some of the opportunities and challenges in managing the Blackfoot Community Conservation Area (BCCA) in the Blackfoot watershed of western Montana, a hybrid model of private-public ownership and governance. Community-owned forests are increasing in the intermountain West, but there has been relatively little empirical research on them. Yet, this increase reflects broader changes in forest tenure occurring around the world, including in the U.S., where public entities devolve to resource users or "stakeholders" varying degrees of authority over public forests. The example of the BCCA is particularly novel given its objective to cooperatively manage the (privately owned) 5,600 acre "Core" with adjoining private, federal and state lands (for a total of 41,000 acres) through a dynamic landscape approach. Since the creation of the BCCA Management Plan for the Core in 2008 and subsequent MOUs with adjoining landowners, there has not been a systematic study of how well its actions reflect founding objectives. As such, the purpose of this study was to examine the definition, charges and empirical operationalization of two of the BCCA's key management principles – community involvement and landscape connectivity through public-private partnership. In this concluding chapter, I summarize key findings and offer reflections and recommendations for BCCA governance going forward.

The community involvement principle is interpreted as the charge to create opportunities for citizen participation in governance of the BCCA, and most directly, the BCCA Core. However, since 2005, a persistent question underlying the BCCA Council's work has been who constitutes the "community" for whom and by whom the BCCA Core should be managed. The founders established that the Blackfoot watershed community of residents, landowners, and users were to be the primary benefactors and participants, serving as the population base for filling BCCA Council seats. Based on close examination of motorized use planning, this thesis concludes on three key findings that influence the current and future operationalization of the community involvement principle: heterogeneity in the BCCA "community," institutions to account for heterogeneous interests, and declining participation. I provide recommendations for the BCCA Council to manage in accordance with the community involvement principle going forward based on these findings.

The BCCA Council understands the principle of landscape connectivity through public-

private partnerships to mean the coordination of management practices and resources toward their shared interests in cross-boundary ecosystems to generate ecological and management benefits. This thesis finds that operationalizing the principle has required being creative in dealing with the jurisdictional barriers and budget limitations of independent partners. I have provided several examples of how the BCCA Council has navigated these barriers. They have pursued and acquired joint funding for a cooperative approach to noxious weed management; and used design and support-based approaches in the forest sector. The BCCA Council manages BCCA Core forests in the ecological and management context of surrounding lands, and assists in the project work of public agencies in various ways. This thesis concludes on three key findings that help to explain how coordination at the landscape-level has occurred and may be improved in the future: formal recognition by state actors, effective communication, and facilitating funding for landscape-level management. As such, this thesis makes recommendations on how to pursue landscape connectivity going forward in each of these areas.

Because the methods used in this study were geared toward exploring this particular case, yielding generalizable recommendations that are applicable to other cases was not its objective. Thus, comparisons with the literature need to recognize the highly contextual nature of community owned forests, especially their unique histories and social and ecological characteristics. Nevertheless, I close with reflections and recommendations for future research studies in this field, particularly with regard to examining the opportunities and challenges associated with these two important principles.

## Community Involvement in BCCA Governance

### Heterogeneity in the BCCA "Community"

The original definition of the community for whom and by whom the BCCA Core is to be managed is the Blackfoot watershed community. This is established in official statements of the Blackfoot Challenge, the management plan and other formative documents, and the perspectives of many BCCA Council members interviewed in this study. Yet, this study finds that the Blackfoot watershed "community" is heterogeneous and dynamic, as there are many social, political, and economic differences between residents of the watershed that affect perceptions of "community," and forces at play that reshape its population over time. Moreover,

users of the wider BCCA and financial supporters of the project have not strictly been watershed residents, which broadens the number and type of stakeholders with an interest in the BCCA landscape. Thus, the task of defining who is a part of the community is complex in this context, and has been an ongoing, underlying, and unresolved question with consequences for how the community involvement principle is put into action.

This finding relates to literature examining community-based natural resource management and collaboration in other cases. Research has shown that definitions of community are often over-simplified, as they assume that shared residence in a place equates to a shared set of norms or a cohesive social structure (Agrawal and Gibson 1999, 2001; Belsky 1999; Brosius et al. 1998; Li 2002). This assumption ignores the social processes and internal differences that exist within a place, especially differences in social standing and socio-economic status among others (Belsky 1999; Agrawal and Gibson 2001; Berkes 2009). Power discrepancies can lead to a lack of representation and inequitable distribution of benefits, as small powerful factions may seek political gain or profits from public goods or resources (Baker and Kusel 2003). Agrawal and Gibson (2001:2) suggest that initiatives like the BCCA should attend to, "multiple interests and actors within communities" and they argue that the focus should be on, "the process of how these actors influence decision-making" to promote more equitable governance.

How BCCA Council members define the community is an important factor affecting access to and influence over decision-making processes and outcomes. Within the Blackfoot watershed, differences in location and length of residence affect how the "community" is perceived and defined. Some BCCA Council members perceived that residents from different parts of the watershed have differing stakes in the BCCA Core, and are more or less well-suited to make decisions. For example, some members that lived nearby felt their input should have more weight in comparison to residents living in Bonner, Lincoln, or Seeley Lake. This was primarily because they felt nearby residents were more familiar with the landscape, and had more reason to manage it well and not abuse it. Others felt the opposite, that nearby residents should not get special treatment because the BCCA Core is for watershed and even broader public benefits. Definitions are also related to differences in watershed residents' social standing, and historic ties to the area. Shifting population demographics, and a burgeoning local recreation economy, contribute to a constant state of local flux, as new and seasonal residents

increasingly make homes in the neighborhoods of multi-generational landowners. Advocates for increased motorized use commonly stated that people who were "born and raised" there were more entitled to the BCCA Core in comparison to newer residents, who they saw as "outsiders" that lacked knowledge of local custom, history, and the landscape itself. Thus, evidence from motorized use planning shows the BCCA Council continues to wrestle with the tensions and uncertainties surrounding for whom the BCCA Core was created, and questions about who has or should have a greater influence in shaping its management priorities.

Despite these varying claims to the BCCA Core, the BCCA Council has embraced an inclusive definition and understanding of the broader BCCA community. Indeed, a common position across the interview sample was that any and all individuals with an interest in the BCCA Core, regardless of residence, have a right to be heard, and are welcome to attend meetings, participate in discussions, and apply for membership. The recent consolidation of the private landowner and user group membership categories into a single "stakeholder" category signifies an institutional shift in this direction. Yet, this increasing awareness of the heterogeneity of the BCCA community, and of the diverse values and interests held in the BCCA Core, brings added complexity to the "diverse representation" standard and mandate of the BCCA Council. It demands that the BCCA Council be aware of and avoid assumptions they make about the "community," and to make an effort to learn whose values, and what values, they are tasked with representing. Thus, this thesis provides cause for continual investigation and redefinition of the values and opinions of the BCCA "community" of stakeholders; and, community involvement institutions and practices that ensure diverse and heterogeneous interests are respected and included.

## Institutions to Account for Heterogeneous Interests

The BCCA Council has been able to build governance institutions capable of accommodating heterogeneous interests in the BCCA Core. In the results chapter above, I showed that the BCCA Council has developed strategies and protocols for community involvement which consist in four key dimensions: information-sharing, perspective-gathering, decision-making, and in BCCA Council membership. In the motorized use planning example, I showed that despite starkly divided views within and outside the BCCA Council, they were able

to build consensus on an appropriate motorized use plan through delegation, cooperation with adjacent land managers, and adaptation over the course of more than a decade.

The results of this study illustrate the BCCA Council's high capacity for conflict resolution. In particular, this study found that there is a strong institutional emphasis on timely information-sharing and perspective-gathering, inclusive and respectful dialogue, fair consideration of all views, and going slow to build agreement in times of conflict. A slower consensus-building process is supported by the Blackfoot Challenge board, which does not substantively intervene in BCCA Council activities, impose deadlines, nor push final votes before consensus has been reached. This enables the BCCA Council to work in the natural flow and pace dictated by the group and the nature of the issue at hand. As shown, they regularly schedule additional meetings, delegate problem-solving to work groups, identify risks and information gaps, and prolong fact-finding in times of heavy disagreement.

These findings reflect what some scholars see as a "deliberative turn" in natural resource management (Parkins and Mitchell 2005; Rodela 2012). A deliberative turn shifts the focus from how to strike optimal decisions in the context of conflict to how "process elements" should engender trust-building, learning, and mutual respect that leads to consensus (Lawrence et al. 1997:579; Parkins and Mitchell 2005; Rodela 2012:28). Deliberative approaches prioritize inclusive processes over strict representation of pre-defined interests (Parkins and Mitchell 2005; Leach 2006), and free and open dialogue about underlying values more than policy positions, or "fixed preferences" (Chambers 2003:308; Halvorsen 2006; Carr and Halvorsen 2000). The BCCA Council's emphasis on communication differs from the often criticized "announce and defend" method characteristic of top-down authoritarianism (Halvorsen 2006). This finding reflects research showing that public satisfaction and acceptance, perceptions of the legitimacy of decision outcomes, and compliance are closely related to whether decision-making procedures are perceived as just and in line with social norms and definitions of fairness (Lind and Tyler 1988; Gibson 1989; Lawrence et al. 1997).

The BCCA Council's approach to community involvement reflects and builds upon these insights. As such, the BCCA Council has developed an approach that meets and exceeds the charges of the community involvement principle outlined in the plan, and is capable of accounting for the heterogeneity in the BCCA community that this study also found. The plan's "ample opportunity" standard and "key strategies for community engagement" specifically task

the BCCA Council with public outreach and providing opportunities for public input. Yet, the plan gives the BCCA Council little guidance as to how and to what extent public input and proposals should incorporated in final decisions. Here, the BCCA Council has fleshed out conflict resolution strategies that integrate public input, and stakeholders themselves, in decision-making processes. As shown, emphasizing respectful and inclusive dialogue in small work-group settings aids in building initial compromises and solutions to complex problems, and an adaptive decision-making approach helps tailor discussions to new information that informs rule changes over time. Notwithstanding the effectiveness of their approach at reaching consensus among conflicting interests, securing community involvement in BCCA governance, and especially the meeting "diverse representation" standard, demands that people show up to meetings to make their voices heard or to sit as members on the BCCA Council.

### Challenges Facing Diverse Representation in BCCA Governance

In this study, I found two areas in which the diverse representation standard, which I interpret as a key mandate and function of the BCCA Council, is operationalized in governance of the BCCA Core. The first is in the composition of the BCCA Council, while the second is in the operational aspects of community involvement revealed by this thesis (i.e., information-sharing, perspective-gathering, and decision-making dimensions). While the thesis found evidence of a strong capacity to account for diverse interests, doing so in both areas has become increasingly challenging and a cause for some concern. I found that the challenges facing diverse representation in BCCA governance, and especially in the composition of the BCCA Council, are rooted in two key causes: (1) decreasing participation in BCCA governance, and (2) the lack of substantive guidelines for allotting BCCA Council seats according to diverse, and sometimes opposing, interests.

First, there have been fewer people applying for BCCA Council member seats, and less feedback given at the BCCA Council's meetings, events, and in other perspective-gathering venues. Despite outreach and information-sharing efforts located across the watershed, of those that do apply for membership, submit comments, or attend meetings, in recent years nearly all have been residents of the immediate area surrounding Ovando Mountain. To address a lack of applicants, the BCCA Council's primary course of action has been to relax the term limit policy,

which has met the goal to retain existing members for longer periods. However, decreasing rates of participation may undermine the durability of the current council model for BCCA Core governance, which relies on the investment of volunteer time by already busy people. Also, it raises concerns that, without new members with unique perspectives, the BCCA Council will increasingly be comprised of like-minded individuals who lack a sense of broader watershed views and interests. In this context of decreasing participation, the BCCA Council's increasing consensus on motorized use in recent years may be related to less diverse representation during the same period, and thus less basis for conflict.

Second, the guidelines for BCCA Council membership do not institutionalize diverse representation beyond accounting for agency members owning lands in the BCCA and a newly cast group of 11 "stakeholders." While on its face this new (as of 2016) "stakeholder" category indicates the BCCA Council's awareness of diverse interests in the BCCA, the actual diversity of interests in the area is poorly defined. Instead, the stakeholder category loosely refers to any and all individuals who feel they have a stake or interest in the BCCA. Where the first BCCA Council members were hand selected in 2005 by the Blackfoot Challenge to represent the "diverse community values and opinions" of the "Blackfoot Valley at large," the composition of the BCCA Council has since been a function of unpredictable variation in who submits an application. As the BCCA Council has received fewer applications for membership in recent years, and because the term limit policy now enables longer service terms for existing members, the loose characterization of "stakeholders" is even more problematic. Without some form of assurance that people with diverse interests have a seat at the decision-making table, the BCCA Council may be at risk of losing credibility as a "community-based model of decision-making," and subject to criticism from within and outside the watershed.

## Recommendations for Community Involvement

These findings lead me to answer the final question of this thesis with respect to the community involvement principle, which was "what lessons and insights can assist the BCCA Council going forward?" Below, I provide recommendations that build from the implications of defining the BCCA community broadly to mean all stakeholders, and declining community

involvement in BCCA governance as a threat to the BCCA Council and its diverse representation mandate.

The BCCA Council should operationalize community involvement in full awareness that the Blackfoot watershed community is heterogeneous and dynamic. As such, a key recommendation is that the BCCA Council reassess and update their understanding of the BCCA "community" on a recurrent basis. As more than ten years have passed since the first BCCA survey and initial scoping meetings of the Blackfoot Community Project (BCP), it may now be time to organize a perspective-gathering effort that investigates the current interests, values, and management preferences of watershed residents and BCCA users. This should gather perspectives on how the BCCA Core has been managed since 2005 and preferences for future management. It should be as inclusive and representative of watershed residents and BCCA users as possible, which could be accomplished by using multiple techniques and venues. These could include public meetings and listening sessions in multiple watershed towns, a second mail-in or online BCCA survey, formal public comment periods, land-use mapping, online comment forums on the Blackfoot Challenge web page, or even telephone surveys.

Such an investigation should also examine the effectiveness of community involvement strategies identified in this thesis. For instance, it would be helpful to know what kind of information residents would like to receive and how, their present knowledge of opportunities to attend meetings or communicate with the BCCA Council, their interest in membership to the BCCA Council, and what they perceive to be the primary barriers to being involved (e.g., transaction costs, exclusivity). The results of this process could inform a better alignment of management goals and practices with current values, and ways to adapt community involvement strategies that enable participation and diverse representation going forward.

Furthermore, to address the troublesome implications of declining participation and to operationalize an inclusive definition of community in on-going governance institutions, the BCCA Council should bolster and/or innovate routines in outreach and perspective-gathering. Information-sharing should attempt to corral untapped volunteer potential within the watershed. It should layout actionable requests to mobilize recipients to act on their interests and attend BCCA Council functions or apply for membership. Importantly, the BCCA Council and Blackfoot Challenge should identify who may not be aware of the BCCA Core or the BCCA Council, and attempt to reach them. Though many BCCA Council members felt that there is

already broad awareness of the BCCA, there are likely many gaps in the distribution of information and, thus, missed opportunities to inform and encourage participation from within or outside the watershed.

The BCCA Council's policy for perspective-gathering should be to do so early, often, and throughout the watershed. This necessarily involves timely and extensive information sharing, and diverse venues for receiving and discussing public input in multiple forms. For instance, the BCCA Council should consider hosting a certain number of monthly and annual public meetings outside of the Ovando area to ease the burden on more distant residents, i.e., from Lincoln, Potomac, or Seeley Lake. They could also provide the contact information of BCCA Council members on their website, or in select outreach materials. To encourage those who do attend BCCA Council meetings, the BCCA Council should continue to demonstrate and insist upon inclusive and respectful dialogue, which has enabled compromise and productivity in the past. In addition, the BCCA Council could design a feedback form and provide it to meeting attendees to comment on specific issues, their meeting experience, and provide their contact information. This would further demonstrate that their perspectives are important to the BCCA Council, and create a database of interested parties and public comments that can be easily referenced in the future as seats become available or issues resurface.

The BCCA Council should continue to embrace an adaptive decision-making approach, especially as new perspectives flow into BCCA Council discussions and conflicts arise. As this study shows, the BCCA Council has used adaptation over many years as an effective strategy for incorporating disagreeing parties' viewpoints into policy-making for motorized use. A part of this effectiveness has hinged upon the BCCA Council embracing a trial-based approach to gain new information. Indeed, the success of this strategy depends on continued investment in monitoring infrastructure, protocols, and strategies, as well as clearly defining measurement variables and agreed upon timelines for reevaluation.

With regard to the institutional and compositional aspects of the BCCA Council membership, the Blackfoot Challenge board should ask challenging questions about their role in governance of the BCCA. Currently, day to day land management is strictly within the purview of the BCCA Council, while the Blackfoot Challenge board oversees the fiscal, legal, and administrative aspects of BCCA governance. However, since 2005, the Board has also retained the right to approve new members, but has yet to intervene in the appointment process. Given

present concerns, it may be necessary for the Blackfoot Challenge Board to use this reserved authority to take on a more direct role in assuring that the diverse interests of BCCA users and watershed residents are equally, or effectively, represented through BCCA Council appointments. Accordingly, the Blackfoot Challenge Board should develop a policy, goals and objectives, and set of action items to institutionalize diverse representation. For instance, the Board could pass a resolution to add the charge, "to ensure a diverse representation of interests in BCCA Council membership" to the BCCA Council's delegated responsibilities. Reassessing watershed views and interests in the BCCA as recommended above could provide new baseline data from which the Blackfoot Challenge and BCCA Council could define the array of "stakeholder" seats that should be on the BCCA Council, and agree on a certain proportion that will go to people along those lines. Combined with constraints and sideboards placed on BCCA Council seat allotments, the Blackfoot Challenge Board could require that the BCCA Council take certain actions in each of the dimensions of community involvement found in this thesis, which could vary on an issue or resource specific basis. For instance, when making decisions that affect recreational opportunities on the BCCA, it may be necessary to host meetings or gather perspectives in Lincoln, Potomac, Greenough, or even outside of the watershed. For other decisions, such as regarding changes to the grazing pastures, it may be deemed unnecessary to involve such a broad array of perspectives. Given the precedent for the Blackfoot Challenge Board to take a "hands-off" approach to the BCCA Council, I recognize these recommendations deviate from well-developed organizational norms. Yet, if community involvement is to be a key principle of BCCA governance, I argue that it is the responsibility of the Blackfoot Challenge Board to be proactive and have a role in shaping institutions for community involvement.

A final consideration is that fostering an inclusive and representative process requires a more concerted effort than would be expected if the BCCA Council made decisions unilaterally. It entails additional duties and commitments, inviting outside challenges to the emergent consensus within the BCCA Council, uncomfortable dialogue, and willingness to retool routines and adapt institutions. I argue that these trade-offs and duties are part and parcel with the community involvement principle in the plan and the modus operandi of the Blackfoot Challenge. With the insights and recommendations from this study, the BCCA Council can work to better understand the dynamics and character of the community for whom the BCCA is

intended, and devise new strategies or adapt existing ones to sustain equitable and inclusive governance of the BCCA Core in the long-term.

## Landscape Connectivity across the BCCA

### Formal Recognition by State Actors

A key variable affecting how landscape connectivity is operationalized is the extent to which state and federal agencies formally recognize and integrate BCCA goals into their official priorities. The BCCA Memorandum of Understanding (MOU) serves as a formal agreement that has lent greater force and legitimacy to the landscape connectivity principle than could be expected without it. Partners acknowledge their responsibilities and interests in the transboundary resources and ecosystems in the BCCA, and have agreed to treat the BCCA as "one land management unit" to improve ecological outcomes as well as generate mutual benefits. The BCCA MOU is a mechanism for creating specific project-level agreements that utilize existing authorities and leverage resources toward common objectives.

The inclusion of "recognized authority" and government support has been shown to be a significant factor in the ability of collaborative groups to reach their goals (Margerum 1999; Moote and Lowe 2007:8). Sabatier et al. (2002:38) found that the, "success [of collaboration], in terms of reaching agreements and implementing projects, depends on active participation by state and federal agencies." Active participation can take shape in the form of investments of financial and technical resources, data-sharing, or formal co-management agreements between state personnel and resource users. Berkes (2009:1693) describes how co-management can be many things in practice, but that it broadly refers to "a range of arrangements, with different degrees of power sharing, for joint decision-making between the state and communities (or user groups) about a set of resources in an area." In this light, the BCCA MOU is an example of what Born and Genskow (2000) term a "measure of formal governmental support," which involves

> the degree to which [collaborative] efforts...are formally recognized and given standing by governmental units; and whether they formally adopt or incorporate [the collaborative group's] actions and plans into their own activities, thus fostering implementation. (Born and Genskow (2000:50)

In a review of USFS's Community-Based Watershed Restoration Partnerships program, Doppelt et al. (2002:iv) suggested that the USFS can enhance landscape-level partnership if high-level

officers "provid[e] leadership through symbolic acts like recognition and by expressing consistent message of commitment" to these efforts. Thus, the BCCA MOU serves this role, promoting cooperative actions that may not otherwise occur.

As I've shown in the results chapter above, several agency members said that having the MOU in place fosters agency cooperation in the BCCA. They said it "breaks the ice" and primes the agency for collaboration, and even that agency managers were able to work at the "ragged edge of their authority" to pilot risky projects on the BCCA, such as FWP's first ever large-scale forest management project. Although the BCCA Council has not been given unique decision-making authority over public lands, and is still confronted by agency sideboards that constrain their ability to manage the BCCA as "one land management unit," the BCCA MOU encourages tangible investment in the management of transboundary resources and ecosystems.

The BCCA MOU proposes the creation of an additional plan – the "BCCA Policy Plan" – to define cross-boundary goals in several resource sectors and zone the BCCA according to land uses. Because of jurisdictional issues, and because many perceived that it was unnecessary, the BCCA Council never completed it. Instead, they have opted to use the MOU as standalone leverage in funding and implementing public, private, or joint projects, which many see as sufficient. However, because this study confirms findings in the literature that measures of government support are critical to success, it raises the worthwhile questions of what value might the BCCA Policy Plan, or something like it, add? In lieu of a BCCA Policy Plan, what other instruments, tools, or mechanisms could enable better funding or more cohesive management of the BCCA as "one land management unit?"

## Effective Communication

Inter-landowner communication plays a central part in operationalizing the landscape connectivity principle beyond BCCA Core boundaries. All interviewees expressed how important communication has been in this regard, and attributed their successes to having a consistent platform for communication within the BCCA Council meetings. Indeed, every example I provided in the results chapter highlights a role for communication in one way, shape, or form. This study has revealed that communication enables three primary benefits:

coordination, knowledge exchange, and relationship-building. Each of these build the BCCA Council's capacity to operationalize landscape connectivity in different ways.

First, the BCCA Council meetings provide a venue in which BCCA land managers can coordinate management activities or develop joint projects. Meetings entail sharing observations and emergent concerns, and providing updates on project-level objectives for ongoing or future management activity on public and private lands. This enables the BCCA Council to identify opportunities for individual land managers to contribute resources toward another partners' project(s), and/or to initiate management activity on their own lands that complements work being done elsewhere. As an example, in the results chapter I showed how interacting with DNRC enabled the BCCA Council to organize forest thinning in the BCCA Core that closely matched the prescriptions and footprint of harvests on adjacent DNRC stands. As the majority of BCCA Council members noted, being able to effectively communicate and "know what your neighbor is doing on the other side of the fence" is essential to coordination.

The second benefit of communication is knowledge exchange. The BCCA Council serves as an important nexus of local and professional knowledge and expertise. As shown, professional consultation has been an administrative, technical, and logistical asset for all parties, and was particularly important to FWP's first ever large-scale forest management project. In that example, the local residents serving on the BCCA Council who knew Ovando Mountain well, and the professional foresters from USFS and DNRC who were familiar with the nuances of timber contracting (e.g., road-building, access easements, and treatment prescriptions) provided expertise that FWP biologists lacked. This thesis argues that ready access to professional and local knowledge and expertise through the BCCA Council has enabled capacity-building and more efficient project execution on the BCCA Core and public lands.

Third, the BCCA Council setting gives rise to productive relationship- and trust-building. One of the guiding rules of the Blackfoot Challenge is that trust and relationships should be a priority, as these are positively correlated with a group's effectiveness and productivity. Likewise, Berkes (2009:1694) and others (Lubell 2004; Moote and Lowe 2007) have argued that trust promotes cooperative behavior, and is a "determinant(s) of success" in multi-party collaboration. In this study, I found that BCCA Council members (especially agency personnel) perceived that agency activities in the BCCA are less likely to be contentious, and can be expedited as a result of regular interaction and relationship-building that occurs at BCCA

Council meetings and afterward at local restaurants, for instance. The BCCA Council provides an accessible forum for the public to ask questions of agency personnel, clarify concerns, request and provide information, and make suggestions that are borne out in project activity; personal contributions which may engender a sense of citizen ownership over public lands.

### Facilitating Funding for Landscape-level Management

The availability of funding to implement actual projects on the ground affects to what extent the BCCA Council can operationalize the landscape connectivity principle. The BCCA Council has demonstrated a high capacity to take advantage of opportunities for financial leverage as they arise. Indeed, they have been sophisticated (and successful) in funding management of the BCCA Core using diverse private, state, and federal sources, with which they have facilitated noxious weed and forest management work on public lands by sharing and saving costs in numerous direct and indirect ways.

The BCCA Council's success in acquiring funding has enabled heavy investment in the BCCA Core. As demonstrated in the design-based approach to forest connectivity, they have utilized funding to manage in light of the social and ecological conditions of surrounding lands. Indeed, funding the restoration of forest habitat, fire risk mitigation efforts, and suppression of border-crossing noxious weeds has been a key priority. Their success in this regard is related to the enthusiasm of agency personnel to support this work. Agencies have been proactive in informing the BCCA Council when grant opportunities become available, and have contributed dollar sums or in-kind donations in staff time or materials to matching award programs. The general enthusiasm of agency members to devote work time to the BCCA Core stands in contrast to some scholarly findings showing that structural disincentives discourage it. For instance, Doppelt et al. (2002) showed that as a result of the traditional incentives and reward systems of the USFS, agency officials may face a career disadvantage if they invest time and resources into collaboration. While this thesis did not investigate this scholarly finding in depth, several agency members, including USFS personnel, echoed that establishing the BCCA has enabled them to look past their own boundaries, and funnel financial, material, and staff resources toward the stewardship and restoration of valued cross-boundary systems.

This study also provides evidence that the BCCA Council is effective at facilitating the work of public agencies on their lands, in part, by facilitating project work and sharing funding. In general, agency council members were adamant that cooperation has generated benefits and saved operating costs in multiple resource sectors on state and federal lands. This is evident in the case of FWP's forest management project, where the BCCA Council helped cover forest inventory expenses and facilitated administrative and logistical dimensions of the project. Their cooperative noxious weed management strategy has also consisted in streamlining contracts to include multiple landownerships across jurisdictions. The cost-sharing approach seems to have created an incentive for agencies to collaborate, as doing so enables agencies to treat more acreage on their lands and meet their respective targets.

In the above ways, the BCCA Council has demonstrated a capacity to leverage public and private dollars toward landscape-level resource management goals. The findings of this study confirm that there are positive financial incentives that drive collaboration, especially eligibility for unique funding programs and opportunities for cost-sharing (Hossu, Ioja, Susskind, Badiu and Hesperger 2018; Moote 2008; Ansell and Gash 2008; Graham 2013). However, the BCCA Council has relied heavily upon government authorities and financial assistance, which makes them vulnerable to unpredictable appropriations and executive or administrative-level shifts in priorities over the long-term (Nie and Fiebig 2010). Even with shared motivations and priorities, different budgets and funding timelines can prevent DNRC, FWP, USFS, or even the Blackfoot Challenge, from being able to actively manage their lands or coordinate with partners. These factors affect the availability of public funding for investment in both the BCCA Core and public lands, which suggests the importance of identifying innovative and creative ways to facilitate land management activity in the long term. This thesis raises questions about how to manage for landscape connectivity in the future in light of political and financial forces outside of the BCCA Council's control; how to utilize existing funding opportunities efficiently and to the greatest effect; and what other funding sources and strategies can be explored to buffer the BCCA Council against downturns and uncertainty in state or federal programs?

## Recommendations for Landscape Connectivity

These findings lead me to answer the final question of this thesis with respect to the landscape connectivity principle, which was "what lessons and insights can assist the BCCA Council going forward?" In light of the above, I argue the BCCA Council is well-positioned to improve landscape-level management across jurisdictions. Thus, my recommendations are to explore additional mechanisms that enable stronger agency commitments to the landscape connectivity principle in the BCCA, continue to demonstrate benefits and efficiencies of cooperation, develop more diverse and creative ways to leverage funding for management across public and private lands, and emphasize effective communication and relationship-building.

The BCCA Council should explore additional formal mechanisms that enable stronger commitments from public agencies to operationalize the landscape connectivity principle. A notable example would be to work with the USFS-Lolo National Forest in the forthcoming forest plan revision under the current planning rule. The National Forest Management Act (NFMA) requires the USFS to coordinate with state and local governments in the development of forest plans to "identify opportunities to contribute to mutual objectives, to reduce or resolve conflicts, and find mutually agreeable outcomes" for management issues that cross jurisdictional boundaries (NFMA, 16 USC 1604(a)). However, the 2012 USFS planning rule takes this one step further, and contains several provisions that signify an "all-lands approach" to ecosystem management and planning not limited to state or federal jurisdictions, but rather the "broader landscape" that would include the private and state lands in the BCCA (36 CFR 219).[7] For instance, to implement NFMA's wildlife diversity mandate, the USFS is required to manage Species of Conservation Concern (SCC) in coordination with "others having management authority over lands relevant to the larger population" (Nie et al. 2017). Several other national forests have taken the lead in planning for wildlife connectivity with off-unit lands, which could

[7] The "all-lands" approach is codified in several sections of 36 CFR 219: e.g., Requiring assessments to evaluate conditions, trends and sustainability "in the context of the broader landscape" (36 CFR 219.5(a)(1)); Recognizing that sustainability depends in part on how the plan area influences, and is influenced by, "the broader landscape" (36 CFR 219.8(a)(1)(ii), (iii)); Requiring coordination with other land managers with authority over lands relevant to populations of species of conservation concern (36 CFR 219.9(b)(2)(ii)); Requiring coordination with plans and land-use policies of other jurisdictions (36 CFR 219.4(b)); Requiring consideration of "opportunities to coordinate with neighboring landowners to link open spaces and take joint management objectives into account" (36 CFR 219.10(a)(4))

serve as reference points for the BCCA Council and the USFS (Defenders of Wildlife, 2015). Pursuing this avenue would institutionalize the landscape connectivity principle in official USFS priorities over the long term, and assist the agency in implementing the planning rule.

The BCCA Council should continue to demonstrate to public agencies that there are mutual benefits to cooperation and related efficiencies. Thus, their objective should be to seek out ways to fund and facilitate management activity on public lands that complies with agency mandates and meets cross-boundary goals. To begin, I suggest a process to identify priority areas for investment across the BCCA. This would entail analyzing existing agency priorities and future plans, as well as assessing current ecological conditions across boundaries, desired future conditions, and types of projects to pursue in the long term. With this analysis, the BCCA Council could create a set of priorities and a 5-, 10-, and 15-year "wish-list" for joint projects. Generating a package of possible joint projects could then guide future fundraising and grant-seeking activities, and provide the basis for proposals as private, state, or federal grant opportunities arise. Moreover, with a set of prospective projects, agency BCCA Council members would be able to lobby up the chain of command for funding authorization with clear project goals and objectives already established. This could lead to the use of unique and underutilized authorities, such as the USFS-Wyden and Good Neighbor Authorities, or stewardship-contracting, for example. The BCCA Council has not yet engaged with the USFS in the NEPA process, but as examples of the BCCA Council's experience with MEPA indicate, they act as a valued nexus between relevant agencies and local citizens, and could help to facilitate the process.

The BCCA Council should explore ways to build resilience into their funding strategy for the BCCA Core. As practical matter, this means diversifying their revenue sources to decrease dependence on government assistance, the profitability of future timber sales, and the viability of local mills. While the vision for the BCCA Core forests should continue to be to ultimately yield a sustainable stream of revenue from timber resources, it may be decades until this can occur. In the meantime, the BCCA Council could look to experimental and innovative ways to generate revenue from the BCCA Core forests, for instance by selling carbon offset credits or awarding contracts for niche market products. Prospecting for additional funding streams can only aid the BCCA Council in managing for landscape connectivity in the long-term, as it would enable them

to maintain active management of the BCCA Core and compensate for shifts in agency budgets and uncertainty in future timber markets.

Lastly, the BCCA Council should continue to define and articulate a shared vision for the BCCA. At base, the examples of cooperation found in this thesis grow from the commitment of past and current BCCA Council members to a shared vision for landscape connectivity principle. Maintaining a clear vision is especially important for acclimating new agency and non-agency members to the culture of the BCCA Council, as they will be tasked with carrying the BCCA project forward in future decades. My hope is that with these recommendations, the BCCA Council can continue to envision, innovate, and operationalize a ridge-to-ridge approach to stewardship of lands and resources across the BCCA.

## Methodological Limitations and Future Research

Examining both the document record as well as interview responses enabled in-depth analysis from multiple angles to construct a rich understanding of actual land management decision-making over time. Choosing few resources and examples allowed me to go "deep," and based my discussions and interviews with BCCA Council members and Blackfoot Challenge staff on specific, tangible, and verifiable events and projects.

However, this methodological approach contains trade-offs. I selected these resources because I knew they were relevant and/or challenging to the principles, which means they could be exemplary cases or not representative of the general approach of the BCCA Council. Selecting so few resources may have created blind spots, leading me to miss compelling examples of the principles at work in managing other resource sectors, such as water, fire, or wildlife resources. Another important limitation of this methodology was that all interviews were conducted with people closely related to the BCCA Council, i.e., they had either served on the BCCA Council or worked as staff with the Blackfoot Challenge. Choosing to interview only those associated with managing the broader BCCA may have created bias, and did not allow me to answer important questions that surfaced in this study, such as why participation in the BCCA Council has been declining in recent years. This is an important caveat to my evaluation that the community involvement practices of the BCCA Council have been effective. Also, this methodology did not include an examination of actual ecological conditions. Instead, I had to

rely on the testimony of the interviewees, who may be biased by their strong feelings of pride in their accomplishments and the work of the BCCA Council thus far. This limited my analysis as well.

These limitations, and the findings of this research, lead me to reflections on conducting future research on these principles in community forest management. As shown, this study revealed several obstacles and challenges to both community involvement and landscape connectivity that could be the focus of future research. For instance, other case studies might explore how other conservation organization-owned community forests have defined and operationalized "community," and dealt with the tensions surrounding who is or is not a part of it. An important question is how do people that are not formally affiliated with the owning organization and/or the governing body, but who feel a vested interest, perceive the decision-making process and the extent of their opportunity to become involved. Future research designs that incorporate interviews with both managers and non-managers would allow for comparisons between the two that capture tensions, gaps, or intersections that may be insightful in that case or others.

A key finding of this study was that administrative procedures and agency sideboards constrain landscape-level management activity. Given the diversity of formal mechanisms geared toward enabling public-private partnership, future research should review what types (other than MOUs) have been used, and what cooperation they have enabled in different cases. In this vain, I suggest a comparative study to examine how and why groups choose different types of mechanisms, what advantages they bring, and how they are used to generate mutual benefits and efficiencies among partners. Such research could inform the decisions of other organizations who are considering the most appropriate option for meeting their specific resource management goals and objectives. Related research should attempt to clearly define what constitutes a "mutual benefit," and identify ways to measure benefits and efficiencies in order to report and evaluate the "collaborative advantage" more effectively (Wyborn and Bixler 2013). Furthermore, in cases where landscape connectivity and collaboration are central principles, an enduring question is have these groups improved ecological conditions; and, if so, to what extent are they related to cooperation across jurisdictions? Therefore, research could ask how groups have been successful in monitoring transboundary ecosystems, identify the primary challenges, and suggest ways forward. In summary, the findings of this thesis, coupled with the ongoing

effort to answer these important questions, will provide insight for conservation organization-owned community forests committed to community involvement in the stewardship of cross-boundary ecological landscapes.

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APPENDIX A. Management Goals and Objectives for Focal Resources

| Goals and Objectives for Resources in the BCCA Management Plan for the Core (2008) | |
|---|---|
| **Resource** | **Noxious Weeds** |
| **Management Goal** | *To prevent, control and/or eradicate invasive and noxious weed infestations through the practice of integrated weed management.* |
| **Objectives** | 1.) Participate in the Blackfoot Weed Management Project with Powell County Weed District as a landowner within the Middle Blackfoot Weed Management Area.<br>2.) Treat new invader species as the highest priority for eradication and control<br>3.) Control weeds along all travel routes and monitor all travel routes for control needs on an annual basis.<br>4.) Spot treat and monitor sensitive native plant communities such as riparian areas and native grasslands.<br>5.) Utilize an integrated weed management approach including chemical application, biocontrol, revegetation, grazing, hand-pulling, mowing, and other innovative practices<br>6.) Require the use of weed-seed-free livestock feed by the recreating public, as well as weed-seed-free mixes for revegetation efforts |
| **Issues Requiring Future Study** | 1.) Develop requirements for washing/cleaning vehicles traveling or using the BCCA Core.<br>2.) Map specific new invader species<br>3.) Develop priority areas for weed treatment (and possible non-treatment)<br>4.) Map existing aspen stands so that chemical herbicide treatments can be directed away from them. |
| **Resource** | **Forest and Forest Products** |
| **Management Goal** | *To promote a diverse multi-age forest using sustainable forestry practices* |
| **Objectives** | 1.) Maintain and recruit forested cover of large diameter trees<br>2.) Maintain and recruit large diameter snags and burned trees<br>3.) Maintain and expand aspen stands<br>4.) Follow State of Montana Best Management Practices and Streamside Management Zone regulations on all timber treatments<br>5.) Pre-commercially thin timber on the most productive forest stands with the highest growth potential in a manner which will promote a diversity of species |

| | |
|---|---|
| **Issues Requiring Future study** | 1.) Identify existing forest stands that are limited in scope or size and develop silvicultural prescriptions to increase their range and vitality.<br>2.) Develop general silvicultural prescription plans for each of the eight stand types identified in the Baseline Inventory<br>3.) Delineate management units within the eight stand types<br>4.) Identify and prioritize stands where pre-commercial thinning will be required.<br>5.) Using the forest inventory and rates of growth, identify sustainable harvest for the BCCA Core<br>6.) Identify stand types that may have existed previously |
| **Resource** | **Travel Management** |
| **Management Goal** | *To maintain a trail and road network for various forms and levels of management and recreational use that does not unduly degrade identified natural resource values* |
| **Objectives** | 1.) Develop a restricted, limited use guided motorized use travel policy.<br>2.) Install and maintain gates or other road closure devices, parking areas, signage, and maps at major entry points to the BCCA<br>3.) Maintain three classes of public and administrative use roads:<br>a. Class 1: Open roads, which are open year-round to motorized public use<br>b. Class 2: Restricted use roads, which are used principally for maintenance, and which are open to the public for motorized use only during specific times of the year<br>c. Class 3: Closed roads, which are other maintenance routes that are closed to wheeled motorized use by the public on a year-round basis.<br>4.) Encourage non-motorized public uses such as skiing, hiking, and horseback riding<br>5.) Monitor various road and trail uses to ensure that users are balanced, and levels of use are compatible with each other and the resources of the Core lands<br>6.) Maintain seasonal motorized use closures to protect sensitive wildlife resources<br>7.) Plow parking areas in winter |
| **Issues Requiring Future Study** | 1.) Investigate the development of signed trail routes<br>2.) Explore development of a signed loop route from the Board Gate to Mollet Park and back utilizing existing Class 3 roads and/or short connector trails.<br>3.) Explore construction of a horse/hiking trail to summit of Ovando Mountain |
| **Resource** | **Wildlife** |
| **Management Goal** | *To manage habitat that will promote diverse and sustainable populations of wildlife.* |

| | |
|---|---|
| **Objectives** | 1.) Maintain identified wildlife travel corridors through the Core<br>2.) Maintain and/or recruit forested cover of large diameter trees of raptor nesting sites by promoting uneven-aged timber management for the appropriate tree species<br>3.) Maintain a range of forested forage such as tree lichen and understory grasses, sedges and shrubs for elk, whitetail, mule deer and moose on a year-round basis<br>4.) Maintain and recruit large diameter snags and standing burned trees to provide nesting and foresge habitat for cavity-nesting birds and arboreal amammals (Trees will be marked and off-limit to firewood cutting)<br>5.) Maintain and recruit large woody deadfall for small mammal populations<br>6.) Manage for a generally mature forest structure that is critical for elk escape cover by retaining adequate large diameter trees, carrying medium-sized saw timber trees and larger diameter trees (20 DBH or larger), and thinning pole-sized stands to increase growth rates in retained trees<br>7.) Maintain and expand aspen stands, particularly for cavity nesters<br>8.) Identify sensitive elk calving areas and implement seasonal closures to motorized vehicles (May 1 – June 15)<br>9.) Manage habitat to benefit threatened and endangered species<br>10.) Conduct wildlife surveys to monitor the diversity and number of species with habitat requirements<br>11.) Update and maintain a list of wildlife species found on the Core |
| **Issues Requiring Future Study** | 1.) Assess special species needs not being fulfilled by the above management. |

APPENDIX B. Guiding Principles

| Guiding Principles in the BCCA Management Plan 2008 | |
|---|---|
| **Principle** | **Definition** |
| Land Connectivity and Ecosystem Management | Define the relationship of the BCCA Core to the surrounding public and private land resources and process to fit within a watershed approach to land management p. 15 |
| Public-Private Partnerships | Build from a history of landowner and Blackfoot Challenge conservation efforts to pool public and private funding and technical resources, pg. 15 |
| Community Involvement | Engage community members in planning, resource management and monitoring, and stewardship practices in the area |

APPENDIX C. Goals and Objectives in the BCCA Memorandum of Understanding

| Goals and Objectives in the BCCA Memorandum of Understanding (MOU) | | |
|---|---|---|
| **Document** | **Goals** | **Objectives** |
| **Memorandum of Understanding (MOU)** | A.1. Treat the 41,000 acre BCCA as one land management unit with a number of common management objectives | B.1. Establish a cooperative written policy for: a.) Access and Roads, b.) Recreational Use, c.) Vegetation Management, d.) Integrated Noxious Weed Management, e.) Wildlife Management, f.) Water and Wetland Management |
| | A.2 Establish a consistent set of designations that describe the uses and management activities that are suitable on each ownership | B.2. Participants may…add topics to the list |
| | A.3. Provide a formal forum (the BCCA council) to discuss issues of mutual concern and develop cooperative programs to address these issues across property boundaries | B.3. Develop a policy management plan for the BCCA that addresses these issues |
| | A.4. Develop strategies that will enhance and promote support and funding of interagency/private projects | B.4. Implement a management plan that will have specific recommendations for [these issues] |
| | A.5. Share experiences of our partnership with other groups that are developing cooperative conservation approaches to natural resource issues | B.5. Develop joint operating plans on a project by project basis |

APPENDIX D. Grant Funding since 2008

| Funding Sources used by the BCCA Council since 2008 | | | | | | |
|---|---|---|---|---|---|---|
| **Grant Program/Funding Source** | **#** | **Funds Received; Year** | **Project Title or Project Focus** | **Match (Y/N) - Amount** | **Matching Contributors** | **Applied to Weeds** |
| **USDA State & Private Forestry Cooperative Grant Agreement, Forestry Division DNRC** | 1 | $275,000; 2008 | Blackfoot Watershed Forest Health and Restoration Project | Y – $137,500 | Big Blackfoot Chapter of Trout Unlimited (BBCTU); Clearwater Resource council (CRC) | X |
| **National Forest Foundation (NFF) Matching Awards Program** | 2 | $15,375; 2009 | BCCA Grazing, Wildlife, and Recreation Management Project | Y - $59,854 | RMEF; BBCTU; Private; FWP – Future Fisheries Program; USFS; BCCA Council | X |
| **Rocky Mountain Elk Foundation (RMEF) – PAC** | 3 | $22,534; 2009 | Same as above | Y – $30,000 | BBCTU; Private; FWP; BCCA Council | X |
| **DNRC - Jumpstart II** | 4 | Unknown; 2010 | Forest encroachment in native parks | N | N/A | - |
| **NRCS – Environmental Quality Incentives Program (EQIP)** | 5 | $194,524; 2010-2015 | Forest Stand Improvements; Weed Treatments | N | N/A | X |
| **NRCS – Conservation Stewardship Program (CSP)** | 6 | $200,000; 2011-2016 | Grazing plan implementation and monitoring | N | N/A | X |
| **DNRC - Forest in Focus I** | 7 | $97,395; 2014 | BCCA Forest Restoration Project | N | N/A | - |
| **Sustainable Forestry Initiative (Not Awarded)** | 8 | $28,510 (Not Awarded); 2014-2015 | BCCA Best Management Practice Project | Y – $29,870 | DNRC, FWP, TNC (Dollars); FWP, DNRC, USFS, BBCTU (In-kind) | - |
| **RMEF – PAC** | 9 | $13,500; 2016 | BCCA Noxious Weed and Aspen Enhancement Project | Y – $7,500 | Wild Turkey Foundation (WTF); FWP; USFS – Lolo NF | X |

| | | | | | | |
|---|---|---|---|---|---|---|
| **DNRC - Forest in Focus II** | 10 | $40,475; 2016 | Blackfoot Cooperative Forestry Project | N | N/A | - |
| **NRCS - EQIP** | 11 | $86,184; 2015-2017 | Forest stand Improvement; Weed Treatments | N | N/A | X |
| **NRCS - EQIP** | 12 | Unknown; 2017-Present | Forest stand improvement | N | N/A | - |
| **NRCS - CSP** | 13 | Unknown; 2017-Present | Ladder fuels reduction | N | N/A | - |

APPENDIX E. Weed Management Actions on the BCCA Core since 2008

| Weed Management Actions within the BCCA 2008-2017 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Treatment Method** | **#** | **Project Title (if applicable)** | **Funding Source(s)** | **Year(s)** | **Treated Acreage** | **Location** | **Cost-Share** | **Applied Across Boundaries (Y/N)** |
| **Herbicide** | 1 | BCCA Grazing, Wildlife, and Recreation Management Project | NFF; RMEF; Private; FWP Future Fisheries; and Lolo NF | 2009 | 60 ac. | Road network; Native parks | X | N |
| | 2 | Blackfoot Watershed Forest Health and Restoration Project | USDA State & Private Forestry Competitive Grant Agreement | 2008-2010 | 260 ac. | 6-mile forested corridor along the Ovando Haul Rd.; Native Parks | X | Y; Private Lands; FWP; DNRC |
| | 3 | BCCA – EQIP Weed Spray; contract #2011-18 | NRCS-EQIP | June 2011-Sept 2013 | 251 ac. | Road network within Core | | N |
| | 4 | BCCA EQIP Weed Spray; contract #2011-18 modification | NRCS – EQIP; DNRC | June – July 2012 | 50 ac. | Recently harvested DNRC Trust land; Native parks and disturbed forested sites | X | Y; DNRC |
| | 5 | BCCA EQIP Weed Spray; contract #2011-18 modified | NRCS-EQIP | Sept – Dec. 2013 | 50 ac. | Native parks; Mollet and Martin Parks within Core | | N |
| | 6 | BCCA – Herbicide Treatments; contract #2014-24 | NRCS-EQIP | June – Oct. 2014 | 70 ac. | Road corridor/network within the Core | | N |
| | 7 | BCCA Herbicide Treatments | NRCS-EQIP; USFS; DNRC | 2015 | 80 | Road Network | X | Y; USFS, DNRC |
| | 8 | BCCA Noxious Weed Control; contract #2016-22 | NRCS-EQIP | June – Oct 2016 | ~100 acres | Road network; Native parks; old landings | | N |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 9 | BCCA Noxious Weed and Aspen Enhancement Project | RMEF-PAC Grant; FWP; WTF; USFS – Lolo NF | 2016-2017 | 100 acres | Native forested grasslands; Road Network | X | Y; FWP |
| **Biocontrol** | 10 | Conservation Stewardship Program (CSP) | NRCS-CSP | 2011-2016 | 3,000 Cyphocleonis introduced | Interior forests/parks; Non-ROWs | | Y |
| | 11 | BCCA Noxious Weed and Aspen Enhancement Project | Same as above | Fall 2016 | 200 Cyphocleonis; 100 ac | Interior forests behind gates | X | Y; FWP, USFS |

APPENDIX F. Forest Management Projects on the BCCA Core

| Forest Management Projects on the BCCA Core 2009-2017 | | | | |
|---|---|---|---|---|
| **Forest Unit** | **#** | **Funding Source(s)** | **Year** | **Acres** |
| **Multiple Units – Ovando Haul Rd. Corridor** | 1 | USDA – State & Private Forestry Competitive Grant Agreement | 2009 | 260 |
| **Dick Creek Pk.** | 2 | DNRC – Jumpstart II | 2010 | 97 |
| **Martin Park N./S.** | 3 | DNRC – Jumpstart II | 2010 | 111 |
| **Warren Creek S.** | 4 | NRCS – EQIP Special Initiative | 2011-2012 | 55 |
| **McNally Meadows** | 5 | NRCS – EQIP Special Initiative | 2011-2012 | 60 |
| **Dick Crk. Plantation E.** | 6 | NRCS – EQIP Special Initiative | 2011-2012 | 35 |
| **Mollet S.** | 7 | NRCS – EQIP Special Initiative | 2011-2012 | 160 |
| **Mollet N.** | 8 | NRCS – EQIP Special Initiative | 2011-2012 | 55 |
| **Boot Tree N.** | 9 | NRCS – EQIP | 2011-2012 | 35 |
| **West Ridge** | 10 | NRCS – EQIP | 2012-2013 | 102 |
| **McNally Timber S.** | 11 | NRCS – EQIP | 2012-2013 | 51 |
| **East Fireline** | 12 | BCCA | 2013 | 51 |
| **N. Muchmore** | 13 | BCCA | 2013 | 50 |
| **Mollet Plantation** | 14 | DNRC – Forest in Focus I | 2014-2016 | 44 |
| **McNally Timber S.** | 15 | DNRC – Forest in Focus I | 2014-2016 | 30 |
| **East Rodeo** | 16 | DNRC – Forest in Focus I | 2014-2016 | 62 |
| **Warren Creek N.** | 17 | DNRC – Forest in Focus I | 2014-2016 | 81 |
| **Dick Crk. Plantation** | 18 | DNRC – Forest in Focus I | 2014-2016 | 76 |
| **South of Larch** | 19 | DNRC – Forest in Focus I | 2014-2016 | 61 |
| **Martin Park S.** | 20 | DNRC – Forest in Focus I | 2014-2016 | 61 |

| | | | | |
|---|---|---|---|---|
| **Boot Tree N.** | 21 | NRCS – EQIP | 2016 | 100 |
| **Martin Park W. (29b)** | 22 | NRCS – EQIP | 2016 | 13 |
| **Muchmore** | 23 | FWP – Upland Bird Habitat Enhancement Program; WTF; RMEF | 2016 | 29 |
| **McNally Timber N.** | 24 | DNRC – Forest in Focus II | 2016-2017 | 108 |

APPENDIX G. Forest Management Projects Abutting Adjacent Lands

| Ten Forest Treatments on the BCCA Core adjacent to non-Core Parcels | | | | | |
|---|---|---|---|---|---|
| **Forest Unit** | **#** | **Funding** | **Year** | **Acres** | **Shared Border** |
| **Multiple Units – Ovando Haul Rd. Corridor** | 1 | USDA – State & Private Forestry Competitive Grant Agreement | 2009 | 260 | Private |
| **Dick Creek Pk.** | 2 | DNRC – Jumpstart II | 2010 | 97 | DNRC |
| **McNally Meadows** | 5 | NRCS – EQIP Special Initiative | 2011-2012 | 60 | Private |
| **Mollet N.** | 8 | NRCS – EQIP Special Initiative | 2011-2012 | 55 | DNRC |
| **West Ridge** | 10 | NRCS – EQIP | 2012-2013 | 102 | DNRC |
| **Mollet Plantation** | 14 | DNRC – Forest in Focus I | 2014-2016 | 44 | DNRC |
| **McNally Timber S.** | 15 | DNRC – Forest in Focus I | 2014-2016 | 30 | Private |
| **East Rodeo** | 16 | DNRC – Forest in Focus I | 2014-2016 | 62 | DNRC |
| **Muchmore** | 23 | FWP – Upland Bird Habitat Enhancement Program; Wild Turkey Federation; Rocky Mountain Elk Foundation | 2016 | 29 | Private |
| **McNally Timber N.** | 24 | DNRC – Forest in Focus II | 2016-2017 | 108 | Private |

APPENDIX H. Quotations on Motorized Use

| Perspectives on Motorized Use | | |
|---|---|---|
| **Position** | **Theme** | **Key Quotations** |
| **Increasing Motorized Use** | Customary access | There's still people that live here that are born and raised here that used to go out there all the time that have basically had that right taken away from em! You know call it right call it a privilege whatever you want, but it was taken away from them. (Pers. Comm. CM7, 2016) |
| | Newcomer values | It was kinda more the people who were new to the valley. You know I don't think they – they weren't familiar with what everyone does or why we do it…And they didn't want to be walking on a road and have somebody ride a fourwheeler by or whatever. Stuff like that. (Pers. Comm. CM16, 2016)<br><br>Many of the voices coming from the outside that wouldn't need or want to use motorized vehicles on the interior of the properties advocated a more restricted motorized use plan (Pers. Comm. CM13, 2016)<br><br>It always felt like outsiders were trying to save the BCCA from the locals (Pers. Comm. CM10, 2017) |
| | Local economic benefits | Now that I own that hotel, I have a little more personal interest in that up there. And it would help the stray bullet and Trixies as well as the hotel, if we could bring some people in to do some recreating and offer the BCCA as a "place to go" (Pers. Comm. CM2, 2016)<br><br>And then as far as this discussion with dozens of people at the fire hall, there was a proposal being passed around to develop the BCCA Core as an off-road vehicle recreation area, as a way to bring in visitors to Ovando – as a way to make money for the area (Pers. Comm. CM11, 2016) |
| **Restricting Motorized Use** | Customary Access led to degradation and abuse | When I first moved here the Ovando Haul Road back there was wide open and the beginning of hunting season it was like a shooting gallery over there, it was a like a zoo. It was frustrating, I didn't want that in my back yard and I thought there was a lot of inappropriate use back there. I have a personal bias against road-hunting. (Pers. Comm. CM12, 2016)<br><br>I hadn't been on that ground in 10-15 years and I drove out there in the 70's/early 80's with my youngest son. And it looked like a KOA campground out there! From the Boot Tree to the North Fork of the Blackfoot there was campers, there was shacks up for hunting. They'd leave em there for the whole hunting season. They brought it on themselves… People used to go up there and dump their garbage, lawn clippings, tree trimmings and stuff like that. They'd drive |

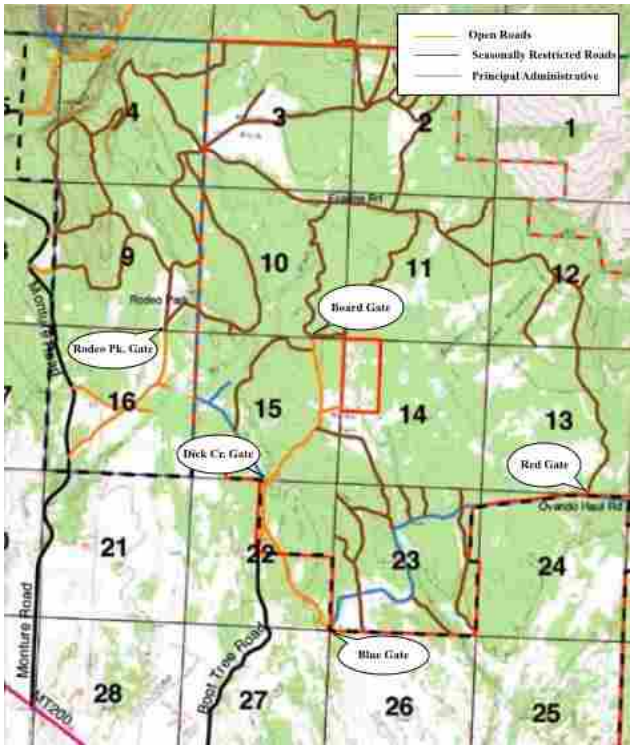
| | | |
|---|---|---|
| | | up them roads with no body looking, just back up the bank and dump it. Refrigerators, washing machines, whatever. (Pers. Comm. CM3, 2016) |
| | Ecological values and Conservation Sideboards | The Blackfoot Community Conservation Area has been promoted from the start as a conservation area. Very little emphasis, if any, has been placed on opening up (or even partially opening) this area to…motorized vehicles other than for administrative purposes. Conservation is generally understood as *not* including motorized vehicles. (Public Comment #5, August 2007, *emphasis in original*).<br><br>Because we believed in the concept, we became one of the many contributors of the much needed funds that helped this worthwhile project off the ground…We understood that we were donating to the restoration and conservation of this area…We feel that the very basics of why this project was set up are already being grossly violated…It seems this plan has come to a crossroad to either take the conservation path or the recreation path. If it turns into the BCRA ("Blackfoot Community Recreation Area") management plan rather than the BCCA management plan, we feel we were misled at the beginning. (Public Comment #4, June 2007)<br><br>The discussion of ORV use beyond our existing plan in the BCCA has already, predictably, become our most divisive issue. Many of the contributors to the BCCA project have said that if this project had been represented as an ORV use area they would not have so enthusiastically supported it. (Public Comment #7, 2010) |
| | Expected high use/Capacity to Enforce Rules | When you drive down the highway, all of a sudden, everyone is pulling an off-road vehicle. Everyone. They've got their big truck to get em to the end of the road and then they've got a vehicle that can take em wherever they need to go…So the concern is that without any restriction to access that that would be overridden basically. (Pers. Comm. CM11, 2016)<br><br>Everyone's concern is once you start to open up those road systems, a problem with a lot of that group is that they tend to abuse that. It creates a – it opens thing up where ATVs can start going off trail. For the most part they are respectful but there's always a few bad eggs…once the abuse starts that's a problem (Pers. Comm. CM15, 2016)<br><br>As word of the area spreads, demand for more use will inevitably occur. It's proximity to a regional population center predisposes it to increased demand. It already is one of the highest used block management areas in the state. How will increased human use of any sort dovetail with the desire to maintain the "rural lifestyle? (Public Comment #1, June 2007) |

APPENDIX I. BCCA Motorized Use Plans between 2005-2017

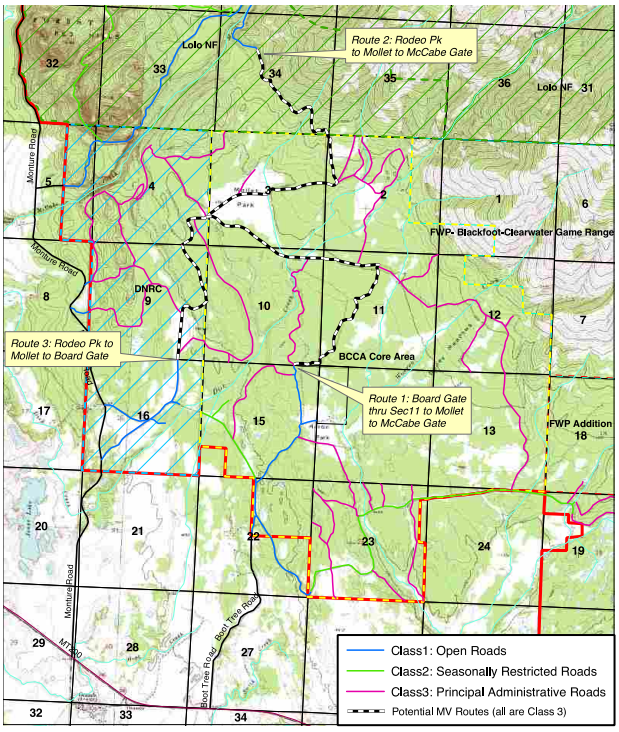
| Evolution of the Wheeled Motorized Use Policy on the BCCA, 2005 - 2017 | | | | |
|---|---|---|---|---|
| **Wheeled Motorized Use Policy** | **PCTC/TNC's Policy: 2005-2007** | **Trial #1: 2008-2010** | **Trial #2: 2011-2017** | **Trial #3: Approved for 2018** |
| **State Goal** | N/A | "Maintain present motorized policy as stated in management plan with following operational conditions for provisional use." (BCCA Motorized Use Policy for Public Access, 2008 Trial) | "Allow for a moderate increase in seasonal recreational motorized vehicle use opportunities, with a moderate level of management oversight" (REW Committee Proposal, Feb. 2011) | No stated goal, as yet |
| **Mode of obtaining Access past Gates** | None; Closed gates | Guided tours, by request; designated routes | Permit-system; designated routes | None; Gates open on designated routes |
| **Season of Use** | Closed year-round | July 1 – August 15 | July 1 – August 15 | July 1 – August 15 |
| **Number of Trips** | N/A | 3/week | 14/week max (avg. of 2/day) | Unlimited |
| **Number of Vehicles** | N/A | 5 trucks or ATVs/tour | 5 cars/trucks or 10 atvs/motorcycles per trip max | Unlimited |
| **Days of Week** | None | Friday, Saturday, and one other day | No restrictions | No Restrictions |
| **Type of Vehicle** | Road Legal required (FS/DRNC regs.) | Road Legal required (FS/DRNC regs.) | Road Legal required (FS/DRNC regs.) | Road Legal required (FS/DRNC regs.) |
| **Designated Routes** | Boot Tree to Blue Gate, Dick Creek Park Gate, and Board Gate | Boot Tree Road thru Board Gate to Fireline Rd. near Mollet park; 9 miles | Same as existing plus route thru Blue & Red Gates up to Fireline Rd and thru USFS/DNRC sections; ~15 miles | Same; ~ 15 miles |
| **Principle Monitoring and Enforcement** | TNC Land Steward | Guides; BCCA Land Steward | BCCA Land Steward; Permit-system; Digital vehicle counters | TBD |

| | | | | |
|---|---|---|---|---|
| **Number and Type of BCCA Council Meetings to Create** | N/A | 2 public meetings; 8 Council meetings; 2 work group meetings (Jan. 2007 – Nov. 2007) | 1 Public meeting; 4 Council meetings; 4 work group meetings (Oct. 2010 – May 2011) | 3 Council meetings (May 2017 – Oct. 2017); 2 work group meetings (April 2017; January 2018); |

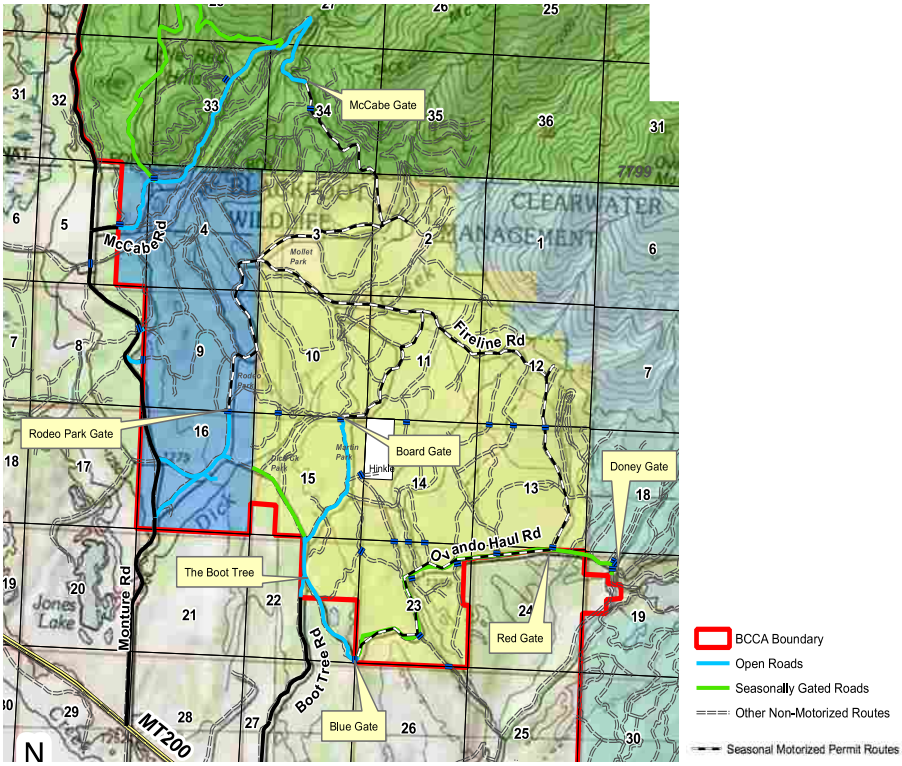
## BCCA Motorized Use Plan (1994-2007)



## BCCA Motorized Use Trial #1 (2008-2010)




## BCCA Motorized Use Trial #2/#3 (2011-2018)



APPENDIX J. Public Proposals for Motorized Use on the BCCA Core

| **Public Proposals to Reevaluate the Motorized Use Plan since 2008** | | | | |
|---|---|---|---|---|
| **Wheeled Motorized Use Policy** | **Public Proposal #1 (2007)** | **Public Proposal #2 (2007)** | **Public Proposal #3 (2010)** | **Public Proposal #4 (2017)** |
| **Stated Goal** | To increase motorized vehicle use opportunities in the watershed | Original proposal of the BCCA Council to maintain PCTC/TNC's policy | Allow for increased, seasonal motorized vehicle use opportunities, with limited management oversight | Open routes to all motor vehicles |
| **Mode of obtaining Access past Gates** | Fee-based, single-season permit | None; Closed gates | No restrictions | No Restrictions |
| **Season of Use** | July 1st – August 31st | Closed year-round | July 1st-August 31st | July 1st-August 15th |
| **Number of Trips** | Unlimited | N/A | No limit | No limit |
| **Number of Vehicles** | Unlimited | N/A | No limit | No limit |
| **Days of Week** | Unlimited | None | All | All |
| **Type of Vehicle** | Road legal | Road Legal required (USFS/DRNC regs.) | Any | Any |
| **Designated Routes** | TBD by BCCA Council | Peripheral spur roads; Boot Tree to Blue Gate, Dick Creek Park Gate, and Board Gate | Same as Motorized Use Trial #1; plus additional route | Same |

APPENDIX K. Interview Guide

**Introduction**

Hello. In case we haven't met, I'm Alex, a student from the University in Missoula and I'm working on my master's degree in the College of Forestry and Conservation in resource conservation. I'm spending my summer interning with the Blackfoot Challenge and doing research on the management of the Blackfoot Community Conservation Area (BCCA) over the last decade and what lessons can inform its revision. My objective for this thesis research is to assess the management plan of the BCCA Core with close attention to its guiding management principles. I asked you to be part of this research because I am interested in the views and experiences of BCCA decision-makers. I'll be asking about two principles in the management plan: community involvement, and landscape connectivity through public-private partnership. I'm looking forward to your answers to my questions as well as any additional comments you may have about the topics. Please feel free to raise them with me at any time during our conversation. I'm very grateful for your willingness to speak with me. Know that your name will not be associated with any comments you make in this thesis.

**(Verbal informed consent)**

**Subject Information:**

**Name: _____**

**Years served on the BCCA Council: _____**

**Agency affiliation: _____**

**Community Involvement**

I'd like to focus here on Travel Management, but I encourage you to talk about other topics as well

*All Interviewees*

**1.)** Could you describe what the principle of community involvement means to you?

**2.)** How do you define the community for whom the BCCA is managed?

**3.)** How does the council work to involve community in management and governance of the BCCA?

**4.)** How would you describe the way community feedback or perspectives are incorporated into the council's decisions?

**5.)** How would you say community involvement in the BCCA has been a challenge for the council?

**6.)** How have the challenges been resolved, or not?

*For Blackfoot Challenge Staff*

**7.)** How would you describe the relationship between the BC Board and the BCCA Council?

**8.)** How would you describe the BC's role in implementing the management plan?

*For Agency Members*

**9.)** How does your responsibility to manage for a broader constituency conflict with, or not, the community involvement principle of the BCCA council?

**Landscape Connectivity through Public-Private Partnership**

I'd like to focus here on managing for Noxious Weed and Forest and Forest Products, but I encourage you to talk about other topics as well.

*All Interviewees*

**1.)** Could you describe what the landscape connectivity and public-private partnership principle means to you?

**2.)** How has the BCCA Council worked collaboratively on management projects on the BCCA Core or other lands?
- **a.** Please explain or provide a specific example

**3.)** What role do state and federal agency personnel play in the work of the BCCA Council?

**4.)** In your experience, what have been the specific challenges or barriers to collaboration with other landowners?
- **a.** Please expand on how these challenges affect what can and cannot be accomplished within the BCCA

**5.)** Do you believe the council has been able to address these challenges?
- **a.** Why or why not?

*For Agency Members*

**6.)** Does participating in the council confer any benefits or advantages to your agency?

a. Please explain and/or provide an example

*For Blackfoot Challenge Staff*

**7.)** How does the landscape connectivity principle reflect the BC's mission and work in the watershed?

Thank you so much for taking the time to sit down and talk with me! My hope is that it was helpful for you to consider some of these questions and that this will benefit the revision this summer. To close, please feel free to add onto anything we've discussed or bring in something additional that we didn't get to!