







Understanding social processes to achieve landscape scale conservation in Colorado

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Executive Summary

Stemming the decline of species across the United States requires landscape scale approaches to conserve important wildlife habitat and ecosystems. With private and working lands making up a considerable portion of the state of Colorado and the West developing strategies that span diverse land ownerships to work at a landscape scale creates challenges for conservation. Yet, while conservation is important for maintaining key ecological functions and wildlife species, it must also work at a scale that is commensurate with relevant social processes. Capturing what those social processes are, as well as devising conservation programs which are synergistic with landowner goals to create more beneficial conservation outcomes, presents challenges for conservation organizations to work effectively.

To investigate some of these social processes and inform the Bird Conservancy of the Rockies' (BCR) partnership work, we conducted four focus groups in areas within Colorado where BCR Wildlife Habitat Biologists (hence forth referred to as partner biologists) partner with the Natural Resources Conservation Service (NRCS) and Colorado Parks and Wildlife (CPW). These partner positions support NRCS and CPW by providing



technical assistance to private landowners to implement conservation practices. Focus group participants included a mix of landowner types present in the respective local community. The groups were convened with the intent to understand landowner needs and perspective to improve BCR's ability to support economic, social, and wildlife needs. Discussions across each of the focus groups revealed social processes that highlighted the importance of social relations for landowners and the potential for some financial incentives to jeopardize these relations, as well as diverse understandings of the notion of conservation.

We found that focus group participants held diverse understandings of the idea of conservation across all sites of this study. Rather than exclusively meaning the protection of ecosystems, birds and/or other wildlife species, conservation primarily signified stewardship and heritage for participants. By striving to incorporate land management practices that complement natural system processes, property owners shared how their approaches sought to not only generate productive lands with economically viable operations, but acted as an important legacy and means for passing the land on to the next generation. While many of these practices were noted for creating habitat for wildlife, participants remarked how these land management practices were frequently discounted by conservation groups or natural resource agencies by failing to understand the diverse economic, social, and environmental factors influencing landowners' decisions.

Maintaining relational ties between landowners and natural resource professionals was seen as critical to achieving management goals on individual properties. Landowners described how they rely on exchanges of information through various social networks. The process of information exchange itself generates social bonds and trust while also providing an important sense of community. The content of this information ranges from neighborhood dynamics, observations of seasonal and/or environmental dynamics, property and operational management ideas, to experiences enrolling in

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conservation programs. Through sustained contact, such interactions shape how landowners perceive the value of programs offered by conservation groups and natural resource agencies. While the role of partner biologists was noted as an asset to the local area by participants, some focus groups expressed frustration either with local natural resource agencies or the complicated nature of working with agencies which had resulted in a growing hesitation by landowners to engage in conservation initiatives.

Despite concerns raised across the focus groups, we identified opportunities to pursue more socially informed strategies to achieve landscape scale conservation. These include: a) developing participatory processes in which landowners feel heard and supported as partners on conservation programs which account for the dynamic and multifaceted realities in which landowners sustain their families and livelihoods; b) ally with landowners on critical resource management issues, such as changing state water policy, through communication strategies



that amplify landowner concerns at scales beyond the community level; c) supporting regular and facilitated social gatherings to foster greater ties between different types of landowners within a community and their respective social networks while implementing different communication strategies appropriate to these distinct social networks; d) consider developing youth educational opportunities in rural communities in partnership with landowners to foster better social ties and amplify landowners' stewardship messages; and e) providing greater resources to assist with navigating through conservation program enrollment challenges and work to bridge better relations between staff in some offices. Collectively, these opportunities can advance relationships with landowners in targeted rural communities and help to achieve landscape scale conservation goals by building from and acting in conjunction with the social processes and norms relevant to that community.

Background

Bird Conservancy of the Rockies partners with the Natural Resource Conservation Services (NRCS) and Colorado State Parks and Wildlife (CPW) to host Wildlife Habitat Biologists (partner biologists) in communities throughout Colorado. The partner biologists leverage Farm Bill funding to assist landowners through voluntary conservation programs to enhance wildlife habitat while meeting landowner and agricultural producer goals and strengthening overall ecosystem resilience. Additionally, through the partnership between BCR, CPW, and NRCS, partner biologists lead efforts to support the delivery and access to technical assistance and conservation resources. Despite these partner- based efforts, interest to participate in conservation programs varies across the state as do perspectives about conservation. In recognition of these differences, as well as the need to increase landowner inclusion into conservation practice design, Bird Conservancy and their partners, NRCS, and CPW are invested in improving our current approach while simultaneously learning about new opportunities to implement best practices for increased engagement and community conservation at scale.

Introduction

Effective conservation efforts need to work at scale that is matched with the ecological needs of target species. Scientific advances in conservation biology and landscape ecology demonstrate that many species rely on large areas that provide a mosaic of seasonal habitats and resources that are distributed across the landscape. In practice, these insights push conservationists to think beyond property level conservation and instead consider how to strategically link conservation actions in ways that provide landscape connectivity and support the ecological processes at an appropriate scale for species' needs. This means thinking beyond conservation projects at an individual property level and examining how each project contributes or can contribute to the larger whole.

While it is important to consider working at scales compatible with relevant ecological processes, it is equally important to recognize relevant social processes and engage with work at the scales in which these processes operate. Scholars increasingly recognize the significance of local norms and practices (i.e., institutions) in sustainable management of natural resources (Ostrom, 2009). The challenge is how to implement conservation efforts at relevant ecological scales while working through appropriate local institutions and social processes.

Traditionally voluntary conservation projects are conceptualized and managed one individual landowner at a time despite the fact that the ecosystem and wildlife need a model that looks comprehensively at an area or community for a true understanding of ecological need at scale. This can result in disjunct wildlife habitats and constrain management approaches across landscapes. Identifying pathways for conservation funding which work at the level of a community and relevant social networks, while accounting for ecological variations, can promote more connected landscapes and achieve conservation goals at an appropriate ecological scale. Moreover, supporting on-going efforts and increasing opportunities for more engagement in local communities through partner programs and conservation districts will foster shared commitment and locally appropriate program co-design.

Because management of private lands in the West often requires collective labor input, landowners and agricultural producers are embedded in distinct sets of relationships and networks of exchange. These social fabrics generate their own understandings of community and sustain important collective senses of place and identity. In large part, sustaining these community relationships ultimately becomes integral to sustaining private property and associated natural resources. Therefore, engaging with these social processes and community interactions not only gives insight into the diverse factors that shape wildlife habitats on private lands and livelihoods for rural residents, but creates starting points to innovate on the design of conservation programs that consider social processes and local institutions. Given how much of the western United States is composed of private land with property owners embedded in larger systems of social interaction, consideration of these processes will be important for scaling the work of conservation organizations.

Our goal in this report is to share these landowner perspectives with Bird Conservancy of the Rockies (BCR) staff and partners so they can be better understood when considering the design, incentives, and strategic implementation of conservation projects. The report also gives insight into place-based processes shaping the social realities of four distinct communities in Colorado. These insights can act as guides for organizational strategies that complement and work in concert with local norms and processes to move towards including conservation planning which is connected across landscapes. This report speaks to the broader themes of increasing conservation strategies by partnering with and better engaging landowners through local networks which sustain communities, collective identities, and diverse understandings of conservation.

Approach

As researchers from the University of Wyoming's MacMillan Private Lands Stewardship Program, we partnered with BCR to conduct focus groups with agriculture producers and residents in four distinct regions of Colorado. These sites were selected to provide a spectrum of local contexts where BCR currently works in partnership with the NRCS and CPW through Colorado, including a diversity of ecosystems and a range of agricultural operations. We held four focus groups between December 2023 and January 2024 in the sites detailed in Table 1.

Table 1. Location and characteristics of focus groups

Site	Main Ecological Characteristic	Landowner Types	Number of Focus Group Participants
Alamosa, Colorado	Wetlands, Rangelands	Ranching, Farming	16
Buena Vista, Colorado	Forests, Rangelands	Ranching, Non- agricultural amenity landowners	6
Fort Morgan, Colorado	Farmland, Grasslands	Ranching	14
Rocky Ford, Colorado	Farmland, Grasslands	Ranching, Farming	8

In the focus groups, we asked participants how they understand the idea of conservation, how they connect with other landowners in their geography, and to comment on hypothetical conservation incentive schemes. With the permission of participants, we audio recorded each focus group and created a transcript using Otter AI. We then analyzed notes and transcripts to identify themes across conservation understandings, social networks, and perceptions of incentivized conservation programs.

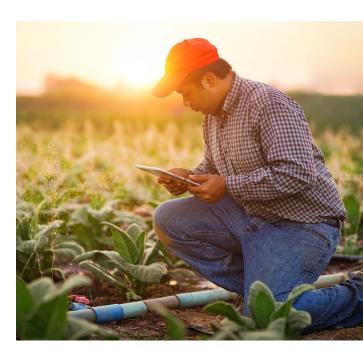
Following the focus group and initial analysis, we held an online meeting with the four BCR partner biologists based in the focus group locations to gain further insight on preliminary themes and how these may have varied across the four locations. Taking a qualitative approach allowed landowners to voice ideas to give a more nuanced consideration of opportunities and areas of concern. Given the diversity of landowner socioeconomics and ecology within each focus group site, this report is meant to provide points of discussion and preliminary insights, rather than generalize across producer and landowner perspectives in Colorado.



Findings

The focus groups discussed ideas around conservation practices and stewardship ethics for landowners in the context of their relationships within their community, as well as the viability of scaling conservation efforts across neighboring properties. While focus group participants shared several points of concern around existing conservation programs, as well as hypothetical conservation scenarios, the groups also found opportunities that conservation organizations could leverage to achieve greater connectivity of conservation projects.

We begin by detailing the meanings participants gave to stewardship and conservation as well as how participants perceived areas of mismatch across these meanings with conservation organizations and natural resource agencies. The focus groups sessions also explored social dynamics and community relations to provide greater insight into landowner networks, the nature of those connections, and how information about conservation flows through networks. Lastly, focus group participants were asked to



comment on hypothetical conservation program designs. These discussions revealed the significance of neighbors and social relationships within the community to guide how conservation organizations may approach incentive-based programs. We summarize points of opportunity and concern distilled from the findings across analyses of conservation and stewardship ideas, social network dynamics, and novel approaches to conservation at the end of the findings.

UNDERSTANDINGS OF CONSERVATION

The focus groups discussed ideas around conservation practices and stewardship ethics for landowners in the context of their relationships within their community, as well as the viability of scaling conservation efforts across neighboring properties. While focus group participants shared several points of concern around existing conservation programs, as well as hypothetical conservation scenarios, the groups also found opportunities that conservation organizations could leverage to achieve greater connectivity of conservation projects.

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Table 2. Illustrative quotes on the range of conservation understandings expressed in the focus groups.

Stewardship Ethic	Legacy/ Next Generation	Economic Realities	Misaligned Conservation Understandings and Historic Marginalizations
"Pushing ourselves to drive ahead and not just be stagnant and to be constantly improving the land." "Learning how to become more intertwined with regenerative thinking which is important for these arid landscapes." "Conservation isn't about organizing procedures and too many metrics. It's about trying to be mindful of what you're putting in the ground." "Learning how to manage things that don't stay the same and working around constantly changing variables." "It's not always how to be efficient in how we do things. Efficiency isn't always the best. It's kind of getting at the sort of short-term needs while getting other benefits that come from your management that you're not going to get paid for."	"To fix problems which may not have been created by us but how to leave things better for next generation." "Conservation is more than just wise use but really thinking about the future and what's ahead for the next generation." "Some of our [conservation] projects came out of absolute necessity to try to salvage a situation that was out of control with the mine. But then I think, also, to me, it's like that legacy of, I want my kids to have something as beautiful as I got to grow up with, or hopefully even more beautiful, to explore and enjoy. And that's a big motivation for me."	"Economics is huge, because a lot of those traditional farms are struggling economically because the scales are tipped to those who can be big and to be industrial to be efficient." "We've definitely gone from less surface irrigation, which hurts financially but we don't have the labor to support it and it's not creating the environments that we've appreciated on the ranch and we can certainly see the change in habitats that it creates." "What I see is farmers buying into funding for more efficient systems to stay competitive, but we are just getting by and we aren't rewarding the benefits of being 'inefficient' with our water and resources in ways that create benefits and habitat."	"It depends on who says the word but oftentimes it's to kick you in the shin." "When you are being told you are doing something wrong." "That is what makes me sad because a lot of surface [water] users were expanding and creating riparian habitat, but they have been marginalized by policy." "A lot of [Hispanic] communities had a culture of creating ecosystems and because the economic and incentive systems have changed it has damaged a lot of these practices". "They [organizations] don't really interface with production agriculture. And a lot of ideas just don't have any fundamental sense The people like (partner biologist) make a lot of sense."

The idea of stewardship, with its strong emphasis on heritage and future generations as a motivating factor for caretaking of the land, was the most pronounced and consistent interpretation of conservation across all four focus groups. While there was mention of conservation programs within the discussion of "what conservation means to you,", these programs were conveyed as embedded and merely the financial means for achieving a more holistic and land health focused association with conservation. The next most common interpretation of conservation centered around heritage and legacy with participants commenting about the need to leave things better for the next generation.

Consistency with how these diverse conservation understandings are accepted or engaged with by conservation organizations, along with local and state authorities, was also a reoccurring theme. Failing to see multigenerational landowners as resources in themselves with long-standing local knowledge of social and ecological components which could be engaged by conservation practitioners was an expressed frustration. Producer focus group participants also expressed concern with decision-makers and funding entities for discounting or overlooking the complexity of their financial realities in maintaining their operations. By not viewing producer activities from the operations management level, landowners often felt misunderstood by environmental groups and other stakeholders. Through stewardship practices around water management, soil health, grazing, and fire mitigation, landowners conveyed a strong perception that they saw themselves as both part of the landscapes in which conservation projects are implemented, as well as the solutions for successful outcomes.

Notably, while occasionally commented on, focus group discussions did not place particular emphasis on birds and other wildlife species protection, nor were they a major part of their conceptualization of conservation. Instead, mention of wildlife was embedded in discussions of how landowner's land use practices, such as irrigating, maintaining artificial reservoirs, and open fields, created habitat. Yet these contributions to habitat were often discounted or misunderstood by conservation groups or undermined by policy, as a multigenerational cattle operator expressed:

The state of Colorado is going to close any ponds that are not permitted, so we were told. That's going to be pretty rough on a lot of the wildlife. It's been hard for us to come in and see what's happened to the beaver habitat, we think about ways to try and support any of the natural habitats for water. We have this tiny little spring, and we would just love to see some cultivation of that. But it's kind of hard for us to be at the mercy of whatever the powers may be around water.

Many of the discussions around landowner practices creating secondary benefits for wildlife overlapped with a variety of concerns around an inability to participate in water policy and how conservation programs often complicated management practices on their operations. These frustrations not only spoke to differing understandings of conservation as a concept, but also spoke to how landowners bore the brunt of decisions made by environmental groups or natural resource agencies as well as being portrayed as the cause of those very wildlife or environmental issues. During a discussion over increased natural resources agency regulations in riparian areas, one cattle operator illustrated how conservation interpretations and approaches, which are not seen as participatory for all stakeholders, can lead to a sense of marginalization from decision-making processes which have direct bearing on landowner properties:

There are better ways to manage riparian areas that doesn't involve pushing the cattle out. But the people that are in charge only look at certain sources of information. But that's conservation that somebody decided and now ranchers have to take different steps and manage grass and soil with the cattle differently but also do more reporting for these requirements. A lot of times, the pockets (checkbook) don't work because of someone else's idea of conservation.

This example of riparian area management not only illustrates the significance of water in and of itself, but the importance of landowners feeling included in policy and resource management decision making. In some instances, these water issues are implicated in a history of marginalization of some subgroups within a local community to which conservation practices can exacerbate. In some cases, participants described how environmental groups aggravated historic harms to local Hispanic landowners through partnerships which reinforced unequal power dynamics with dam operators. According to several individuals in the group, this was a result of pursuing misinformed conservation approaches which did not adequately account for local realities and human factors. As one participant expressed:

Unfortunately, some environmental groups came in and wanted to address the problem that there's no water in the river all winter. So, they partnered with the big owners of the dam and marginalized traditional [Hispanic] farmers by partnering with somebody who is not vested. They dried up land, they took water from historical farms and did not compensate. We told them we were here, but you know, certain community members get marginalized because they are not the ones who have as much power.

Collectively, these sentiments over water concerns not only demonstrated how many landowners felt excluded from water administration and use processes, but how these exclusions undermined management goals on their own property, many of which landowners felt created co-benefits for wildlife. Moreover, conservation understandings which have failed to account for historic realities to a community have become problematic and aggravated historic inequities. Particularly because of the complex realities landowners operate in, maintaining good neighborly and community relationships becomes crucial for property owners to achieve management goals, especially given other stakeholder groups being perceived as antagonistic to, or disregarding the complex factors involved in landowner management



decisions. This was an important theme across all focus groups and is described below. We provide suggestions for how conservation organizations could leverage these landowner concerns for more productive and scaled conservation work through partnerships which are more attuned to these histories and sense of exclusion from water and resource management in the Opportunities section.

SOCIAL NETWORKS

We conducted the focus groups across diverse social and ecological landscapes in Colorado. With much of the state experiencing rapid residential development amidst larger demographic shifts in rural communities; the social makeup of each site had undergone a degree of change in recent history. As a result, there was a more diverse socioeconomic makeup to many communities and, therefore, more diverse networks of social and information exchange than may have been present a couple of decades ago.

Many of the stewardship ethic and conservation meanings described above take shape in the day-today relations and social networks of landowners. With new and changing landowner types in each of the focus group areas, sub-networks of relations carrying their own conservation understandings had emerged in varying degrees. Not only do these social networks reinforce conservation norms, they also function as points of information and knowledge exchange for conservation practices and strategies between landowners. Yet, because these exchanges occur across informal interactions with information and knowledge not always spoken of in a formalized way,



they can be discounted or overlooked as significant to landowner management decision-making. As one participant in the described, "your neighbors are a network to lean on each other and you build your schedule around each other and do a lot of socializing together. It becomes it becomes a community and kind of a background to your operation and decisionmaking." The conversation in this focus group highlighted interactions with neighbors and others in the community through shared labor for livestock management to general property upkeep that serve as a means to develop strategies for managing one's property or operation.

Given the realities and dynamic environment landowners operate in which they are often dependent on labor contributions from others, landowners rely on neighbors and community relationships in diverse ways. The centrality of these relationships in achieving property goals alongside general community well-being was consistently expressed by each of the focus groups. With the significance of these relationships brought out during discussions of hypothetical conservation incentive schemes, we elaborate on the nature of relationships as embedded in landowners' capacities to act as stewards and, therefore, pursue conservation which is tied to notions of legacy and stewardship ethics in the Novel Approaches to Conservation section.

Landowners rely on information about the costs and benefits of property management options and practices through their social networks. Because conservation programs are part of the portfolio of management strategies landowners can leverage to achieve their goals and help buffer against uncertainty, it is important to consider how perceptions of conservation programs are conveyed through social networks to influence landowner decisions. Being attuned to the diversity of property owner goals, and how those may vary across landowners who are agricultural producers, new residents, absentee owners, or amenity homeowners will be important for tailoring messaging around what constitutes conservation, as well as the rationales of conservation programs. NRCS and FSA staff are some of the primary points of contact for information regarding conservation program opportunities for many landowners. Yet some focus groups voiced frustration over the ineffectiveness of local offices due to high staff turnover, limited capacity, and/or the increasingly bureaucratic nature of available programs. With negative perceptions becoming amplified across community networks, landowners expressed how they became more cautious or reluctant to engage with conservation programs as a result.

Despite the concerns shared by property owners over natural resource agency processes, partner biologists, which are funded through a partnership between NRCS, CPW and BCR, were seen as resources to help navigate through these cumbersome processes. They also acted as important bridging agents across landowner types (i.e., agricultural producers, amenity homeowners) which may embody different understandings of conservation. While the work of partner biologists in closing informational gaps and providing access to external resources was seen as invaluable by many participants, the nature in which the partner biologists were spoken of as embedded in the community speaks to the significance accorded to personal relationships and partnered conservation efforts. We describe further the role of trust generated through



personal relationships and the ability to forge a sense of shared future in the context of conservation work in the Novel Approaches to Conservation section.

Because of various demographic changes occurring in rural communities and across the state of Colorado, different networks of information exchange and divergent touchpoints between residents naturally arise within a local community. A surprising finding of this research was the strong appreciation participants expressed for the focus groups themselves across all four sites. More than an occasion for informational exchange, the gratitude for the focus group as an opportunity for storytelling and community connection speaks to the value of extending relationships across different stakeholders. In effect, the focus groups created bridging mechanisms between previously unconnected individuals.

While the sessions were appreciated as a touchpoint for some participants who already knew one another, the ability for individuals to exchange personal histories and connections to the area with community members in different social networks while in an inviting yet facilitated setting was well-received especially when participants of distinct social networks within the communities had not had the opportunity to interact previously. Indeed, the value of social networks forged through consistent and sustained social contact can generate a sense of cohesion and facilitate norms of trust and have been shown to have positive outcomes on resource governance. Such processes are integral for building consensus around conservation ideas, norms, and can provide starting points to leverage for expanding conservation programs.

The idea of educational opportunities through ranch visits and school programs as a means to bridge subgroups and link social networks within a community was voiced in 3 of the focus groups. Particularly in areas experiencing demographic changes with large influxes of new landowner types, learning opportunities could be beneficial for connecting landowners to conservation understandings residing in social networks outside of their own to build greater social cohesion in a community. During one focus group, where there has been a considerable amount of this demographic influx, one agricultural producer commented on how impressed he was by a local group which created such educational opportunities for youth:

There is a group in town that puts on summer camps where they learn agricultural techniques, everything from wool spinning to irrigating, and we let them bring out the kids to the ranch and many of them are from out of state so their families will come visit too. It's a great way to promote agriculture to kids and to show people what we do.

Exchange and learning opportunities through family-based events or summer camps allows for engaging in the diverse understandings and meanings of conservation which may exist in a community in lived form. This can offer a valuable pathway to foster greater community cohesion around shared awareness of and appreciation for the ways in which conservation is expressed in human elements of livelihood, future generations, and stewardship in addition to wildlife species and ecosystems.

NOVEL APPROACHES TO CONSERVATION

In order to explore how to scale conservation projects across more private properties, and how this may be facilitated or incentivized by tapping into community processes, we presented two hypothetical incentive schemes to the groups for feedback. The first hypothetical described a conservation program where "bonus" incentive payments would be provided to neighbors that enrolled contiguous properties or landowners that recruited others to participate. The second incentive scheme involved neighbors or property owners in specific areas collectively applying for grants which would then be evaluated against proposals from communities in other localities.



The discussion revealed several concerns that would potentially strain existing relationships. The idea of

incentives and novel approaches to conservation often give a misleading impression that local people are primarily driven by extrinsic motivations. While there was initial interest in receiving additional financial compensation for actions benefiting ecosystems and wildlife, further discussion revealed considerable concern regarding fairness and ensuring credible verification. "How would referrals be verified" and "why not simply pay everyone the same" were two main points of feedback from the hypothetical incentive schemes. Obstacles of (likely) bureaucratic administration also highlighted a hesitation where many landowners did not think the benefits of such schemes would be worthwhile given the anticipated red tape involved. Moreover, there was significant concern raised over how landowners would be made to prioritize financial gain at the expense of personal and neighborly relationships. In general, participants were generally skeptical of the hypothetical scenarios and revealed how these scenarios might distort or minimize the significance of community and neighborly relationships. Moreover, conditionalities which could become overly bureaucratic and at the risk of jeopardizing irreplaceable relationships made such hypothetical incentive scenarios unattractive.

Opportunities

Because of various demographic changes occurring in rural areas and across the state of Colorado, different networks of information exchange and divergent touchpoints between residents naturally arise within a local community. All focus groups conveyed an appreciation for the event as an occasion to get to know others, reconnect with neighbors and friends, and to engage with different views through group discussion on topics which were relevant to the community. New residents voiced gratitude for the opportunity to hear personal stories from multigenerational landowners in the

area, while longtime residents were grateful for the ability to share their history and experience of social changes in their community. Multigenerational residents shared local history of how coffee shops and converted garages previously acted as such hubs of social exchange and relationship building within the community.

This consistent appreciation across landowner types demonstrated a need for continued storytelling and exchange as a path for scaling conservation in more inclusive and socially acceptable ways. For conservation organizations and practitioners, these emerging realities of different social networks within communities create an opportunity to develop communication strategies with messaging that speaks to understandings and forms of conservation which go beyond discussing birds and wildlife protection, to conservation which accounts for human components through acts of stewardship and heritage. Organizing

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or supporting regular social gatherings similar to those of the focus groups where a facilitated setting allows for neutral exchange of conservation ideas, values, and concerns to create bridges and bonds between members of different social networks in a community can promote greater consensus around conservation at a local level and greater conservation buy-in.

Each of the focus group areas expressed some type of concern over conservation approaches or history of conservation organization activities in their community. The ability for landowners too feel heard, and to feel included as equal stakeholders in decision making processes which have direct bearing on their operations, particularly regarding water decisions, creates novel pathways for conservation organizations to scale their work. By partnering with landowners around concerns which go beyond direct species protection to act as allies, such as in areas of water policy, conservation groups can be seen as invested in broader social and community outcomes and demonstrate a recognition of the multiple benefits provided to wildlife and ecosystems through land stewardship. As an example, conservation organizations could recognize community concerns, like changes in state water policy, and help communicate these concerns through their organization's broader statewide network. Furthermore, engaging with the presence of diverse social networks within and across communities can shed important light on not only the nature of information sharing and knowledge transfer, but power dynamics. Particularly in the context of historically marginalized populations within communities, considering social networks affords opportunities for conservation organizations to ensure that relevant representatives of all subgroups are invited and engaged in participatory processes (Prell et al., 2008).

The majority of focus group participants conveyed some history of program enrollment and working with NRCS and FSA staff. Concerns voiced over dynamics in some agency offices were a more recent development and participants shared an array of property benefits and productive relationships they previously had had with agency staff. The NRCS investment in partner biologists were not only seen as a valuable resource for information regarding program processes by landowners, but as a tool for working with both FSA and NRCS staff. Considering the significance of informational flows within social networks, having additional experts with whom landowners can build relationships can increase positive experiences around conservation work which can be transmitted across their respective networks.

More broadly, with landscape scale conservation as necessary to achieving meaningful conservation for wildlife and ecosystems, social networks should be seen as a resource that can be leveraged to amplify positive messages about conservation work and programs. By investing in meaningful and sustained relationships that result in positive experiences around conservation work in local communities, conservation organizations can anticipate spillover benefits of increased program awareness and interest across individuals in the network, which can serve as targeted as a conservation strategy in itself. Yet the growing reality of more diverse landowner types in rural communities across the American West requires conservation organizations to not only think about updating communication strategies which reflect these realities, but also identifying and creating meaningful points of social exchange which promote relationshipbuilding across different sub-networks, such as through facilitated meetings.



Lastly, several focus group participants suggested developing youth education and school programs, which create immersive opportunities for school kids and their families. Such opportunities not only create more direct and genuine engagement with the complex variables that factor into landowner management realities, but also allow for landowners and producers to feel heard and valued. Supporting youth programming and connecting with agricultural producers through compensating landowners for school and family visits could be an extension of BCR's current educational programming and further engage rural communities, which may lack formal environmental education opportunities. Such outreach strategies could be synergistic between BCR's stewardship and education programs and engender greater perceptions of partnership and sense of invested relationships between BCR and landowners. These partnerships would build from broader social relationships and go beyond bird and wildlife focused approaches to conservation.

Conclusions

The four focus groups confirmed what has been widely documented in academic literature and increasingly pronounced by conservation practitioners - that positive biodiversity outcomes do not emerge with passive, consultative, and bought types of participation (Perry & Davenport, 2020; Prell et al., 2021). The value participants gave to the focus group event speaks to a broader interest for similar occasions as opportunities of exchange and social learning. The process of collective learning has been shown to promote locally cohesive values to which conservation work and activities can map onto. Group-based approaches to program design which are inclusive and representative of the communities in which they are implemented does not guarantee specific biodiversity or conservation in and of themselves. Cost share programs, new patterns of land ownership, and policies will continue to be important dynamics affecting conservation delivery and programs. Yet, conservation work which is embedded and developed in partnership with local communities create the conditions for greater resilience in navigating external dynamics. Establishing understanding and relationships of partnership across the diversity of conservation values and networks which may reside in a community will prime conservation work to achieve greater connectivity, be more proactive, inclusive, and scalable across geographies.

In some cases, creating bridging ties between unconnected stakeholders are important for addressing hierarchies and historic tensions (i.e., such as with marginalized communities). Through facilitated meetings, these ties can provide social integration and increase trust and consensus. Similarly, providing venues for influential and deeply connected individuals to share their positive conservation experiences which are then transmitted across diverse social networks could be a powerful enabling force for achieving greater landscape scale conservation goals. Overall, the focus groups revealed that the continued opportunity for landowners to feel that their concerns were heard, and to be included in participatory decision-making processes, will be important not only for instilling productive social



relationships across communities but foster greater buy in for conservation.

Provided the growing complexity of resource management and conservation amidst wider development processes, BCR will benefit from investing in the collective ability to mobilize various and different kinds of know-how for management across diverse landowner types, operators, and ecosystems. Not only can it leverage better systemic understanding of ecosystem processes in a project area by engaging with those in day-to-day contact with a natural system, but it can create and strengthen social connections to convey, identify, and diagnose challenges in more robust and innovative ways.

In some cases, creating bridging ties between unconnected stakeholders are important for addressing hierarchies and historic tensions (i.e., such as with marginalized communities). Through facilitated meetings, these ties can provide social integration and increase trust and consensus. Similarly, providing venues for influential and deeply connected individuals to share their positive conservation experiences which are then transmitted across diverse social networks could be a powerful enabling force for achieving greater landscape scale conservation goals. Overall, the focus groups revealed that the ability for landowners to feel that their concerns were heard, and to be included in participatory decision-making processes, will be important not only for instilling productive social relationships across communities but foster greater buy in for conservation.

Provided the growing complexity of resource management and conservation amidst wider development processes, BCR will benefit from investing in the collective ability to mobilize various and different kinds of know-how for management across diverse landowner types, operators and ecosystems. Not only can it leverage better systemic understanding of ecosystem processes in a project area by engaging with those in day-to-day contact with a natural system, but it can create and strengthen social connections to convey, identify, and diagnose challenges in more robust and innovative ways.

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Appendix: Focus Group Questions

CONSERVATION UNDERSTANDINGS

- When you hear the word conservation, what does that mean to you?
- How does the conservation term align with your vision and management of your property?
 - a. How about for your neighbors or others in the community?
- Have you done a conservation project on your property? If so:
 - a. Could you briefly describe the project?
 - b. What motivated you to do the project and what was your experience like?
 - c. What did you like about the agency or organization you worked with to do the project?
- What are some of the biggest needs in your community and what would you like to see in terms of conservation organizations or agencies considering those needs? (resilience)

INFORMATION NETWORKS

- What information is most useful to you in order to manage your property in the ways that you want market or economic information, animal health, ecological information (forage, wildlife, soils, water)?
- Where do you go to obtain this information for managing your property?
- Are there information gaps for you for managing your property in the ways that you would like?
- How would you go finding out about conservation options for your land? Is that similar to what you think your neighbors would do?

SOCIAL NETWORKS

- Is there a leader in the community or someone who comes to mind who acts as a resource for the community?
 - a. Without sharing their name, could you tell us a little bit about makes them a community leader or resource?

- 10. Would you say that there is a high level of awareness of potential/planned/completed conservation projects in your community?
 - a. In other words, if you do a project do you think others in the community are aware of it?
- 11. Are there concerns about conservation work in your community?

NOVEL APPROACHES TO COMMUNITY CONSERVATION

- 12. Do you have any ideas about how to raise awareness of conservation projects in your area? What do you think would be the best way to get more participation in or awareness of conservation in your community?
 - a. What sort of barriers do you think exist as far as increasing participation in conservation?

SOME NOVEL IDEAS OF BUILDING COMMUNITY SUPPORT HAVE BEEN PROPOSED. WE WOULD LIKE TO EXPLORE A COUPLE OF THESE IDEAS WITH YOU TO GET YOUR FEEDBACK.

- 13. One idea some academics and economists have proposed includes providing "bonus" incentives for landowners adjacent to each other enrolling - or "bonus" incentives for landowners that recruit others in their community to participate. How would you feel about an approach like this? How about your neighbors?
- 14. Do you think financial compensation is necessary or would individuals in your community participate in conservation for other, non-financial reasons?
- 15. Another idea is to have neighbors or property owners in a specific area apply for grants collectively that would be evaluated in comparison to proposals from communities in other geographic areas. What's your reaction to that approach?
- 16. Do you have other ideas for how to increase broader community participation?

CONCLUSION

If you had to share one thing with an outsider that you are proud of about your community, what would you share?

We have talked about a pretty broad range of topics today. Is there anything that has come to your mind during this session that you think we may have missed?





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