

“It Should’ve Never Been Broke Out”: Understanding Participation in the Conservation Reserve Program in Southwest Kansas and Southeast Colorado

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ABSTRACT

The Conservation Reserve Program (CRP) plays a vital role in restoring grasslands by removing highly erodible land from production; however, landscape-scale conservation success depends on participation. Fluctuating trends in participation suggest a need to better understand landowners’ motivations for enrolling. Since participation hinges on agricultural producers’ perceptions of programs, there is utility in understanding programs through their lens to ensure program design accounts for their needs. To understand what drives enrollment, I conducted immersive ethnographic fieldwork in farming and ranching communities of southwest Kansas and southeast Colorado. Through interviews and participant observation, I examined producers’ reasons for participating, program perceptions, and the degree to which CRP fits with their lived experiences. I also explored challenges faced by field staff of the Farm Service Agency (FSA) and Natural Resources Conservation Service (NRCS) in working within the program structure. I used open coding to identify common themes and quotes to capture producers’ and field staff’s points of view. I identified several frames through which producers think about CRP and themes related to how CRP fit well or poorly with producers’ and field staff’s lives. Frames characterized producer perceptions of CRP as a financial savior, a way to maintain financial solvency, and to gain leverage for their operation. Additionally, CRP was framed as a retirement fund and a conservation program that provides a solution for erodible land. Lived experiences related to wind erosion and the Dust Bowl, perceived community impacts of CRP, and the cultural and economic history of the region, also influenced how producers make sense of and ‘frame’ the program. Guaranteed payments to maintain cover incentivize participation, especially for land which some producers believe should have never been farmed, or “broke out”, in the first place. Even so, the economic and cultural aspiration to farm may prompt program avoidance or re-cultivation of prior CRP land. In identifying program fit, many felt the program serves a noble purpose but is complicated by rules which lack ‘common sense’. While producers valued the program’s role in soil stabilization and increased wildlife habitat, CRP requirements during

the grass establishment phase and mid-contract management do not always align with producer and field staff visions. Mixed opinions existed around suitable grass species and management practices such as disking, interseeding, and grazing. A dominant theme emerged from producers, echoed by field staff, in the benefits of grazing and need for CRP to increase flexibility to maximize grazing compatibility. Broader program concerns included a shifting program focus, inconsistent enforcement of rules, and one-size-fits-all management. Personal relationships between FSA, NRCS, and producers were generally regarded as positive, and staff members value their role in working with producers to harmonize program requirements with producer needs, within the bounds of the program. Juggling various programs with limited time and other procedural issues leave many field staff feeling overwhelmed and understaffed. Field staff expressed a desire for greater one-on-one time with producers to better communicate program requirements or amend management plans. Both producers and field staff felt CRP could be enhanced to achieve a greater conservation benefit, alleviate staff burdens, and improve overall satisfaction if program rules had both greater flexibility and regional tailoring to correlate with the variable climate and local conditions. In exploring CRP 'frames' and 'fit', this case study provides a window into the interplay of producers' lived experiences in the shadow of the Dust Bowl, and a ubiquitous conservation program's impact on the way land is used.

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GENERAL AUDIENCE ABSTRACT

The Conservation Reserve Program (CRP) compensates farmers for removing sensitive lands from agricultural production. Since program participation has fluctuated over the years, there is a need to understand participation through the perspective of farmers and ranchers who enroll their land in CRP. The goal of CRP is to provide habitat, reduce soil erosion, and prevent runoff; however, understanding producers’ reasons for enrolling may paint a clearer picture of how to better match human needs with program objectives. To understand these motivations, I used a deep dive approach in communities of Southwest Kansas and Southeast Colorado to better learn about perspectives related to CRP from both producers and field staff of the Farm Service Agency (FSA) and Natural Resources Conservation Service (NRCS). I conducted face-to-face interviews and participated in a variety of activities with field staff and producers to understand why people enroll, and to what degree CRP fits with their needs and desires. Through my time in the field and analyzing interviews and fieldnotes, I found several frames or ways of thinking about CRP. These include CRP as a retirement fund, as financial solvency, and as a conservation program and answer to land blowing or wind erosion. Additionally, I found several themes related to program fit including concerns with one-size-fits-all management, changes in the program’s focus and rules over time, and the need for greater flexibility to match CRP requirements with local site conditions and producer needs such as grazing. Field staff expressed concern over program staffing and time constraints and echoed many of the program mismatches discussed by producers. The management implications in this thesis were inspired by ideas from producers and field staff who thought CRP could be adapted to take advantage of opportunities that make sense for the climate as well as agricultural and procedural needs. This case study provides a window into how lived experiences around farming and ranching in the Dust Bowl region interact with a widespread conservation program to impact the way land is used.

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Figure 1: Cattlemen and women ride through CRP in Prowers County, CO

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INTRODUCTION

Over the last century, grasslands in the Southern Great Plains have experienced large-scale conversion to crops to supply a growing population's demand for food. By 1938, nearly 78% of Western Kansas was in crop production (Lauenroth and Burke 2008). Grasslands provide valuable ecosystem goods and services such as forage for livestock, wildlife habitat, soil stability, carbon sequestration, and clean air and water (Maczko and Hidinger 2008). In a region which has been farmed intensively for over one hundred years, grasslands benefit from landscape-scale conservation efforts to restore ecological function and diversity and mitigate habitat fragmentation. Voluntary conservation programs like the Conservation Reserve Program (CRP) provide a link between sustaining viable ecosystems while supporting agricultural communities, in a region that experiences significant hardship both ecologically and economically.

CRP provides farmers with annual rentals payments and cost-share assistance to remove sensitive lands from production in order to reduce erosion, improve water quality, and provide wildlife habitat (fsa.usda.gov). It uses financial incentives to encourage landowners to set land aside for perennial grasses. Annual payments for land enrolled in CRP provide stable income for farmers and ranchers (Isik and Yang 2004). Benefits of CRP include improvements in soil quality and erosion, greater habitat connectivity, and abundance of species (Diebel et al. 1993; Spencer et al. 2017). With the impending 2018 Farm Bill, CRP rental rates, the acreage cap, and nesting season grazing restrictions are being considered for amendment. Currently, the CRP acreage cap is proposed to increase to 29 million acres, with a rental rate to be set at 80% of average farm ground lease rates (agriculture.house.gov).

While financial payments are considered the primary benefit to landowners, there are a number of ways landowners view the benefits of participating in CRP. Participation in and satisfaction with CRP is a function of the benefits to the land, direct benefits to a producer's livelihood, as well as benefits to their overall wellbeing. Consequently, a number of factors influence program satisfaction such as rule complexity, relationships with field staff, flexibility with requirements, and perceived environmental benefits (e.g. Reimer and Prokopy 2013; Lute et al. 2018). Understanding how financial incentives as well as other motivations influence program

participation can aid practitioners in sustaining program engagement. Understanding the considerations of producers when contracts are expiring may shed light on how the process of re-enrollment may be structured to match producers' concerns. My research adds to the existing literature on CRP motivations, and addresses the paucity of purely qualitative studies that focus on producer enrollment, re-enrollment, and what happens after leaving the program.

PURPOSE STATEMENT

The future of Farm Bill programs like CRP can benefit from understanding what farmers and ranchers think to inform program improvements. My study used a human-centered design framework with ethnographic methods to understand the culture and lived experiences of producers in order to ascertain their needs in relation to CRP. Conservation of working landscapes ultimately hinges on solving both ecosystem and human problems. With this in mind, my study sought to explore both producer and field staff perspectives related to CRP enrollment, re-enrollment, and decisions after contracts expire. While a great deal of research explores motivations for CRP participation and enrollment (e.g. Young 2014; Konyar and Osborn 1990), fewer studies examine producers' thought process after contracts expire (e.g. Caldas et al. 2016; Johnson et al. 1997). The purpose of my study was to understand users' experiences throughout the CRP process, using a human-centered design lens, to identify where the program is working and where missed opportunities may exist. The overarching goal of my research was to help inform program adaptations to better match the needs and lived experiences of producers and field staff of southwest Kansas and southeast Colorado. Identifying the suite of challenges related to CRP allows for a complete picture of the program experience to see where producer needs, agency needs, and conservation objectives may become better aligned.

Research Question:

My general guiding research questions were: *Why do landowners participate in CRP?*
To what extent does the program meet the needs and desires of producers and field staff?

With my first question, I wanted to understand what the barriers and drivers were of enrollment, re-enrollment, and exiting the program. My second question examined producers and field staff's level of satisfaction with the program, how CRP fit or did not fit with their needs, and what the

program mismatches were. The second question included exploring the experience of field staff: FSA who administer the program, and NRCS who provide technical assistance. Throughout this study, the term producers is used which may indicate someone who farms, ranches, or both.

LITERATURE REVIEW

Conservation programs depend on various drivers of participation (e.g., Sorice et al. 2013; Ramsdell et al. 2016). Landowners face intrapersonal constraints that suppress participation in conservation programs such as concerns about loss of farming/ranching culture and reluctance to accept government subsidies (Gutwein and Goldstein 2013; Didier and Brunson 2004). Additional factors contributing to nonparticipation include time and resources (Didier and Brunson 2004), exceedingly complex rules (Lute et al. 2018), lack of control and flexibility in program design (Swann 2016; Sorice et al. 2013), a strong property rights orientation (Lubell et al. 2013) and temporal disconnects from delays in feedback from land management actions (Briske et al. 2016). Further challenges hindering private lands program participation include knowledge gaps and tension between landowners and NRCS, inadequate communication of monitoring results, and weak ties between conservation outcomes and production goals (Kennedy and Brunson 2007; Lubell et al. 2013; Briske et al. 2016). Several landowner-perceived benefits of adopting conservation practices have been accounted for including bringing back wildlife for hunting and viewing opportunities (Diebel et al. 1993), enjoying the aesthetics of restored land (DJ Case and Associates 2014), as well as noticeable range improvements and being seen as a good land steward (Didier and Brunson 2004).

A study from Australia examined private lands conservation with a landholder-based approach. Moon and Cocklin (2011) interviewed landholders to ascertain attitudes and values towards three conservation programs, which they note are often designed in a one-size-fits-all manner versus tailoring to one's land and needs. The study found that monetary incentives were preferred among production-oriented individuals. The authors explain that financial incentives serve to alleviate the risk and uncertainty of agricultural production; whereas, non-production landholders may respond to more diverse incentives. Moon and Cocklin (2011b) also found that win-win scenarios of conservation programs and production goals were more likely to be embraced by

landholders, such that, “if there’s nothing for us, why bother doing it because it’s just another thing you’ve got to do then.”

Participation in CRP and Farm Bill Programs:

In considering CRP participation, Isik and Yang (2004) noted farmers are faced with uncertain revenue dictated by market forces, and CRP payments that change from one sign-up period to another. Some landowners welcome CRP payments as a means towards staying on the land; the cost-sharing benefits and steady payments can help with both financial uncertainty and finding utility in marginal land (DJ Case and Associates 2014). The 10-year contract period may be seen as a positive long-term investment for many producers weighing the pros and cons of CRP participation (Stubbs 2014). In a mixed methods examination of CRP in Nebraska, Lute et al. (2018) found enrollment to be influenced by a combination of concern for soil erosion and seeing CRP as a profitable land use. Reimer and Prokopy (2013) also found farmers were motivated by the two-fold benefits of CRP soil conservation and as a solution for marginal land. The authors explained that the environmental benefits and rental payments outweighed the benefits of continuing to farm the land.

Various program qualities can either encourage or deter enrollment. CRP participants value broad program benefits such as increased habitat, decreased water runoff, and improved soil quality (Lute et al. 2018). Reimer and Prokopy (2013) found that farmers were interested in hunting benefits from improved habitat, and CRP land as a wider environmental public good. Young (2014) found identity as a hunter as central to program willingness in addition to perceived environmental benefits. Diebel et al. (1997) noted that producers especially favor increased populations of deer and pheasant as a result of CRP. Deterrents to enrollment include high commodity prices, low rental rates, and changing producer preferences in retiring land (Konyar and Osborn 1990; Stubbs 2014). Lute et al. (2018) found rule complexity to be a common limiting factor in enrollment, and the strength of relationships between producers and practitioners as either encouraging or dissuading participation. The study also found noxious weed concerns were the most common complaint of CRP.

Decisions regarding post-contract plans point to the considerable importance of land-use decisions being financially feasible for landowners (Caldas et al. 2016; Johnson et al. 1997; Janssen et al. 2008). Caldas et al. (2016) found that producers with either high gross farm sales or high livestock numbers could make them less likely to re-enroll land. Having a strong profit motivation meant greater emphasis on cost-benefit implications of land-use choices. How close one was to retirement, as well as increasing land values, were also found to affect producers' decisions to keep land in CRP (Caldas et al. 2016). Johnson et al. (1997) found landowners who had a high level of engagement in livestock production were more likely to keep land in grass following contract termination, by either re-enrolling or converting land to pasture. As well, the authors found increasing commodity prices may prompt strongly oriented farmers to put expiring land back in crops.

While the majority of CRP studies use quantitative (e.g. Konyar and Osborn 1990; Isik and Yang 2004; Diebel et al. 1993; Caldas et al. 2016), or mixed-methods approaches (e.g. Reimer and Prokopy 2013; Lute et al. 2018), very few were found to use a qualitative approach (e.g. Juhl 2002). Juhl (2002) examined Farm Bill conservation programs, including CRP, in a landowner-centered context in the Great Plains. Interviews with farmers in Nebraska were aimed at identifying expressed farmer needs, ecological knowledge, and a conservation ethic. Juhl surmised that most agency assessments and program developments are conducted without input from farmers, and that “this is ironic, considering that individual landowners and farmers have the most power to influence the landscape” (Juhl 2002, p. 6.)

Various recommendations exist in the CRP literature which are proposed to broadly increase program effectiveness and satisfaction. Swann (2016) explained that increased one-on-one time and in-person farm visits to share knowledge of practice benefits would increase information transfer and may promote commitment to conservation practices. In addressing delays in feedback between practices and ecological benefits, the Conservation Effects Assessment Project (Briske et al. 2016) calls for increasing collaborative monitoring of program land, boosting communication capacity between landowners and NRCS, and being explicit about linking conservation practices to ecological outcomes to strengthen feedback loops. Young

(2014) also suggests making information about CRP environmental benefits more salient to farmer's perceptions of land health.

BACKGROUND

The area of southwest Kansas and southeast Colorado, the focus of my study, has experienced an alarming loss of native grassland habitat, along with soil erosion and aquifer level decline since farming took hold in the region (Lauenroth and Burke 2008). Consequently, CRP has played a central role in land-use in the area and conversion back to perennial grasses since the late 80s greatly reduced topsoil erosion by wind, and mitigated water runoff. Additionally, CRP land in this region provides valuable habitat for upland game birds, songbirds, and focal species such as the Lesser Prairie Chicken (*Tympanuchus pallidicinctus*). The Lesser Prairie Chicken (LEPC) State Acres for Wildlife Enhancement (SAFE) program is a popular CRP initiative in the region, and producers may be dually enrolled in CRP and the LEPC SAFE ("Conservation Habitat Management"). For this species, CRP especially in Kansas has successfully provided greater habitat connectivity, abundance of food sources, and facilitated a northward expansion; however, questions remain about the prairie chicken's overall abundance as well as the quality of habitat provided by CRP (Spencer et al. 2017). Quantity of habitat on the other hand is not lacking, as southwest Kansas and southeast Colorado have some of the highest rates of CRP participation in the country. Kansas has the second highest rate of CRP participation in the U.S. with 2.07 million acres enrolled as of September 2017 (fsa.usda.gov). Colorado is number four in enrollment with 1.78 million acres. Both Baca County in Colorado and Hamilton County in Kansas have the highest rates of CRP enrollment in their respective states and have transitioned large percentages of the counties to CRP grass (Personal communication, FSA 2017).

Because over 70% of land in the United States is privately held (Ciuzio et al. 2013), landscape-scale conservation success depends on private landowner participation in conservation programs like CRP. The U.S. government provides voluntary conservation programs for private landowners through USDA Farm Bill programs, which had a combined funding of \$5.53 billion in 2015 (NRCS, Economic Research Service, unpublished data). United States taxpayers, federal land agencies, landowners, and grassland-dependent species all hold a stake in the degree to which landowners engage with Farm Bill conservation programs. Created in 1985, CRP is the

largest and most well-funded federal private lands conservation program with 23.5 million acres enrolled as of April 2017 (Barbarika 2016). Despite the program's longevity, CRP participation has fluctuated over the years, and within the last decade has faced historic declines in enrollment (Stubbs 2014; Ciuzio et al. 2013; Briske et al. 2016). The CRP acreage cap was reduced to 24 million acres under the 2014 Farm Bill (Caldas et al. 2016), making enrollment eligibility more competitive; however, the 2018 Farm Bill proposes the cap jump to 29 million acres. The annual rental payment limit is currently set at \$50,000 per landowner.

Ecology, Climate, and Demographics:

My study area of southwest Kansas and southeast Colorado is a rural, agriculture-based region of the Southern Great Plains. Dryland farming, irrigated farming, and cattle ranching are the primary modes of production with wheat, corn, and milo as the most common crops. The region is marked by low precipitation and shortgrass steppe vegetation including buffalo grass and blue grama. Western Kansas is the divide between the shortgrass and southern mixed prairie, and concurrently, the semiarid and dry subhumid zones (Lauenroth and Burke 2008). In other words, as one moves east in Kansas, precipitation and production capacity increases. The Arkansas River flows through Prowers County, Colorado and Hamilton County, Kansas as it flows from the Rocky Mountains towards the Mississippi River. The Cimarron National Grasslands are located in Morton County, Kansas and the Comanche National Grasslands lay in the southwest corner of Baca County, Colorado. This region, particularly the southernmost counties, was part of the hardest hit area during the Dust Bowl experiencing extreme damage from wind erosion.

Today, the shortgrass steppe, which includes southwest Kansas, southeast Colorado, and the Oklahoma and Texas panhandles, makes up the driest and warmest portion of the Great Plains (Lauenroth and Burke 2008). A portion of the landscape is in central pivot irrigation and relies on the Ogallala aquifer for irrigated farming. Wells for stock tanks and residential water are sometimes drilled at depths of up to 1000 feet while other areas may have more shallow access to the aquifer. Portions of the region have a large concentration of playa lakes, notably Kiowa, Greeley, Kearny, and Lane counties. Playas are ephemeral rainwater catchment basins that provide valuable recharge to the Ogallala aquifer ("Playas Recharge the Ogallala Aquifer" 2016). Additionally, this region is part of the central flyway for migrating birds and many bird

species and other wildlife depend on the grasslands and playa lakes of this region, making this an important region for CRP engagement.

Issues Facing Landowners in The Great Plains:

Private landowners in this region and elsewhere have diverse motivations for owning land and face myriad issues related to balancing livelihoods and values. Motivations to pursue a farming/ranching lifestyle are not solely driven by profit, and other values for staying on the land may be equally important as financial reasons (Sayre 2004; Sorice and Donlan 2015; Brunson and Huntsinger 2008; Didier et al. 2004; Kennedy and Brunson 2007; Grigsby 1980). For example, landowners may have strong attachments to the land (Gutwein and Goldstein 2013; Lubell et al. 2013), take pride in local ecological knowledge (Knapp and Gimenez 2009), and have strong ties to values associated with farming/ranching such as independence, a self-sustaining lifestyle, and tradition (Rowe et al. 2001; Grigsby 1980). This all occurs in the context of a fluctuating cattle and agricultural commodities markets (Gutwein and Goldstein 2013), pressure to sell land (Sayre 2004), drought due to climate change (Wilmer et al. 2016), exurban migration (e.g. Rowe et al. 2001; Larsen et al. 2007), and changing landownerships (Gosnell et al. 2006).

Currently, within the Southern Great Plains (Colorado, Kansas, Oklahoma, Texas, and New Mexico), wildfire risk and concern over the dwindling Ogallala aquifer pose significant challenges for Plains farmers balancing production needs with conservation objectives. Moreover, this region holds a lasting legacy in which pursuance of the agrarian ideal as a result of the Homestead Act came to a catastrophic halt during the Dust Bowl of the 1930s. Following the Dust Bowl era, the U.S. government continued to encourage the agricultural conquest of the plains and provided federal relief, crop insurance, and loans to keep farmers on the land (Opie 1998). The invention of center pivot irrigation in 1948 allowed farmers to tap the enormous Ogallala aquifer. Opie (1998) characterizes the sustained federal farm support the Great Plains have received as a kind of ‘moral geography’ in which the family farm is idealized and preserved as the “locus of good human values and authentic environmental conditions” (Opie, p. 241). This is important to know as historical context for conservation programs like CRP and federal farm

support in the Southern Great Plains, which evolved as an outcome of political processes, social pressure from agrarian morals, and trying biophysical realities.

METHODS

My research employed a human-centered design (HCD) lens using ethnographic methods to explore the current reality and needs of landowners. In Europe and Australia, human-centered design has been used to directly inform policy related to government programs (Mintrom 2016). HCD can be used to enhance public value with government programs because “many gaps exist between the services governments deliver and what citizens want” (p. 1). Using a HCD approach may fill knowledge gaps, illuminate blind spots, identify areas of opportunity, and create more holistic understandings of government program impacts on citizens (Mintrom 2016). The following quote from Sorice and Donlan (2015) illustrates the necessity of a human-centered approach to conservation program design, and the essential role of the researcher in the ethnographic stage:

The crucial first step in this program design approach is to understand the lived experience of the target group. For example, ethnographic research provides in-depth, comprehensive knowledge of a group’s culture and value systems, which can serve as a foundation for identifying the specific unarticulated needs of the potential participants. A conservation program design process that first understands what is culturally meaningful and appropriate can then explore how members of that group might undertake the journey from the discovery of the program, through enrollment, and to their exit from the program. This knowledge can generate innovative solutions that will improve the overall attractiveness and performance of incentive programs (p. 790).

Much like grounded theory, HCD allows for concepts and ideas to emerge from the data and from the people themselves, in contrast to either a deductive theoretical approach or a top-down pragmatic approach. It is important to pay attention to a diversity of cases in which ‘positive deviance’ may have occurred, meaning individuals who have found success through unconventional means (Brown and Wyatt 2010). Looking to places where unique benefits or trickle-down effects happen could generate out-of-the-box insights about how conservation programs may be manifesting in unusually valuable ways. This is why seeking out landowners at diverse ends of the adoption spectrum was a goal of this research. Additionally, a human-

centered design approach can uncover unarticulated needs and unmet desires in landowner conceptualizations of conservation programs (Santo et al. 2015). The overarching philosophy of the HCD approach focuses on landowners' needs and tailoring conservation program design to meet those needs. I used a combination of HCD and ethnography as the guiding foundation to my research while in the field.

Sampling

I conducted my field research in southwest Kansas and southeast Colorado over the course of three and a half months. I lived in the town of Syracuse, Kansas in Hamilton County and drove around the region to visit farms, ranches, and FSA/NRCS offices. The majority of my time was spent in Hamilton, Kearny, and Stanton counties in Kansas and Prowers and Baca counties in Colorado, but I also worked in Morton, Stevens, Lane, and Greeley counties in Kansas, and Kiowa and Bent counties in Colorado. I lived in Hamilton County, Kansas for the duration of my fieldwork. I spent one month in the motel of Syracuse, and two and a half months living in the country, ten miles north of Syracuse in a restored train depot bunkhouse across the road from my landlord's farmhouse.

Initial sampling was conducted through connecting with key informants via project partners including the Bird Conservancy of the Rockies, Playa Lakes Joint Venture, NRCS staff, and FSA staff. These contacts helped provide access to landowners at varying ends of the spectrum of engagement with CRP. In order to gain a diversity of perspectives, my study set out to interact with current participants, those who were re-enrolling, those who have dropped out, and those who have never enrolled (see *Table 1*). What I discovered in the field, is that placing landowners into these categories proved difficult given that they often have multiple contracts at varying stages of enrollment. A producer may have had newly enrolled CRP land, land that had been in the program for thirty years, and land which was in CRP but he/she had chosen not to re-enroll in order to farm or pasture it. With that said, my sampling guide (*Table 1*) encouraged me to seek out outliers such as landowners whom had never participated in CRP. They were difficult to find given the program's wide prevalence in the region; however, I did talk to people who fit that criterion.

I adhered to a sampling paradigm which was opportunistic, allowing for following new leads and taking advantage of opportunities in the field as they arose. These methods of sampling are well suited to learning in the field through naturalistic inquiry (Bernard 1995). I started by connecting with local FSA and NRCS staff people to learn more about what CRP participation looks like in the region and potential landowners to contact. I asked NRCS and FSA about whom the avid CRP participants were, as well as those who had expressed frustration or had waning engagement. My primary entry point for gaining this knowledge occurred through spending time in NRCS/FSA offices, at County Committee meetings, and on county tours and CRP spot-checks with agency staff. In addition, the relationships I formed through personal connections I had in Syracuse, Kansas, my landlords, and producers I met through my own interactions and networking in the community allowed me to use snowball sampling to gain a diversity of perspectives with a combination of production-oriented and conservation-minded participants.

Table 1. A diversity of perspectives can be achieved by finding landowners who are at different stages of engagement with CRP.

	Never enrolled	Enrolled: Active	Enrolled: Re-enrolling	Enrolled: Dropping out	Dropped out
Level of engagement with CRP	Producers who have never enrolled	Producers who are in an active contract	Producers who have re-enrolled or are in process	Producers who are dropping out and have decided not to re-enroll	Producers who have left the program
Broad question	Why are they thinking about enrolling or why not?	Why are they actively involved and how is that going?	Why are they re-enrolling after their current contract ends?	Why have they decided to drop out?	Why did they leave and what are they doing now?

Data Collection

My research was inductive, holistic, and focused on landowners' own perspectives. I used ethnographic methods to gain an in-depth understanding of CRP through the producers' eyes. Ethnographic methods included semi-structured interviewing and participant observation to

better understand the contextual realities of producers in my study region. To understand what is meaningful to people, ethnographers aim to record ‘thick descriptions’ of the life of those being studied to illustrate meanings and experiences in-context (Taylor and Bogdan 1998). The strength of this method is in capturing detailed data to develop insight and concepts through understanding the multi-faceted aspects of producers’ lives which influence engagement with CRP.

Edith Turner (2007) argues that in ethnographic inquiry, “the nearer to participation, the better the writing” so that we as researchers must “get out there and dance with the people, to wash the dishes for them... to really participate” (p. 109). I attempted to embody this more humanistic style of ethnographic inquiry which eschews the neutral and detached researcher. I opted instead for the advice of Turner (2007) who explains that many research students cannot help but become involved in the communities in which they are placed and in fact must always be “attempting to learn the local language of words and manners and, by doing this, delighting the hearts of their new friends” (p. 110). She argues that allowing this liberty to connect with research participants actually leads research towards a more accurate representation of life in a given community. I felt as if I gained a truly thorough comprehension of CRP through the producer’s perspective during my field research through embracing this style of anthropology:

Anthropology may be looked at as a kind of getting-in-down with the people, gradually absorbing many details about their lives, their intentions, their techniques, and the depths of their ways, and at the same time demonstrating that one is learning those ways and does understand them, by reflecting them back to the people as innocently as possible, like the moon reflecting the sun nonjudgmentally (Turner, p. 111).

While a great deal of research in rangelands has been conducted through surveys and quantitative methods, other research including this study, choose to use interviews, participant observation, focus groups, and other qualitative methods to better understand the people of working landscapes. Sayre (2004) argues that qualitative methods are appropriate for understanding the way landowners think about their land, and are “capable of discovering factors that are unanticipated and thus undetectable using purely quantitative methods” (p. 669). Sayre critiques quantitative rangeland science literature as having exhibited minimal connection between

expressed value orientations or demographics and actual agricultural practices. This suggests that landowners do not always do, think, and feel what they may say, suggesting a need for empirical observation and engagement in an everyday life context. Qualitative research is often used for its knack at elucidating the subjective, contextual, and place-based worldviews of research subjects. Indeed, Kennedy and Brunson (2007) contend that qualitative research is gaining legitimacy in understanding decision-making in rangelands due to its flexibility and potential to “reveal factors which affect ranch management but have eluded quantitative studies” (p. 26).

The underlying contextual realities of landowners are further complicated through the highly variable and unpredictable biophysical landscape in which they reside (Kennedy and Brunson 2007; Sayre 2004). The life of producers is perhaps best understood on a case-by-case basis. Kennedy and Brunson (2004) endorse spending time with individual producers on their land to reach a deeper understanding which may not be achieved through aggregate studies. The following quote accurately illustrates the need to understand producers through case-based qualitative research, and to resist grouping producers into categories or typologies:

It is not so much about different ‘types’ of ranchers having different values, but about individual ranchers having multiple values that cannot be reduced to any single common denominator and whose relative importance is not necessarily fixed. Sometimes these values align with one another, sometimes they conflict, and exactly which value predominates in a given decision may depend on contextual factors (Sayre, p. 671).

At least two ethnographies of ranching communities exist: Carolyn Sprague’s of Nevada ranch women (1984), and Thomas Grigsby’s of buckaroo ranchers in southeastern Oregon (1976). Many other studies have used ethnographic methods such as interviews and participant observation (e.g., Yung 1991; Knapp and Gimenez 2009; Didier and Brunson 2004). All of these studies have attested to landowners’ strong attachments to the landscape and the relationships formed in those landscapes.

Participant Observation

Participant observation enables the researcher to study culture through immersion in the setting to “hear, see, and begin to experience reality as the participants do” (Marshall and Rossman

2011, p. 140). Through participating in and observing CRP and farm/ranch related tasks, I was able to engage in relevant activities in the same manner as participants would. Taking on a role as a participant-as-observer allowed various levels of engagement in the daily life of farming, ranching, and CRP activities in a more-or-less neutral visitor's role. An example of active participation would include recording vegetation species as a volunteer with Pheasants Forever, while more passive observation would entail listening to FSA staff interact with producers in the office. Taking this approach helped lead me to a more intuitive understanding of what producers like and don't like about the program and how CRP fits with their lifestyles, as well as how field staff interact with the program. Participant observation activities were focused around my research question of understanding why producers participate in CRP, and having them 'show me' their experience of what CRP means in the context of a producer. Along these same lines, I also engaged with NRCS and FSA to observe how the CRP process unfolds from the agency angle. In interviews and surveys, participants may leave out or hide things which they feel is not relevant or desirable (Bailey 2007). Part of the rationale for participant observation is to gain additional insight from engaging in activities and learning beyond what is said in an interview or with a set of questions.

My engagement as a participant-as-observer in the community was achieved through various levels of engagement with social and agricultural activities, as well as repeated visits with certain families, and shadowing FSA staff and accompanying them on CRP-related activities. The purpose of engaging in a diversity of ways was to build rapport, learn more about someone's land and operation, and explore more concrete aspects of CRP such as mid-contract management. I formed relationships with FSA/NRCS staff in an effort to understand the benefits and challenges faced by program staff. I spent time in several different FSA/NRCS county offices looking at CRP paperwork, went on multiple-day county tours, and accompanied local FSA staff on CRP spot-checks, in addition to the interviews conducted. On one occasion I volunteered to help with Lesser Prairie Chicken monitoring with Pheasants Forever and NRCS. I spent another day touring playas with a landowner and Ducks Unlimited staff.

With producers, I almost always conducted interviews at their farms sitting at the kitchen table or in the living room. A couple interviews were conducted in truck cabs. Interviews were semi-

structured and conversational using my interview questions as a guide. Participant observation included driving around and looking at CRP fields, grazing of CRP, walking through fields, riding in tractors planting CRP cover crops, as well as looking at farm equipment, CRP contracts, and anything from being shown a landowners' taxidermy collection to their grain silos, wildlife waterers, and feeders. I also spent time on horseback with producers looking at habitat improvements they were doing, the difference between CRP and native grass, and gathering cattle for branding. I learned about opinions on CRP and farm programs around the branding fire with ranching families after helping to give shots to calves. Farmers would take me through their CRP fields, native grass fields, and farmground to discuss negative impacts of things like disking, pests, or cover crops, or to show me a CRP field they thought looked "just gorgeous" as one producer exclaimed. Field discussions included learning more about someone's operation and farm including work, family, and social background as well as their experiences with program processes and management practices.

My landlords were my first interviewees and subsequently became both landlords and friends. I spent a significant amount of time with this family; helping to take care of their cat when they left town, having dinner with them, talking with my landlord as he repaired equipment and loaded trucks, and conversing with both him and his wife around the kitchen island in their house. I interviewed and participated in activities with my neighbors who lived in the rural area north of Syracuse and became very familiar with that corner of Kansas and the people who lived there. This was a production-oriented dryland farming and cattle producing community.

During my time in the region, I participated in many local activities to gain an understanding of the way of life and lived experiences of farmers and ranchers. I spoke with farmers while getting my oil changed at the local co-op, had lunch at the sale barn during cattle auctions, played golf in a ladies group, attended dances at the local pub, was part of a mud volleyball team during the county fair, and helped a neighbor cook for a seed company party. I also attended barbeques, children's birthday parties, lunches, dinners, baseball games, tractor pulls, and rodeos as a result of the relationships I formed during my time in the region. As fall approached, I took photos of corn harvest and went dove hunting with producers I had interviewed. I sometimes heard myself referred to as 'the CRP girl' as many people were familiar with my presence as a graduate

student doing my thesis research on CRP. I found the community to be warm, welcoming, and open to speaking with me and sharing their experiences with CRP, as well as including me in various activities to help me understand life in the area. As a general rule of thumb, I rarely said ‘no’ when invited to experience various farming and ranching activities and social events; a research strategy encouraged by Brinkmann (2014b) who contends that sense-making occurs through experiencing situations. Being open to these opportunities afforded me a multitude of potential interviewees which allowed me to meet and exceed my interview and participant observation goals. Through my time embedded in the community, I was able to gain rapport and form a more complete picture of the connection between lifestyles and CRP through the eyes of local producers and agency staff.

Fieldnotes

The primary method of data collection during these participant observation activities was ethnographic fieldnotes. I engaged in the participating-to-write style of ethnography (Emerson et al. 1995), which consisted of making notes, jottings, and memos while in the field (Marshall and Rossman 2011). I recorded notes at the end of the day following participant observation or whenever I had a spare moment in the field. I often jotted down notes in a small notebook or on my phone while driving around with producers and agency staff. Sometimes I would jot down key points of recent conversations during bathroom breaks. I recorded producer quotes, descriptive observations, and key insights during field encounters. Adherence to inductive and iterative methodological guidelines calls for reading and re-reading data early and often, keeping track of hunches and intuitions, and looking for emergent themes and patterns (Taylor and Bogdan 1998; Charmaz 2006). I was able to pursue this method of inquiry at the end of every week when I would write a weekly summary of field observations. I digitized and archived fieldnotes on a weekly basis and had frequent check-in phone conversations with my advisor and CRP research team members to share my initial insights.

Interviews

My method of inquiry allowed locally-contextualized concepts to arise from the data in a way which honored my research participants’ ways of knowing. My principal interview technique was semi-structured face-to-face interviews; however, I also engaged in informal field interviews

during farm tours and shadowing agency staff. I recorded all of my interviews using a personal recording device and stored interviews on a secure server. The idea behind semi-structured interviews was to “provide a structure that is flexible enough for interviewees to be able to raise questions and concerns in their own words and from their own perspectives” (Brinkmann, p. 285). Fontana and Frey (2008) explain that the value of this mode of interviewing is in being open-ended with the researcher having general themes or questions in mind, but not imposing an agenda within the interview which would prime and direct interviewees to give limited answers. The authors also explain that this style of interviewing and participant observation go hand in hand since the data gathered through field interviews is often a product of participant observation. The guiding epistemology is one of an active emergent process that places the researcher in a *learner’s role* which seeks to understand meanings by limiting the superimposition of preconceived ideas (Fontana and Frey 2008). Semi-structured interviews, according to Brinkmann (2014), allow the researcher to focus more on issues of relevance, but still allow respondents to follow up with aspects they may think are important. This also allows the researcher to build upon knowledge and understanding in-context, versus sticking to a stringent interview guide.

With this as my guiding framework, I conducted a total of thirty-four interviews; twenty-seven with producers and seven with agency staff that ranged in length from twenty-five minutes to two hours. The majority of my producer interviews were with male dryland farmers of the baby boomer generation who represented the third generation of farmers in the region and had a production-oriented mindset. My youngest interviewee was around thirty years of age and the oldest was almost ninety. I interviewed one woman and on a few occasions I would be speaking with a husband and wife, or a father and son(s).

Analysis

The overall approach of my analysis pulls from the epistemology of grounded theory and case study research. Aspects of grounded theory which influenced my research included pursuing hunches, looking at data in fresh ways, being open to what is happening in the field, and research results being grounded in the data (Charmaz 2006). Grounded theory stresses moving back and forth between data collection and analysis early on, using new observations to test interpretations

of the data, and developing explanatory theoretical frameworks. In line with this reasoning, I transcribed interviews and wrote initial insights and summaries to iterate between what I was hearing in the field, initial analysis, and to keep track of reaching a point of saturation or hearing little new information. Charmaz (2006) cautions against ethnographies collecting large amounts of unconnected data, and argues that employing a grounded theory approach adds rigor by "building systematic checks into both data collection and analysis" (Charmaz, p. 23). To this end, I was able to test preliminary insights and themes with producers while in the field to triangulate information and check for saliency and dissimilarity among subsequent interviewees.

Case study research is useful for understanding phenomena in a certain place at a certain time. Case studies lend themselves well to understanding real-life, contextual dynamics in a given unit of analysis, and can be used for descriptive and exploratory purposes (Yin 1994; Eisenhardt 2002). My focus on producers in southwest Kansas and southeast Colorado in an area that was more or less 100 square miles, using repeated interactions and observations with specific producers and their families, and within the temporal context of my field season, echoes the underlying notion of a case-study framework.

The majority of analysis was done through open coding of fieldnotes and transcribed interviews to look for concepts and emerging themes as articulated by producers and agency staff. Interviews were coded using Atlas.ti version 8. Open coding allows for themes and phenomena to emerge from the data (Creswell 2007). It differs from other methods of coding in that codes are generated from the data itself without a priori categories and often using the language of research participants. With this in mind, I looked for common themes and patterns of positive and negative program attributes as told by producers, as well other themes such as community impacts, post-program plans, and motivations for enrolling. I adhered to an analysis framework which was iterative, holistic, and place-based, meaning that my data was analyzed within the context of my study site using codes based on the exact language of my interviewees. My results are presented in a way that highlights insight and themes from the coding process with producer quotes that allow the reader to understand my research questions in exactly the way producers responded to them.

RESULTS

I interviewed 27 producers for this study and conducted participant observation with 18 producers for a total of 44 producers met with in southwest Kansas and southeast Colorado. Most, could be categorized as active program participants with current contracts in CRP. Of total producers met with, twenty-one best fit the active category with some additional overlap in the re-enrolling category (*Table 1*) in which producers were re-enrolling land and therefore had been participants for at least ten years. Seven were best categorized as exiting the program and weighing decisions on whether to re-enroll or take land out, and four were best characterized as out by choice or had specifically chosen not to continue participation. Four were also categorized as having never enrolled but were landowners in the region. Overlap existed when landowners had multiple contracts and land at varying ends of the spectrum such as land they chose to remove, and land that was newly enrolled along with land that had been in the program since 1986. It was not uncommon for a landowner to fit at least two categories. I also conducted seven interviews with thirteen field staff of FSA and NRCS and including participant observation activities, spoke with a total of nineteen field staff.

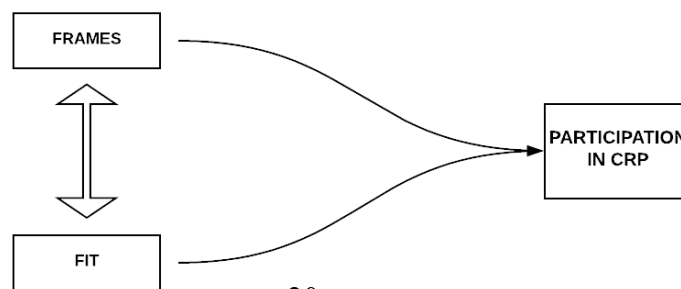
My results are structured into two sections. The first section examines the framing of CRP and how producers think about the program. Specifically, I identified the frames used by producers to explain the role of CRP in their lives and community. I found that, although largely viewed as an income source, producers espouse broader appreciation for a program that provides valuable habitat benefits and soil conservation. The second section examines the degree to which the program fits with the needs and desires of producers and field staff. Various themes include challenges with top-down management and vacillating program rules and requirements that often do not make sense for the landscape. Another intention of this research was in understanding how producers value environmental benefits of CRP land, which may help managers emphasize program conservation benefits that dovetail with producers' human-land relationship. Similarly, understanding how producers relate to the land, and the knowledge gained through experience, may influence how they view and endorse various practices required of CRP contracts to manage grass.

In understanding motivations for participation, producers often described how CRP fit into their lives using metaphors. Frames are constructs people use to organize and interpret the world around them as informed by their worldview (Jansujwicz 2013). As a tool for interpretation, “framing is used to understand how individuals and groups interpret or ‘make sense’ of a particular conflict or challenge and to explain what the conflict is about, why it is occurring, and how it might be resolved” (p. 946). I begin by discussing my results in terms of frames which group metaphors and perceptions of producer experiences with CRP into the larger schema of frames. Producers invoked different frames to describe how CRP fit into their lives.

Then I discuss landowner perceptions of program ‘fit’ using the concept of institutional fit. DeCaro and Stokes (2013) explain that good institutional fit requires social fit and ecological fit to create a comprehensive fit that matches the biopsychical, social, economic, and political dimensions of social-ecological systems. In the case of CRP, fit includes landowner perceptions of program attributes and processes that fit well with land use goals as well as those that provide a poor fit. Items of fit manifest as likes and dislikes about CRP. As a program with various interacting social, economic, and environmental factors, CRP represents a type of institutional arrangement that can fit well or poorly with those engaged.

Frames and fit inform each other and also influence participation in CRP (*see Figure 2*). A frame may be invoked because of various ways CRP is creating good or poor fit. The degree of fit is also informed by landowners’ frames. For example, if a producer frames CRP in terms of financial solvency, the rental rate for land may determine whether this land-use choice fits one’s operation and economic needs, and as a result, whether or not they participate in the program.

Figure 2: Frames, Fit and Participation. Frames and fit inform one another which in turn influence participation.



FRAMES

This section explores various ways producers framed CRP. These ways of thinking about the social, economic, and ecological environment surrounding CRP influence and guide motivations for enrollment, re-enrollment, and opting out of the program. CRP frames are often rooted in the cultural history, farming economy, and ecological landscape history of the region. I delve into various frames which evolved from analyzing interview themes, origin stories of CRP's creation, and what producers like about the program. To provide the social context for participation, I discuss producers' history on the land, lifestyle motivations, and farming rewards and challenges. Finally, I explore how CRP participation relates to producers' stewardship motivations and examples of wildlife stewardship on landowners' own accord. This sheds light on how farmers and ranchers relate to the land, make decisions regarding its management, and form opinions about how a program like CRP intersects with their own local ecological knowledge.

CRP as FINANCIAL SAVIOR: Saving the farm

In a region fraught with environmental and economic hardship, CRP acts as a financial savior for farmers while simultaneously alleviating concerns about highly erodible soils. When the program was first introduced during the farm crisis of the 80s, many farmers were "going broke" and facing foreclosure, struggling with low commodity prices, and generally experiencing difficulties with sustaining a farming operation's cash flow. Prone to extreme drought and wind erosion, farming in the Dust Bowl region has been a consistent battle which many producers contend is better won on farmground that would not blow away. Land that should not have been farmed in many producers' minds was still plowed, or 'broke out' because farmers had no other choice; perpetuating the cycle of stretching resources and time with land that was not yielding. CRP represented a way to survive economically by providing an economically feasible option for erodible land, and as a result, saved many farms. Bankers initially served as brokers of CRP by encouraging farmers to put land in CRP to have some sort of reliable cash flow. When thinking about CRP in retrospect, some producers recognized CRP's crucial role as a tool to both survive and conserve soil, while others gave little consideration to conservation: "Back in the 80s when we put this in we were starving to death out here... It wasn't put in by the farmer's opinion to conserve anything, it was to survive".

The redemptive nature of CRP was that in many cases, the program allowed farmers to hang on to their land and sustain their agricultural heritage. CRP was salvation in a time of difficulty and an opportune fit because it allowed farmers to remove their less productive land from production and focus efforts on land that would turn a profit. One producer explains CRP's two-fold solution for finances and erosion:

So it could have been that CRP came out divinely, because it was the answer to prayers, of how they were going to be able to pay off some land... And so it was a financial decision, because it was a guaranteed amount that they could make, at that time. Now there's a lot of land blowing, at the same time, and so it was multifactor. The financial thing is probably the thing that, 'Okay, this land can be paid for, if we do this. And too, it won't blow away.' It was a little blowy land. They were concerned of making ends meet on this land, because it had blown before.

In current times, producers in this study explained that CRP was almost always viewed as a financial decision. The legacy of CRP serving to help farmers survive economically is often still functioning in this manner today by allowing one to diversify their operation and sustain the farm through the combination of CRP payments and farm income.

CRP as FINANCIAL SOLVENCY: Making ends meet

Although CRP saved many farms from financial ruin, some producers described CRP as more of a backup or cushion to pay taxes or see them through the bad years. It is important to note that CRP is not always the end-all-be-all for producers in the region to survive, many simply use it as supplemental income. As one producer noted, "Some people are like, 'Oh, got my CRP payment. I'm going to go on a vacation to Europe.' And others are like, 'Oh my gosh. I need my CRP payment. I've got to get the bank, or they're going to shut me down.' So, you see both spectrums."

CRP worked because it aided in the most important factor in maintaining the farm, financial solvency, while simultaneously allaying concerns with another essential element in the minds of farmers, the soil. CRP's role in aiding in the continuance of communities in the region is echoed

in sentiments expressed by both producers and agency staff, one of whom explained that if CRP were to disappear “many of these communities would be devastated.” This was especially true in Baca County, CO which holds the highest CRP participation rates in Colorado. CRP provides valuable income which could not be made otherwise since the county also has a high percentage of highly erodible soils and very low precipitation. The loss of CRP could mean the loss of the critical economic buttressing CRP provides.

The framing of CRP as a financial cushion helps to understand the economic motivations to enroll in CRP. One farmer described the land-use decision process: “But when the banker is at your doorstep, you’ve got to make everything, every little piece of land that you have, yield something.” Indeed, the volatility of farming in the region, the need to make land yield a profit, and attractiveness of a steady financial return through CRP combine to influence CRP participation. As one producer explained: “So, CRP in this area, we don't know if we're actually going to have a good crop, or our land is going to blow away. So, we're like, ‘Well, see what happens next year.’ Nothing to bank on, except for CRP.”

While CRP may act as a saving grace for some and merely a cushion for others, the economic incentive accompanying a contract most certainly drives participation. In the words of a producer: “That little \$20,000 or \$12,000 I’m getting off the CRP is so minor compared to this (harvest income), but you know what? It pays the taxes. It’s a wonderful little security net down there for me. I don’t have to watch the markets on it. I don’t have any inputs. I don’t have to decide whether I have to do that \$2,250 on the bindweed.” In weighing pros and cons of CRP, this producer notes that farming decisions like controlling invasives are going to create unpredictable costs for her.

CRP as LEVERAGE: Beyond solvency to growth

CRP allowed producers to hang onto their land in the 80s, and in current times, may act as a financial lever for many producers who are paying a mortgage, trying to buy improved machinery or fertilizer, or trying to accumulate more ground to expand a farming operation. While not directly referred to as ‘leverage’, a common theme among producers described the leveraging potential of CRP as a key program function which serves as a frame through which

producers view the program. Perceptions of CRP's leveraging abilities varied depending on the producer. Producers explained that generally CRP only acts as a pure financial bonus for landowners who have already paid off their land. For some, CRP payments may merely facilitate breaking even, while others can use it as extra income for anything from paying college tuitions to purchasing new equipment. CRP payments have allowed many farmers to expand their operations and invest in better equipment. Farmers in the region add acres to their operation through buying surrounding or nearby land that would not be too far to transport implements like a sprayer or seed drill. One producer explained that many of the 1,000-acre mom and pop farms are being consolidated into remaining farmers' large operations.

Several talked about how the program creates an opportunity to fortify investments elsewhere on the farm and to re-focus energy on more productive acres: "manpower is a big deal because we spend days over there on that marginal land, which now I can allocate my employee over here on my good farmground." Producers explained that had it not been for CRP, they would not have been able to buy their irrigated farmground, their new tractor or sprayer, or raise their operation to the level it needed to pay loans on equipment. One producer described the potential for leverage as a draw for participating: "So my idea was to put some of this into CRP, free me up some cash and some time and rent some more ground to farm, so that's why I put mine into it." In keeping up with changing times, CRP elevated a farm's potential:

Any change takes money, takes capital to do that and it's the CRP payments, some will help with that. All of a sudden they could go to the bank and borrow \$100,000 and pay it off over three or four years 'cause they had this guaranteed income coming in.

An owner of a farm implement dealership explained that he had initial fears of CRP reducing his business due to taking acres out of production, when in fact it actually had a positive effect: "What I failed to consider though was if something put money in my customer's hands that was a good thing, for me, because I could surely come up with something they needed and lo and behold I did." As farm machinery became larger and more efficient, more acres were required to make up for the increased cost of machinery. Increasing acres under production meant a higher yield and in effect, a more sustainable operation. As one producer explained, "you don't wanna have equipment for 10,000 acres and you're farming 5,000... it makes your meat and potatoes

come out a lot better.” From what producers described, CRP may have inadvertently played a role in propelling farming to a more efficient scale as a result of available cash flow; producing more on fewer acres with improved technology on only the higher quality ground: “People started farming better as a result of the money and they started raising more grain again.” The idea of CRP as leverage is closely tied to producers’ view of the viable nature of CRP to serve as an investment.

CRP as INVESTMENT

CRP land can look like an attractive financial investment, and many producers in this study had varying perceptions of CRP as an investment and the related impacts on land-use. These perceptions can dictate decisions producers make regarding buying and selling land that is tied to CRP. One producer said he wished he would have bought neighboring CRP ground since the value had increased since the time of sale. Another producer explained that, to him, the value of CRP would be worth investing in, but if the price of wheat increased, he would instead opt for buying good farmground. One producer characterized the thought process and decision-making involved with nearby CRP land selling:

If you really study those land auctions, a lot of them are gonna come out, they sell at a couple years before the contract expiration. That way there’s a couple of payments left to entice somebody to buy thinking that maybe they’ll get it re-enrolled, but then if they don’t get it re-enrolled, guess what, you gotta farm it man, or you farm it or run cows on it and if it’s one quarter out here by itself, you can’t afford to, you can’t afford to drill a well it costs almost \$15-20,000 to drill a well, ok, so if it’s just one quarter by itself you can’t afford to do it so you’re gonna have to farm it.

This quote explains the decision to farm expiring CRP may arise out of necessity if it is not accepted for re-enrollment. Grazing may also be a more appropriate choice on some land.

Another investment-related impact mentioned was outside investors, interested in CRP for financial gains, buying CRP land and creating competition for locals while allowing money to leave the community. It appears this is less prevalent now as contracts require certain stipulations such as enrollees having a history of production in the region. Some producers spoke about how

the value of land had increased artificially as a result of CRP; since prices often reflect the income from payments for the remaining length of a contract. One Kansas farmer talked about how he had witnessed people investing in CRP land for economic gains:

What's happened with the investment part of it is this individual see the CRP property for sale, buy it as an investment. They'll take the CRP payments for ten years or eight years or whatever's left on the contract. They buy it for basically the amount of money that's left on the CRP contract, whatever that might be. And then they turn right around and they've got that money that the government paid them for the CRP on top of what they sell the property for after... It's a revolving door. It's been done ... Like I say, the one property is at least five times now that I know of.

CRP as Gambit: Getting in the game

The lucrative nature of CRP as an investment, which in turn may increase acres farmed, was not always considered a beneficial program impact. Several ranchers felt it was detrimental that the program allowed farmers to take land out of production and then “let the same guy turn right around and go buy another piece of ground over here and break it out of native grass and go to farming it.” It is important to note that many producers who run cattle very much value native grass that has never been touched by a plow, since it is scarce on the landscape and well-suited for cattle. In the early days of CRP, they believed a perverse incentive existed for a few people who decided to break out native grass in order to qualify for the program later on. They explained that this was not a widespread phenomenon but believed this occurred with a few people that “had the inside track” about a program that would pay for land with a cropping history. One rancher recalled:

I witnessed firsthand I used to help this guy out once in a while and he plowed up some of the worst ground, farmground, that I have ever seen, because he knew that he could get it into CRP... And make some money on it, and that's what he did. He went around and picked out some of the worst places on his property, plowed 'em up, planted 'em to CRP. Just so he could collect the check.

Ranchers explained that any ground that was broke out to qualify for the program was never plowed for a reason, and they expressed resentment towards CRP today that likely stems from this unintended consequence and the resulting erosion. One rancher told a similar story of a large tract of grassland being plowed and then enrolled in CRP. He explained that during this process

of land transformation, the land blew so bad that, “it was hard to watch. I’m glad I wasn’t their neighbor.” This adverse effect of CRP has been curtailed by the Sodbuster Provision in which producers may lose eligibility for farm programs if they cultivate highly erodible soil without a conservation plan. The ability of CRP to act as an investment or gambit spurring various land and real estate transformations is a frame producers invoke when thinking about the program’s current and historic existence rather than their own experiences.

CRP as RETIREMENT: Getting out of farming and impacts to the younger generation

When the program arrived, CRP acted as an accelerant for retirement for many producers in the region. Many producers spoke of CRP being “a way out” for their parents who were close to retirement age and barely making ends meet, especially when wheat prices were in a slump. Some producers put all their land into CRP and got out of farming all together, which gave rise to the profound absenteeism of the region. Producers acknowledged CRP as a helpful tool for elderly farmers looking at grain prices and their land who realized it was “a no-brainer to put it into CRP.” It created steady annual income and, in effect, became a retirement plan, in some cases even allowing earlier retirement. The program has even earned the nickname amongst some producers as the ‘Conservation Retirement Program’. Even today, producers rarely argue with the fact that this was an attractive solution to the older generation; the fixed income was very important for their parents or grandparents. Even if the younger generation decides they want to farm after contracts expire, they understand their elders’ motivation for enrolling. One producer explained, “there were some elderly farmers around here that were on the brink, ok. The CRP came in, they sold their equipment, put their ground in CRP, had a steady income for the rest of their lives. So it was a damn good thing for that.” For many, it reduced the risk of farming and resulted in a portion of the population taking that land out of production, selling equipment, no longer employing tenant farmers, and even moving out of the area to retirement destinations.

While CRP as retirement may be regarded as a positive for the older generation facing hard times, farmers today are frustrated with various impacts on the community and landscape as a result of the ensuing absenteeism which often comes from retirement. In most cases, absenteeism was discussed in reference to retired landowners and subsequent generations who live outside the

area and remain uninvolved in their land and often the community. When farmers think about the program's social and economic legacy they often tie this idea of CRP as retirement to the larger issue of absenteeism and the reduced availability of farmground for the younger generation. Some had fairly neutral perceptions of these impacts and thought farmground availability was not a huge concern because kids could still break out land their parents put in CRP once the contract expired. This was especially attractive when commodity prices were high or when the drive to carry on a farming tradition was strong. This is why many producers contend that all 'good farmground' has already been broke back out.

A more negative sentiment is held by some producers who feel that CRP has undoubtedly impacted the availability of farmground, and that there is still an amount of high quality farmground owned by absentee landowners that they think should not be in CRP. Land may have been initially enrolled as a retirement plan, and now that land has passed on to the next generation, family members are faced with various land-use choices. Several producers spoke of having family land in CRP that they wish they could farm or are trying to convince family members to let them farm when contracts expire. For example, one producer explained that his nephew was waiting for his great aunt's contract to expire so he could farm it. Decisions like these are exacerbated by the fact that "you're competing against Uncle Sam for the same acres." Consequently, the producer explained that the aunt would base her decision off what the new CRP rental rate would be in relation to what her nephew could make farming it. While the possibility stands of having a good year and making a higher annual profit than a CRP payment, it is not guaranteed, making CRP a more enticing option for elderly or retirees who need steady annual income. Farmers said that this impact meant CRP "squashed a lot of the opportunity... for young people," and that it was "a little tough on that next generation, who needs ground to farm." While CRP was 'a way out' for the older generation, if the younger generation was serious about farming they generally found a way to do it. Producers stressed that this is best achieved in an established farming family or with the help of the Young Beginning Farmers and Ranchers Program. Many producers spoke of how it would be nearly impossible to farm in the region without some sort of family toehold and existing capital. In many producers' minds, the idea that CRP was used as a tool for retirement, and the cascading impacts of absenteeism and availability of farmground, inform the way the program is conceptualized.

CRP as a CONSERVATION PROGRAM: When the Mission of the Program Matches Lived Experiences

For producers in southwest Kansas and southeast Colorado, the concept of ‘land blowing’ weighed heavily in lived experiences; this was a dominant theme across producers in the study. In this area, producers used the term ‘blowing’ to describe the prevalent wind erosion of the region; however, many used the term erosion as well. The farmers I interviewed would often ask me if I realized that we were in the heart of the Dust Bowl region. Many spoke of their parents and grandparents who lived through the Dust Bowl and Great Depression years. This repeated acknowledgement of this ecological catastrophe and the resulting economic and social effects seemed to be a formative part of the way farmers and ranchers relate to the land. Wind erosion was a natural force that garnered much respect; so much in fact, that it prompted the majority of farmers in this study to evolve their farming practices into no-till operations. No-till farming was construed as the common method for dryland farmers in the region and is favored for maintaining moisture in the soil and keeping cover on farmground. During harvest, stubble or residue is left which is then sprayed at a later date to kill weeds instead of tilling the soil to kill weeds as was traditionally practiced. When speaking about reducing blowing in the region, producers often thought that the advent of the no-till generation of agriculture played a significant if not equal role to CRP. Nevertheless, producers spoke at length about CRP’s direct contribution to greatly reducing wind erosion.

Memories of the Dust Bowl: A Family History Shrouded in Dirt

Farmers and ranchers have experienced wind erosion since the days of the Dust Bowl. Several producers talked about the Homestead Act and sod-busting days explaining how they thought the government actually encouraged the initial farming of the region. In discussing the Dust Bowl, or “Dirty Thirties” as many called it, as well as the drought of the 50s, one rancher thought, “that’s what farm programs from years ago did to us.” That is to say that the government provided assistance to keep farmers on land which was not being farmed using best practices and therefore resulted in the Dust Bowl. One farmer recalled enduring Black Sunday with his family as a young boy as a frightening experience while another told a story of his father needing to tie a rope from the house to the barn to prevent getting lost in the dirt storms. Yet another told stories

of his mother placing wet rags in windows in an attempt to curtail the dirt buildup inside the house. Years later while restoring the old house, he discovered several inches of relic dirt in the attic. It became evident in hearing these stories that the legacy of the Dust Bowl had become permanently etched into the psyche of the area's farmers.

The families of most of the producers in this study settled in western Kansas and eastern Colorado around the turn of the century, many coming from eastern Kansas or places like Iowa. They often arrived by wagon pulled by a horse or tractor, and lived in homesteads, chicken houses, and shepherd shack. Remnants of the Homestead Act and early days of agricultural settlement can still be seen in the occasional homesteads, schoolhouses, and rock pens scattered through the backroads of the region. The majority of interviewees were 4th or 5th generation. If they were baby boomers they would be the 3rd generation, their parents or grandparents settling in the area. Farmers in their 30s/40s were typically 4th generation and if they had children they were the 5th generation.

Experiencing Blowing: "If it ever gets bare, Katie bar the door."

Producers conveyed that the culmination of the Dust Bowl and extreme drought during the 50s brought an awareness of the detriment of wind erosion and resulted in the Soil Bank, the precursor to CRP. Soil conservation programs grew out of necessity and an understanding that farming practices were not sustainable: "There were three things that caused the Dirty Thirties. You had an extended and very severe drought, we were practicing inversion tillage, and annual cropping. And what do you think's going to happen guys? Anyway, we have built on our ashes." Wind erosion still occurs to this day at varying severities. Producers described the phenomenon of blowing as "horrible", "a mess", "some of the most depressing stuff I've ever seen", and "one of the worst things I've ever seen." Producers depicted land blowing as something which moves across the landscape causing other areas to blow when the storm came in contact with land without adequate cover. They also mentioned that any ground which had been disturbed by disking, tilling, or left fallow may be apt to blow if conditions were right. However, one producer alluded to modern practices ability to stop blowing: "you just have to do really stupid things to make it blow now." As mentioned before, many producers contend that conditions are much better today because of both the CRP program and improved farming practices: "The

combination of CRP and the new farming techniques has made a vast difference in the county the last 30 years.” With adapting farming practices, producers spoke about how “you wanna leave as much residue as you can,” and to “never put a tillage piece of equipment in the field.” This is where CRP favorably matches the preoccupation with an ecological catastrophe whose legacy still informs the sense of place.

The Role of CRP: An Answer to the Blowing

Without a doubt, producers appreciate CRP for maintaining cover and breaking up the landscape to reduce blowing. A common response to the question of what their favorite thing about CRP was how the program has “cut down on the amount of fields that would blow.” Farmers talked at length about how much CRP has helped reduce erosion and that having grass cover on CRP fields held the soil in place and prevented it from blowing away. As mentioned before, wind erosion still occurs, “but it wasn’t just acre after acre after acre... it’s isolated to one tract here, one tract there.” In general, producers support CRP’s design in removing highly erodible land from production and providing cover to reduce erosion. As one Baca County farmer commented: “that’s where the CRP really shines.”

FURTHER EXPLORATIONS OF COMMUNITY IMPACTS AND ORIGIN STORIES

Producers’ framing of CRP is closely bound to the various social, economic, and ecological impacts of CRP. While many of these impacts have been uncovered so far, the following section explores more concrete aspects of community impacts and various producer perceptions.

Farmers and ranchers in southwest Kansas and southeast Colorado are content to discuss the inception of CRP and share origin stories, which function as myths informed by frames, around why they think the program was created and related impacts. Myths encapsulate the stories people tell and metaphors used to describe the world which give a feel for a culture and their history. Peterson and Horton (1995) contend that myths serve “as a coding device actors use to describe their worlds” (p. 147). They also are capable of setting up “an image with a set of values, beliefs, and attitudes imprecise enough that members of a community can tap into them, identify with each other through them and adequately interpret their situations” (p. 147). This is why these various origin stories emerged products of myths held among farmers. Peterson and

Horton (1995) contend that mythology can direct producers' views of the human-land relationship. Stories regarding the history of CRP and related impacts were frequently articulated, and understanding them can further highlight producers' overall attitudes towards the program.

Stabilizing Markets

Stabilizing the commodities market is a widely agreed upon creation myth of CRP. The program came about during the farm crisis of the 80s, which producers explained was mimicking low grain prices at the time of this study. Many farmers explained that in hindsight, taking all of those acres out of production inevitably raised the price of wheat and allowed farming to continue in the region. Today's wheat prices are further confounded by the existence of a global market and greater competition internationally. If CRP were to disappear today, and that land was re-cultivated, producers contend that the effects would be disastrous from driving prices down. Moreover, the idea that CRP was created purely for conservation reasons was questioned by some: "So anyway, Congress rushes in, OK, we've got to do something, we've got farmers going bankrupt right and left, and so we're going to take 25 million acres out of production and put it into a, you know, we'll package this as a conservation program when it was actually a production control program."

Creating Jobs

As highlighted in the previous section, positive community impacts of CRP included job creation in areas not previously seen as profitable. Producers explained that as a result of CRP, a demand grew for contractors to do custom work planting CRP grass and interseeding. Disking, which runs a plow-type implement at a shallow depth through CRP to create disturbance, is something producers can usually accomplish on their own since a disk is a commonly owned farm implement; however, absentee landowners will usually hire local contractors for disking as part of their mid-contract management. Thousands of acres of newly enrolled CRP meant the seeding or drilling of grass seed. Grass seed is bigger and fluffier than the typical grain seed drilled in the region so a specialized grass drill implement is required. One producer noted: "We seen an opportunity we thought to get in the grass seed business, selling the seed and drilling it you know, 'cause the government was paying to do that." Another producer explained that he

basically “evolved from a producer to a contractor,” and yet another spoke of how doing custom work provided him with income through the winter. Several producers thought local seed companies and contractors with grass drills were making significant income from CRP. When cattlemen would discuss the payment reduction for grazing, they would sometimes explain that while they may capture a financial gain from using CRP grass for cattle, “the guy who’s out there disking it is benefitting too.”

Transformations on Main Street

Several interviewees spoke of the initial hit rural communities endured from the lack of production due to CRP. Some contended that while the rural shifts were widely viewed as driven by CRP, they most likely would have occurred anyways as the agriculture economy ebbed and evolved with changing times. Even so, the arrival of CRP meant farmers were buying less machinery, fuel, parts, fertilizer, and taking less grain to the local elevators. Several interviewees spoke of the reduction in grain volume local co-ops were taking in, which cut into overall production profits during the early days of CRP. The populations of counties in southwest Kansas and southeast Colorado were reduced as a result of CRP and absenteeism: “so it did thin out the numbers of a generation of farming.” One producer told me that in his farming community of Prowers County, Colorado, as a child, the school bus would be completely full going to school and that today, there were only four children in the area. Another in Baca County, Colorado said that before CRP he would run into neighbor after neighbor on the farm roads, and today he is lucky if he sees anyone. Indeed, the level of activity, amount of inputs such as fertilizer bought, and number of active farmers diminished, causing many towns’ businesses on Main Street to become obsolete. Clothing stores and less essential businesses faded from the local scene, while auto dealerships and implement suppliers consolidated to generally be one per county. Producers surmised that some of this could be attributed to changes in the structure of American retail businesses in general such as the arrival of big box stores.

Changes in farm demographics meant the 1000-acre mom-and-pop farms disappeared with the advent of CRP and reverberations of the Farm Crisis of the 80s. Throughout the region, smaller operations became larger operations as remaining farmers expanded and acquired more land in their vicinity. A farming family in Morton County explained that the land they farm once

belonged to eight different farming families. Instead of 1000-acre farms, “now 20,000 acres is probably not very big either... there is farming families around here that probably have 50,000 acres”. Along with expanding operations, producers invested in the equipment needed to sustain such an operation and became successful at farming on a larger scale. As previously noted, the implement dealers I spoke with realized that the fear over CRP impacting finances was not as drastic as first thought: “the demand didn’t drop nearly as far as I thought it would, but my customer list did... I thought man I’m really gonna get thumped by this deal and as it turns out I was wrong it wasn’t that bad. It changed things but it didn’t destroy things. From the farm economy point of view”. Farmers in rural communities of the region responded to consolidation and economic restructuring by adapting and overcoming: “small towns like Syracuse had to just ‘hope this works’ and then by golly it kind of did.”

Absentee Landowners

The absentee legacy and myth of CRP held by producers is that the program allowed many people to move away from the region resulting in kids employed in urban areas with little interest in farming. Some spoke of CRP contracts passing through multiple generations of heirs to the point where a single contract may be split by as many as eight people or more. CRP land may switch hands many times. Local producers talk about how absentee landowners may be hard to contact or lack knowledge of where their land even is. One producer said his landlord had not seen his land in forty years. Producers explained that the next generation inherits CRP land, often not knowing where it is, what sort of management practices are required on it, or if noxious weeds are growing and impacting neighbors. CRP becomes inherited and provides income for non-resident landowners who remain disconnected from their land and the surrounding community. Two producers explicitly characterized absentee landowners as people who more or less “take the money and run.” Other concerns expressed by producers included the fact that large amounts of money were leaving the county and even the state. In speaking about elections for FSA County Committee members, one producer remarked, “you’d be amazed how much the votes come from out of town.” Local producers do play a role, however, if absentee landowners decide to employ a tenant farmer or operator on either the rest of their ground or expired CRP. Typically, land is re-enrolled since no one in the family is farming. Anecdotes recalled land being in CRP and kids deciding to sell the better-quality ground once contracts expire or lease it

out to a tenant while keeping the erodible land in CRP so they could maintain a piece of the farm. Producers commonly expressed how for many families, CRP meant the end of the farming life since the kids “don’t live here and it’s just a payment to them”. If land owned by absentee landowner is eventually sold, one producer felt that “you’re sitting here trying to figure out if we’re gonna buy it or find somebody to buy it so we can farm it.” Producers mentioned absentee landowners often when discussing CRP; one producer explained that at least 50% of the land in the county was owned by absentee landowners as a result of CRP.

CRP CYCLES: ASSESSING LAND AND PROGRAM ENROLLMENT

There are myriad ways producers see CRP as supporting and shaping their wellbeing, yet when it comes to decision-making regarding enrolling, re-enrolling, or removing land from the program, several factors come into play. This section explores aspects of why producers believe some land should stay in the program and why other land should be removed.

“Breaking out” Previous CRP Land

Producers often talk about “breaking out” ground. The term harkens back to the days of breaking or busting sod and literally means plowing up grass to plant crops. All farmground or cultivated land has been ‘broke out’ from the original native grass cover. When CRP contracts expire, one of the first decisions producers make is whether to break out that piece of ground or try and re-enroll it. This usually depends on two factors: whether it is flat ground that is able to produce, and the market price for grain commodities at that point in time. If a contract expires during high corn or wheat prices, a section of flat CRP land with suitable soil may seem like an attractive addition to a producer’s farm operation. According to producers, the decision is decidedly economic in that if projected income from crop yields are greater than the CRP rental rate for that ground, the producer has the equipment and ability to farm it, and is not overly concerned about negative environmental effects such as wind erosion, he/she may plow up CRP ground once it expires or even break a contract and pay the penalty.

In speaking about breaking out CRP, one producer explained: “Now we do have some land that got put in, that would probably be better farmland.... Some of it would farm in nicely with some other stuff we have, so it’d be kind of nice to, when the contract’s up, break it out and actually

farm it.” Another producer remarked: “I actually bought a quarter over East, it was in CRP for 25 years, flat. And that was the first one I broke, because the CRP wasn’t gonna make it work so, and it should’ve never went in.” This producer is noting that having the land in CRP would not work as well financially as farming it. Another farmer talked about breaking out some of his previous CRP land that he deemed was “excellent farm ground” and now is growing his best corn. Breaking out former CRP ground seems to be an economic and structural decision for producers in assessing their existing farming operation and the land in question’s ability to produce.

Occasionally producers may not re-enroll once contracts expire due to more philosophical reasons such as not agreeing with the complexity of the rules, or fear over future regulation that may impact independence over land. Aversion towards government and endangered species regulations may encourage moving away from CRP and incorporating acres back into production:

Now, one other reason that that land was broken was because of the fear of the prairie chicken, ok, and the fear of government control, ok. So you go and say nope I’m not gonna stand for that I’m gonna break it back out and that way, it’s my land I can do with it what I want, so ok, so that was another reason, but we were breaking out good, flat, farmable ground.

As this producer mentioned, the decision to break out land is not likely to occur on rough ground that would be prone to erosion. In general, people of this region do everything in their power to prevent land from blowing and therefore much of the CRP ground that stays in the program tends to be the unusable acres, such as irrigated corners, or acres with rolling topography or gullies. Producers explained that flat land regarded as suitable for farming has either already been broken out, is being considered for breaking out, or is in the hands of an absentee or retired landowner who is not interested in farming. Whereas some land is “just better off in CRP,” producers tend to think “the better land needs to be farmed.” Just like rough ground belongs in CRP, ‘good farmground’ belongs in production. This sentiment was expressed many times throughout interviews and participant observation:

You know, I really don't look for any more CRP to get broken out in the county because the acres that are left in CRP are either light soil, which wasn't good for production, or they are highly erodible because they were pretty rough acres. So I think most all of the good ground has been broken back out, there's still some, but for the most part the best farmground has been broke out and the rest of it probably never will be.

With that said, this mentality of what land should remain in CRP and grass cover and what ground is acceptable to be farmed ties in to the idea of 'it should've never been broke out': the sentiment that CRP exists for land that should have never been farmed to begin with. It is important to consider the context for the decision to not re-cultivate CRP land. This is land that many producers' grandparents farmed through the Homestead Act, and that their parents barely survived on through the Dust Bowl. After talking about the severity of land blowing, one farmer remarked: "In some regards, CRP is our best chance for them to go back into some kind of normal cycle."

Believing CRP land should remain in grass

Producers repeatedly stressed the recognition that certain types of land should have never been farmed in the first place. The type of land in which producers refer to is that which is prone to blowing; rough acres with gullies and draws, sensitive soils, sandy/rocky soils, or otherwise marginal cropland that tends to not produce and is apt to blow. Producers often call this type of land 'poor farmground' or 'rough ground' and it is generally highly erodible or may even have terraces, an obsolete method of farming in which terraces are cut into the landscape to create flat, farmable strips on a slope. Farming terraces in modern times is difficult given that the size of equipment such as the long booms on sprayers make farming them nearly impossible. Rough ground is also referred to by producers as 'marginal land', meaning it is marginal for production and viewed as the weaker end of the farm due to its inability to produce a crop. This is land that producers envision as the perfect fit for CRP; it would not be worth it financially to attempt to raise a crop on, and the potential for erosion and excessive wear and tear on equipment deter any productive use.

For some, keeping land in grass through re-enrollment in CRP may be an obvious choice: “Now, the ground in Colorado that I’m putting back in, we fight that all the time. We fight the bindweed. We never have an average crop on it. It’s always blowing. It’s always very marginal. We do make a little bit of money off of it, but... the minute we found out we could get it into CRP, I put it in.” Having a place for marginal, rough ground in CRP often makes the most sense for producers battling the climate, structural qualities of the land, and thin margins due to input costs and commodity prices. When weighing land allocations for CRP, most producers talked about putting their lowest-producing fields in the program. Land that is deemed as suitable for farming is generally farmed.

The rougher ground should stay in the program, for good. ‘Cause I’m spraying fields and working and all it does is tear up equipment, and you ain’t really raising a decent crop on it whatsoever. It just needs to be in its natural habitat and that’s grass. Literally, it just needs to stay that way. But the flatter stuff that’s flat as a board, it needs farmed.

Producers have an intimate understanding that grass is the natural state of land in the region, and feel strongly that rough ground belongs in grass, and therefore in CRP. When producers say land should have never been broke out they finish by saying it should stay in grass. Many firmly believe that marginal land needs to be in CRP and needs to have grass cover, often in perpetuity.

Perceptions of Ecosystem Services: Complex and Intersecting

Producers regard CRP as serving a variety of ecological or land health functions. Indeed, marginal land or rough ground is a perfect fit for CRP in farmers’ minds and is thought of as shielding the rest of the landscape from wind erosion by breaking up farmground with maintained cover. Producers explained that CRP “breaks up land”. Commonly expressed ecological purposes for CRP were that it reduces wind and water erosion and provides hiding and cover for wildlife. A couple producers spoke about noticing how CRP reduced the amount of runoff in fields that previously washed out. One explained that it was because CRP grass “slows it down, holds the soil together... the water hasn’t got a clear shot it’s gotta run through all the sticks and the grass and the roots and a lot of it gets soaked up before it gets to the crick.”

Another remarked that CRP’s design is “to take out the lesser productive ground that is marginal for erosion, good for the wildlife, all that, and this ground fits that to a T.” The environmental

purposes and functions of CRP envisioned by producers are diverse; however, CRP' role in soil stabilization from maintained cover was the single greatest favorable ecosystem service noted by producers.

FURTHER EXPLORATION OF PRODUCERS' LIVED EXPERIENCES AND STEWARDSHIP

In understanding how CRP is situated within the lives of producers, I asked interviewees about their experiences with the farming and ranching lifestyle. In addition, sometimes the concept of stewardship would come up in interviews and conversations. This section seeks to explore the multifaceted aspects of producers' lived experiences on the farm and ranch and what stewardship looks like through their lens.

Lifestyle Motivation and Farming Rewards:

In understanding producer engagement with CRP, this study sought to understand the context of why producers are motivated to live an agricultural lifestyle, and what they valued the most about this way of life. Common themes related to lifestyle motivation included the solitude and peaceful atmosphere of a rural lifestyle, values instilled in children such as responsibility, and the heritage and legacy values of farming and ranching. I heard many producers talk about how farming "gets in your blood." Indeed, producers espoused that having parents or grandparents who were farmers further strengthens the drive to farm and need to honor farming as a family tradition. Many talked about the importance of independence as driving the lifestyle choice and the need to maintain faith and spirituality in times of uncertainty. When I asked about the most rewarding part of farming, one producer remarked, "The most rewarding thing is the lifestyle itself. The ability to be your person, your own boss, to decide what you do or don't do with any part of the operation." Another explained, "it's a matter of being able to put something in the ground out there and watch it grow and take care of it." Many producers noted their contentment with "raising a good crop" or bumper crop, riding on the tractor at night "with the world to myself", and being in "that field with all that wheat that looks so good." The concept of dirt getting in ones' blood seemed to ring true among producers who valued the heritage and legacy of farming as leaving something behind: "maybe it'll grab hold and your kids will take over or

just keep it in the family and keep going. Just a legacy, leave a legacy behind.” Additionally, producers who ranched or raised cattle and other livestock expressed a sincere appreciation for their animals and often were involved with 4-H, rodeoing, or livestock shows. Taking pride in livestock was a formative part of the ranching way of life.

Farming Challenges: “Worse than Vegas”

Producers in the region expressed myriad challenges faced by farming families. More than anything, the harsh and unpredictable climate of the region held significant weight in farmers’ and ranchers’ minds. Producers explained that with dryland farming, which receives no irrigation, the success of a crop completely hinges on precipitation. Other weather cycles such as blizzards, heavy wind, and hail also affect the vitality and growth of crops. Pests including grasshoppers and wheat streak mosaic virus were mentioned as significantly damaging crops. Finally, noxious weeds are another predominant natural disturbance complicating producers’ lives. Some producers explained that dryland farming occurred where the soil was suitable and the battle with weeds or other environmental conditions was manageable. Even from Kansas to Colorado, many spoke of how much drier and harder it was to farm in Colorado because of the Rocky Mountain rainshadow. Production capacity and subsequent land values increase as one moves from West to East. Also mentioned was the formation of sandhills and sandy soil as another ecological hindrance to farming, of which most would not even attempt to farm.

Moisture was often alluded to as the single biggest limiting factor in a farm’s success. As one farmer explained: “Dad used to say you never wait on rain in this country ‘cause it may never rain again.” Even when there is ample moisture farmers must deal with mud and equipment getting plugged up. This study was conducted in the summer of 2017 which producers continually reiterated was one of the wettest and greenest summers the region had in years. Farmers expressed great joy in the prospect that harvests could yield as much as twice of what was normal. Some producers explained that “the dryland corn looks like irrigated corn.” It’s no surprise then that whenever asked about the most challenging part of farming, ‘the weather’ was a prevalent answer, along with markets. Producers explained that farming was a gamble, “worse than Vegas.” One farmer highlighted farming’s struggle: “Hopefully you’ve got a friendly banker... it’s a crapshoot. The biggest gamblers in the world, because you’re gambling on

Mother Nature and whether or not things will work.” When this sort of climate instability coalesces with the low price of wheat, dealing with global markets, and the cost of inputs and equipment, farming becomes something which requires much perseverance, and even luck and faith as some explained. This context helps elucidate just how important CRP was in overcoming the contingent ecological conditions of farming in southwest Kansas and southeast Colorado.

Stewardship Motivation: In Philosophy and In Action

In discussing CRP and conservation program participation, producers sometimes talked about what it means to be a steward or what conservation meant to them. Farmers and ranchers spoke at length about valuing wildlife, habitat, and land health in general. Some described instances of conservation actions initiated without government assistance. Hunting was expressed as a palpable interest and passion among landowners and seemed to resonate with the philosophy of the meaning of stewardship. In order to nurture this hobby, many had actually taken measures to improve habitat, or provide feed and water for wildlife on their land without any sort of program monetary incentive. Producers mentioned trail cameras, feeders, food plots, and solar pumps for waterers/guzzlers. In one instance, a producer explained that although trees were not allowed in CRP, when re-enrollment approached they would carve out the piece of land which had trees and opt not to receive a payment because they thought the trees were necessary for nearby wildlife. Producers enjoyed seeing wildlife on their land and as one mentioned it would be “very boring” without it. For many, they envisioned good stewardship as sort of a win-win for their operation and wildlife. For example:

We’re there to help the wildlife anyway and then so we kind of give a different mentality about how we think about wildlife you know. When we have cows back there in the country and there’s deer back in there with them and it’s find ‘cause it it’s good for cows it’s good for deer you know. And we want water back there for deer ‘cause our cows need water back there see so it’s not that we’re abusing deer, we want our cows to do great and if there’s a few deer that’s fine too, you know so.

Another explained that “if the grass is good, the cows do well, the wildlife do well, it all goes hand in hand you know.” Producers spoke about their ideals of stewardship as “gratifying”, a form of “altruism”, creating optimism, and as a way to take care of land. One farmer explained

he would leave weeds along fencerows and field borders because he knew the quail used them. Taking care of certain types of weeds however, such as bindweed, was described as a stewardship ‘must’ for producers in the region. Weed management was brought up several times when discussing what it meant to take care of land health. Additionally, several cattlemen spoke about rotational grazing and low stocking rates or moving cattle away from streams. One farmer swathed and baled his kochia weed because he knew the deer liked it. Another landowner opted to interseed with legumes with his own money to improve habitat, and another always kept a water tank filled because “the wildlife, they’ll enjoy it maybe.”

In discussing what producers thought about being a land steward, the previously mentioned theme of certain land belonging in grass also arose as farmers’ concept of stewardship and being a responsible landowner. In talking about keeping land in grass, one farmer explained: “there is a percentage that they do it because of stewardship issues they just, it is the most responsible action for certain ground”. Some producers explained that it was not stewardship per se as the driving force or reasoning behind CRP participation, but the fact that maintaining cover on highly erodible ground is the responsible, sensible thing to do.

FIT

I identified a number of overlapping issues related to views about CRP rules and requirements and broader program perceptions. The following section explores the idea of institutional fit and the degree to which CRP fit well or poorly with producers and field staff needs and knowledge related to economic, social, and ecological processes. I’ll start by discussing broader conceptual themes that influence fit, and then identify good fit followed by fits needing improvement. Finally, I will explore field staff experiences and expressed desires for program adaptations.

In discussing these issues, I explore various management practices. Disking is a very common management practice where a plow-like implement is lightly worked through the soil to create ecological disturbance. Interseeding is often required for enhancements to gain a certain percentage of forb or grass species in order to get points up to re-enroll. Grazing is a

management practice consisting of grazing CRP with cattle during a certain time period to control undesirables and create disturbance. The following section explores these management practices and various program fits and misfits as experienced by producers and FSA and NRCS staff members in the region.

How Producers Understand Grass: Grass Values and the CRP Mismatch

The idea of grass values emerged as a common theme when discussing what producers liked and did not like about CRP. Producers, whether farmers or ranchers, think about grass in a particular way with corresponding values and standards over what constitutes a good ‘stand of grass’ or ‘grass stand’ as producers called it. Management practices and enhancements required of CRP maintenance may alter pre-existing grass in a way that producers may not agree with. Opinions vary on the species of grass grown and the inclusion of forbs in CRP mixes, which producers generally call ‘weeds’. Values related to grass are often tied to farmers’ conception of land use which values utility, taking advantage of opportunities, and growing what works in the climate at a given time. Grass values also correspond highly to producers’ thoughts around grazing; which regards grazing by cattle as the most acceptable and beneficial management action to be carried out on CRP land or any grass in the region. Leaving grass alone or using minimal disturbance was another heavily mentioned ideal or rule of thumb for dealing with grass.

In understanding producers’ values towards grass, it is important to recognize the benchmark by which all grass is measured which in producers’ minds is referred to as ‘native grass’. To producers, native grass was not CRP grass but the pasture and rangeland shortgrass in the region mixed with mid-grass species which had not been broke out and is generally used for grazing. The sentiment that “buffalo grass is king” was widespread and producers sometimes expressed bewilderment that CRP grasses did not place more emphasis on the one grass species which they thought was the true native and most resilient grass. In asking about native grass, producers generally explained that it was the short, warm-season buffalo grass mixed with blue grama. Sometimes producers would mention additional species such as little bluestem, side oats, and western wheatgrass. Cattlemen especially covet native grass which has never been plowed for their cattle and contend that “once you break a piece of ground, it’s kind of like you, once you break your arm your arm will never be as good as God made it the first time... native grass is the

same way.” Even so, several producers explained that heavily disturbed ground will eventually be taken over by native prairie which they explained was buffalo grass. One producer in speaking about CRP grass said, “why don’t they just put buffalo you know, ‘cause buffalo is what grows normal around here.” Another explained that “buffalo grass seed is ubiquitous, it’s everywhere, and it just gradually takes a hold... but buffalo grass is not what they were after you know that was not part of their mix.” A group of ranchers explained that in determining what would grow in the landscape of Southeast Colorado, we should look at Mother Nature and in doing so “if we can learn how to farm in this area, we should learn it from the buffalo grass.”

The disconnect with buffalo grass seemed to open the door for other CRP grass issues that did not fit well with producers’ values towards grass. I sometimes heard that growing CRP grass was much like growing any other crop on the farm except that grass is one of the hardest crops to actually get established. Required CRP management practices that disturb grass that is already established did not make sense in producers’ minds. Quite often, the consensus on established grass was to “leave it alone” or “don’t mess with it”. One producer expressed frustration that CRP grass required extensive maintenance whereas his best grass on his land had no interference: “go look at it it’s perfect grass, never planted a piece of grass on it.” He explained that, “if you don’t mess with dirt a lot it’ll go back to its natural habitat which is sod.” Another critical point related to producer grass values is the importance of taking advantage of windows of opportunity with the climate and biophysical conditions. Producers explained that management actions like disking during a drought made little sense and could lead to increased erosion, while grazing, mowing, or burning after a wet year was the best way to revitalize a grass stand or control undesirables. “If you got a wet year and you burn it, it’s perfect, because you burn all the nasty grasses off and then it rains and it comes back beautiful.” Moreover, since producers tend to apply cost-benefit analysis to land management decisions, sometimes CRP practices that manipulate grass are viewed as a waste of money:

The problem I have with it is that silly maintenance they do. You know they have you go out and they interseed or have you disk it, it’s like they’re trying to help the farmers and then they’re spending more money and we’re spending more money, it’s like get it to grass and leave it alone! It’s a good habitat for animals. Here we are out there disking and tearing up nests and whatever

you know they won't let us farm the certain areas but yet they want you to farm your CRP. It's such a waste of money both sides, our side and the government 'cause they pay for half of it.

Finally, the value of utility is essential in producers' minds to understand how they view CRP grass. Producers generally like management practices in which they perceive they are getting some use or benefit such as haying or grazing. Being able to match a management practice to achieve the desired stand characteristics with tangible producer benefits is one way CRP succeeds in producers' minds. Since grass is synonymous with CRP, additional subsections following this circulate back to this idea of utility and grass values which rest firmly in producers' experience and knowledge of the land and the region's variable climate.

A Change in Program Focus: From Grass to Weeds and the Wildlife Influence

Another central theme that provides context for CRP fit is how producers take notice of changes in the program's focus since its inception. Many producers contend that CRP has shifted from an erosion control program to a wildlife habitat program. This relates to their grass values because where producers were once required to grow strictly grass, CRP re-enrollments now require producers to interseed with a mix of forbs, which many producers consider weeds: "When it first started if you had weeds growing in it you had to get rid of them but now they want weeds grown in, for wildlife." One producer recalled the program shifting:

See when CRP was first put in, they didn't let weeds grow on it. Now they don't care if weeds grow on it. That to me has been the most amazing thing about the whole thing. I mean, like the kochia and stuff, they actually, the wildlife people like that. Because it enhances more cover, and creates these little insects in there that the prairie chickens and the pheasants and stuff like. It's all directed toward enhancing the wildlife.

Producers also emphasized the CRP point system as accompanying the shift to a wildlife-focused program. A producer is more likely to be accepted into CRP if they have higher numbers of grass and forb species. A few producers recalled that early program requirements meant they planted solely grass, and that this new point system which requires enhancements left them feeling like they were losing out or have to play catch up. One producer recognized that the early days of CRP often created monocultures of side oats and grass stands which did not have enough height and species diversity for nests and young chicks to move around. In order to renew a contract,

producers may be required to tear up a field or part of a field and replant a particularly dense monoculture, or interseed an existing stand with different species to enhance diversity and gain points. Producers spoke about how they had issues qualifying since the acreage cap had been reduced and were facing competition. Having high points from a diversity of grass species on one's CRP meant one was higher up in the point system and more likely to get land enrolled or re-enrolled.

Program changes over time and a shifting focus lead one producer to believe “you can't plan nothing, because they change the rules.” Another explained that, “it's changed really, what I've seen, from a deal to stop erosion so much that I think that it's more geared for wildlife now... just seems like they change it a lot, but that's the government of course.” This producer also explained that the program may not exist without wildlife interests lobbying for the program to receive funding in Washington D.C. While not necessarily a program like or dislike, a small number of producers generally recognized the idea that the shift to wildlife has bolstered support for keeping the program around. It was generally conveyed that wildlife interests, which producers often called ‘the wildlife people,’ were holding influence on CRP at various levels. One cattleman felt vexed that CRP grass mixes today are less geared towards cattle grazing and felt that “it is environmentalist-driven 100%. Because of the prairie chicken, the spotted owl, whatever buzzword animal of the day is, is why CRP is so strong today.”

Another ancillary theme related to program shifts in focus was that farmers expressed a desire for CRP payments, which currently pay more for ‘good farmground,’ to instead pay more for marginal land. At the same time, these same farmers explained that while the soil rental rates seemed “backwards” or “flip-flopped”, it made sense to receive a higher compensation for land that could turn a higher profit, otherwise there would be less of an incentive for farmers to enroll land. With that said, producers did explain that they have also noticed a change from the early days of CRP when so much land was enrolled, to now having FSA/NRCS be more discriminating about keeping land in the program that is in fact highly erodible or useful for wildlife habitat. Similarly, falling within the ‘prairie chicken line’ as producers called it, meant one could qualify for the Lesser Prairie Chicken SAFE program which carries an attractive financial sign-up bonus. Being in the ‘prairie chicken line’ meant land was eligible for

enrollment in the SAFE program. Planting pollinator strips packs some of the highest points but this was not very common among producers due to input costs of buying expensive seed and getting it established.

One positive program shift mentioned by a few producers was the fact that FSA and NRCS had become more flexible in being able to amend contracts to work with local conditions and producer capacities, and were increasingly recognizing the benefits of grazing. Even so, one of the key ideas expressed by producers was that program shifts along with various program requirements meant they were required to “jump through hoops” to earn their CRP checks. Producers often had ideas about why the program seems to require more maintenance on the farmers’ part: “I think a lot of this pollinator strips and wildlife enhancements is just a deal they can put in the news and say we’re making farmers do something for CRP... It’s kind of a public relations deal, good PR that farmers aren’t just getting their check for nothing.” Another concept which was broached but not frequently discussed was the speculation that part of why management practices exist is to create jobs and inject money into the community. A few operators I spoke with who conduct management practices for other landowners outwardly acknowledged that they were in fact receiving a financial benefit from planting, disking, or interseeding others’ CRP. These operators, who sometimes owned their own CRP as well, liked the fact that CRP maintenance provided them with income, yet were still skeptical regarding the actual efficacy of the practices. One of them expressed doubts about disking being worth the input for expected land response and explained: “I’m reaping a benefit when I’m out there disking. I made, I do the disking too, but I complain terribly about it, I complain every time I go in that office about disking.” Producers in this study often felt program changes added management practices which have little tangible results in manipulating the soil.

Inconsistent Rules and Clashes with Local Knowledge

Discussion of program direction was not limited to the shift in focus from soil erosion to wildlife protection. One of the most common dislikes of CRP expressed by producers was the experience of CRP rules constantly changing. Producers thought that CRP rules evolved in a trial-and-error fashion in which the program was more or less testing what worked or didn’t and then adapting

the rules. The following is a producer feeling perplexed by the programs' vacillating management prescriptions:

It seems, the evidence that it's changing, mid-contract management protocols are changing and changing and changing, means, 'Yeah, that didn't work. Oh, that didn't work, either. Aw, crap. Maybe we should have listened to the farmer. Okay, farmer, maybe we'll consider. We still have to make you disc, but now we're only gonna make you disc a half-inch deep.'

Through conversations with some producers, it seemed as if they felt marginalized through having their knowledge and experience ignored with CRP. The mantra of 'a farmer knows best' seemed to resonate with producers in the region, especially with knowing what grows and the conditions it takes to get there. Farmers live close to the land and are paying attention to the weather, soil, and other environmental factors. This experiential knowledge is sometimes passed down through generations and leads producers to maintain that they hold time-tested knowledge gained through growing crops in a variable climate year after year. One producer contended:

It's kind of that, they administer the program, they tell us how to do it. And then, when there's a problem, we bring it out and say, "Hey, this is an issue." They're just running stuff that may not come back for years to come. Like, we're not making this up. It has happened before. This is a lesson that we learned. History will repeat itself, if we don't learn from history.

The notion that CRP rules do not always align with farmers' visions of what works in the landscape colors the way producers perceive conservation programs. One farmer communicated his frustration with having local conditions overlooked: "We can tell our local biologist, 'this doesn't make any sense. You can't treat the soil this way, here. You're never going to grow anything for six years. Don't risk it, or it won't grow for six years.'" He went on to explain that his frustration mainly stemmed from "the guys up in Denver" and that he had contrary opinions over plowing half a CRP to gain a certain percentage of forbs since he knew that weeds were more likely to proliferate than the types of forbs the biologist was wanting.

Another complementary theme of CRP rules changing which frustrated farmers was a perception of incongruent regulation related to CRP compliance. A few producers spoke about conducting

the same management practices as a neighbor, or on two separate CRP fields which they owned, and being in compliance on one but not on another. For some producers, the idea of who makes the rules, who interprets them, and who is enforcing them was something viewed as inconsistent and somewhat arbitrary. In addition to losing a contract when they did the exact same thing as a neighbor down the road, they also identified issues of being told two different things by field staff from different counties, or reaching an agreement on a certain management practice then being told they needed to do it a different way. One farmer spoke of planting a cover crop to certain specifications by one staff person then being told it would not suffice by a different staff member. Stories were told of CRP spot checks not being performed on every piece of CRP by field staff, counties being told different things by higher-ups, and rules changing mid-contract. These inconsistencies are compounded by both program staff and producers often dealing with several different CRP contracts on different pieces of land at various stages of enrollment. As a result, the hazy and mercurial nature of the rules of CRP have left many producers feeling somewhat fatigued by the program.

One-Size-Fits-All Management and the need for Common Sense

A fundamental theme expressed by farmers and ranchers, which encompasses an array of opinions presented in this study, is the issue with a one-size-fits-all approach to conservation programs. The one-size-fits-all approach leads producers to believe CRP requirements are disconnected and lack common sense. In this sense, producers alluded to a creator's disconnect in which the rules of CRP are crafted in a distant place from where they are enacted. To put it bluntly, according to many producers, the rules of CRP are made by people who "have never seen a damn farm." Concerns with grass mixes, establishment periods, and management practices, all stem from a larger design issue which producers explained lacked regional tailoring. One producer likened the problem to the Homestead Act where 160 acres may have worked in Kentucky, but in Western Kansas one would need about 2,000 acres just to survive. I heard many times from producers that "what works in Eastern Kansas doesn't work in Western Kansas". Producers I spoke with seemed to think the bulk of rules came from Washington D.C. but were also made in state offices in Denver, Topeka, or Manhattan.

Producers explained that these blanket rules seemed to lack the practical experience gained from living close to land. Common sense to producers means hands-on, practical, local knowledge which adapts to a given situation. One producer explained what he meant by how the program could benefit from local input and common sense:

Yeah, well you know people who lived here and know what this country is like, the amount of rain and when you get rain and if you let the weeds grow and just a lot of things about this country that someone you know who comes from Eastern Kansas, which is just an entirely different world than Western Kansas, or even you know from another state or fresh out of college, their first job, why, sometimes that causes problems.

The concept behind knowing what grows native, what will not work during a drought, and when to put cows on grass all stem from this idea of place-based, common sense knowledge. One producer mentioned, “so-called experts without hands-on knowledge.” Another remarked “people behind desks and people behind pencils, that never go in the field, aren't going to ever understand. Common sense will never prevail in that... I don't know who comes up with these, but it's not a farmer that comes up with this idea, or a livestock man.” In order to ameliorate this fault in producers’ minds, many suggested making the program more regional to suit the local climate and conditions: “You have to be able to break up into smaller regions.” The creator's disconnect often was reflective of how producers thought of government programs in general and the influence of politics. Many expressed an almost powerless attitude since the all-encompassing rules of CRP were characteristic of the status quo of government operations. One producer explained the overall dilemma of a one-size-fits-all approach and the need for common sense:

Because our state office or state committee a lot of times develops policies state-wide and you know our state office is in the eastern part of the state, it's in you know the Flint Hills it's in the rainy area, and a lot of the influence in the population is the eastern part of the state and so there's a lot more political pull maybe. But so they dictate these policies for, CRP is a great example, and then it doesn't work across the state because the climate is so different, soil types are so different, environment is so different... But I think they need to stop looking at the state as one, one shoe fits all.

Good fit

Several other themes arose with producers around positive aspects and good fits of the program. Producer motivations for enrolling or keeping land in the program may be influenced by the degree to which the program provides satisfactory benefits. Similarly, one's framing of CRP may also be tied to what producers like about the program. The following sections explore some of these favorable aspects.

Emergency Grazing: One positive aspect of CRP mentioned by producers is the opportunity to take advantage of emergency grazing. During drought years and a disaster declaration, CRP grass can provide a forage back up for cattle without a payment reduction. At one point in time, I heard it referred to as “sort of a knot at the end of the rope to help us keep some numbers in our cow herds so that we can keep going.” In this sense, CRP grass acts as a grass reserve for producers with cattle. Another contended that during drought years, “I would've been wrecked if I'd had to have kept my cows and not had CRP to graze.” While the forage value in terms of nutrition for cattle may be widely debated, there is no doubt that CRP grass plays an advantageous role for cattle producers dealing with drought conditions. Moreover, the waiving of a payment reduction during emergency grazing makes this practice widely liked by producers in the region, where CRP grazing payment reductions may eclipse typical pasture lease rates.

Beginning Farmer and Rancher Program: The Beginning Farmer and Rancher Program was mentioned frequently in interviews when discussing what producers liked about CRP. In a region where any opportunity to propel the next generation of farmers is encouraged, the Beginning Farmer and Rancher Program and its connection to CRP is held in high esteem. Young farmers and ranchers in this program may use CRP for grazing their cattle free of charge for three years. This helps young cattlemen or women building up their cowherd who are in need of pasture. It was a prevailing sentiment that in conjunction with CRP it “has been a really good program to help these young guys starting out.”

More Wildlife: While perceptions about specific species were debated by producers, it was generally agreed upon that there is more wildlife as a result of the program. The two most

commonly mentioned species which producers believe CRP has helped are deer and pheasant. Other species that producers connected to CRP were quail, ducks, coyotes, snakes, antelope, and fox. While mixed opinions exist regarding these species' desirability, producers in this study widely maintained that wildlife numbers have increased from CRP, and that this was a program impact they were in favor of.

Farmers and ranchers watch CRP throughout the year working in their fields or driving to and from town and throughout county roads. They witness wildlife through day-to-day living and often espoused knowledge of their behaviors, movements, and food preferences. One Hamilton County producer talked about a deep level of familiarity with wildlife in the area and their whereabouts since he made frequent trips driving backroads. He thought that coyotes love CRP because they prey on prairie chicken, pheasant, and rabbits. He explained that knowing this allows him to target CRP land for hunting coyotes “’cause when calving season comes it’s just you know, hors d’oeuvres, I mean they just, that’s prime for coyotes and we gotta keep them thinned out.”

Producers spoke extensively about the relationship between CRP and wildlife. ‘More wildlife’ was a very common response when asked: *What sort of positive changes on the land have you noticed as a result of CRP?* Without a doubt, the species mentioned more than any other which CRP had helped in producers’ minds, was deer. Increased deer populations were mentioned in many interviews and often discussed in participant observation. Other species in which producers said grew in numbers were pheasant, quail, coyote, and antelope. Songbirds, turkey, prairie chicken, and snakes were also noted as having increased. Some producers believed very firmly that CRP has helped pheasant and quail numbers, while others may question CRP’s role with either species, or explained that pheasant numbers have declined due to drought more than being attributable to human intervention. Farmers generally contend that CRP had been very beneficial for the land, habitat, and wildlife. They explained that CRP gives wildlife “more cover”, “a place to hide”, and “roosting and nesting,” and generally thought of this as a positive program effect. With that said, not every farmer or rancher agreed that CRP had a significant positive correlation with wildlife numbers. Sometimes they explained that CRP may have helped some but that changing farming practices were also involved since wildlife also use land that is

being farmed. In addition, some landowners also installed wildlife waterers and feeders or planted feed plots (crops that wildlife use for food) on their own accord without financial compensation, which they think has helped sustain populations in addition to CRP.

Soil Health and Diversity: A smaller number of producers discussed soil health benefits or increased diversity. Among benefits of diversity, these producers enjoyed aesthetics, the “fun aspect”, and the breaking up of the landscape which they felt was monotonous at times. One acknowledged that diversity meant “broadleaf weeds for brood habitat, and to support insects and things that need a little shade.” This producer believed that having a variety of plants at different heights aided in water capture and penetration into the soil. Another producer even thought that diverse habitats bolster one’s happiness. Soil health benefits discussed included increased organic matter in the soil and deep root systems. When I asked one producer what he meant by saying that CRP soil looked healthier, he explained:

If you go out and dig up a clump of dirt out of CRP, you’re going to find dead roots, organic material, things like that of plants that have been growing for a while. So a sign of health is the organic material in it. We’re finding that in the farmland, if we no-till farm, in certain scenarios, no-till farming makes a healthier soil. So, CRP is absolutely no tillage and so we’re seeing those things too.

Concluding Remarks about Positive Program Fits: CRP likes are generally tied to something seen as a practical use of the land or that has a tangible benefit such as seeing more wildlife, the ability to graze CRP without a payment penalty, and a break for young farmers starting out through the Beginning Farmers and Ranchers Program. Similarly, although not a common practice, swathing and baling of CRP is generally viewed in a positive light as it is a productive use since it provides supplemental winter feed for cattle. Producers often connect certain ecological benefits of CRP in conjunction with no-till farming benefits, such as less wind and water erosion, habitat benefits, and soil health.

Fits needing Improvement

Commonly expressed dislikes or program challenges are presented as fits needing improvement or program themes producers and field staff feel could be enhanced to create better fit. Producer perceptions on CRP mismatches were often rooted in the requirements of management practices. Strong opinions existed around the practices of interseeding, disking, and grazing, with a smaller focus around haying, burning, and mowing. Producers and agency staff often had similar views regarding these management practices, with a few noted differences. Results begin with producer perceptions followed by the agency perspective.

CRP Grass Establishment

The most heavily mentioned themes regarding enrollment and establishment were the seed mixes, planting dates, and conditions during establishment. A few producers also voiced issues with the cover crop which is planted before CRP grasses. Those who mentioned it explained they would like to see less emphasis on height of cover crop because when they run a drill over it to plant CRP grass the thickness makes it difficult both on equipment and allowing for seed-to-soil contact to occur. Also, sometimes a cover crop may not come up in a dry year and need to be re-planted. Soil moisture and climate conditions played a large role in what producers thought about CRP grass mixes and establishment:

The first year CRP come out there was not, the seed mixes that they prescribed for this, some of them were not native to this area and so they introduced some grasses that we wouldn't normally see here I suppose some of that's good some of it was bad, but the first few years of CRP, it took that stuff a long time to get established, I mean five years at least before you see half as much as I got out here too, but a lot of that was moisture.

One of the main voiced issues with the establishment phase was having to have an established stand of grass within the first three years of a contract, and not having any leeway if it was a particularly dry year or two. In some cases, however, producers explained that when their case went to the County Committee for review, committee members who understood what producers were up against would give them an extension of a year or longer to get in compliance. Additionally, producers do not always agree with the varieties of grasses and forbs in CRP mixes that in their minds seem like a mismatch with the climate. One producer even called the grasses

he was required to interseed with “sissy grasses.” Another remarked: “One, forbs don't grow here. Like, five percent forbs is not really natural here. And so, it's grassland, so you've got to expect what nature has already presented itself to do.” I often heard that in order for these special varieties of grasses and flowers to ‘take off’, it would require the right amount of rain and not having a year with a late blizzard or months with no rain. The summer I conducted my fieldwork was a good year for wildflowers, which prompted many producers to relate this phenomenon to CRP planting frustrations:

One of the quarters we have in CRP, it had to be interseeded with clover, and you didn't even know it was clover, then all of a sudden we had a perfect year and there was clover everywhere, absolutely everywhere, but it just shows up every once in a while, conditions have to be right at the right time of year. It's just like wildflowers, sometimes you have a year where there's wildflowers everywhere. It has to rain at the right time.

Rules around planting dates were also questioned by producers. One producer explained that, “a lot of that stuff when they were planting during the winter the ground was frozen, the seed would just lay right on top of the ground you couldn't cover it with any soil the ground was frozen so it was not a good seed bid at all.” He went on to mention that producers and agency staff were figuring out that the later planted grass did the best, and that he thought the date was structured to be so early to allow enough time to get it planted with a limited quantity of grass drills in the area. While this may prove convenient in some cases, planting early may not always fit well for producers juggling various logistical and ecological factors:

You have to have the drill parked there and the seed handy. You've got to have everything ready, and then you've got to plant the grass as soon as it rains when you have a forecast of rain for another week or 10 days. And the soil temperature has to be at least 55 degrees, and the amazing thing, if you do that in 3 days you've got grass... But we don't have crop scouts and so we say OK, we've got grass coming up here after 3 days, even though everybody knows you plant native grass and in a couple years you go back out there and look, and by God you've got grass.

It was clear in conversations with producers that a dominant complaint about the establishment period, species of grasses in CRP mixes, and planting dates was the fact that rigidity with the rules did not align with variable climate conditions. Being kicked out of the program for not

having species established in a given amount of time did not make sense for producers. “Where do you think that seed came from that completely turned my whole pasture yellow when you couldn’t hardly find one before for years and years and years? It was already there. You just get the right conditions and you’ll have it. And if you don’t have the right conditions you won’t.” In this sense, they considered CRP rules too rigid to accommodate the ebb and flow of nature’s cycles.

Establishment from the agency perspective

Agency staff generally held similar sentiments as producers around species mixes and the establishment phase, yet were faced with expectations, timeframes, and procedures with which they must follow. As far as CRP grasses, agency staff explained that what is required in a mix has changed over the years. One staff member explained that decisions were influenced by “wildlife special interests and so our hands are a little bit more tied as far as getting things established and what’s allowable and what’s not.” The issue of weeds during establishment and in CRP mixes was a producer concern that field staff sympathized with: “No farmers ever gonna wanna see weeds in their property, ever, and that’s the whole problem. I mean the difference in the mentalities of the wildlife people versus the farmer- because it becomes an issue later, or it becomes an issue to your neighbor.” A NRCS person explained that yellow sweet clover was recently removed from the mix and expressed bewilderment since the species was liked by producers, cattle, and birds:

Yeah, our number one plant on CRP is yellow sweet clover and they won’t allow us to plant it. And if you walk out in a CRP field and you wanna see a little nest, and usually it’s lark buntings or it’s horned larks, I’ll admit it’s not prairie chickens, but they have their little clumps in the grass and they’re all in sweet clover, and now we can’t plant it, it’s outlawed.

Getting grass to germinate and establish during a drought was another common frustration with the rules among FSA and NRCS. Staff spoke about seed costs, varying times for establishment, and the right conditions needed. One staff member explained that, “it feels awful” to kick people out of CRP contracts but, “it’s a contract, and there’s just very little wiggle room once you hit that finite date... We’ve got to follow the rules, you’ve got to do like you do, but, so that’s frustrating. But then again, that’s Mother Nature not cooperating with us.”

Interseeding

For some producers, the interseeding required of CRP land meant opening up the soil to allow undesirable plants like bindweed and Russian thistle to grow. A rancher commented on a neighbor's CRP where they had interseeded: "Nice grass but where they stripped it, there's the tumbleweeds, leave it alone! Anytime you disturb that ground that's what you get." One producer laments what he views as irrational rules around interseeding:

But that was the last time. After that was, rule with an iron fist, and you will only plant what we tell you to plant. You will not add anything else. It's really frustrating. Now, mid-contract management, also very frustrating. We have some really good-looking CRP. You had to have, what is it, four species of grass and at least five percent forbs. We had four well-established species of grass... Instead of five percent forbs, we had four percent forbs. So, instead of saying, 'Hey, we just need one percent, so one percent of a section. We need six acres of forbs,' it was, 'no, plow up the whole thing and plant it.' I'm like, 'wait, that doesn't make any sense.' Well, 51 percent. But we had to plow 51 percent of the land, to try to gain one percent forbs.

The majority of producers expressed relatively negative perceptions of interseeding as a management practice. While they understood the purpose of interseeding as creating more plant diversity, they still believed it was somewhat extraneous unless a grass stand was truly lacking in coverage, diversity, or vigor. One producer encapsulated the general sentiment around a perceived lack of efficacy of the practice, which is sometimes grouped with disking: "But all that disking and interseeding is all hogwash, I mean nobody benefits from that except the equipment dealer 'cause they wear it out, tear it up, bouncin' over that pasture ground out there you know." Many producers explained that having a grass drill was not common and that the seed required in enhancements was often a bigger fluffier seed making it impossible to use a wheat drill or pre-existing equipment; hence, having to hire someone to do it. One producer explained that there were not many grass drills in Kansas before CRP and that now some operators had made a living out of investing in a grass drill and seeding CRP. Seed companies were also commonly cited as another benefactor. A crucial element of interseeding which producers generally did not agree with was performing this action during a drought or on erodible land:

I said, that's fine that you want to enhance it and make it better, let's don't do this kind of stuff in the middle of a drought, because we've been terribly dry from 2002 to all the way up until

'12, with a couple of decent years in there, but there were some bad, bad years, and they were sending these tractors out plowing CRP and reseeding it, and there was some stuff got to blowing.

A lot of the same sentiments for interseeding also apply to the practice of drilling since both involve manipulating grass with some form of implement. Producers voiced concern over management actions on CRP grass which may lead to wind erosion or 'blowing'. One producer told a story which summarizes the various frustrations faced with management practices like interseeding:

They came out and they said well, we may have 5 species of grass but we didn't have buffalo grass and we didn't have something else, and I said well, hell, what do we need buffalo grass for if we're not going to graze it... And they said 'well, the NRCS is really rigid about things and if they decide that you ought to have buffalo grass... then it's a requirement you plant buffalo grass'. So the year that we did, I said 'yeah, OK, good, I'll burn that, maybe in April and then plant the grass'. And well, it was too dry to burn, so we couldn't burn, and then so we planted that buffalo grass and the other forbs... and I said you know, we're not going to get any grass. We're not going to get anything that we've planted in that. And they said, it doesn't matter. You've got to plant it.

Producers also questioned rules related to the various species they had to interseed with. One producer was taken aback that alfalfa was not approved in a seed mix when "two years ago when we were doing the interseeding with flowers, legumes, and all this here, alfalfa was one of them we were putting in the mix, so I don't know." In addition, agency staff also felt like their hands were tied in having producers conduct various management practices when conditions were not optimal, but had to follow program requirements even while knowing that doing things like interseeding during a drought would not work. Moreover, the climate and regional conditions proved pivotal in producers' minds: "The interseeding I think because we're a dry climate has been a very ineffective, it's just not a real strong contender as far management in these conditions in my opinion." Other producers also mentioned how sometimes new interseeded species may become "choked out" by other, more prevalent species.

Some producers seemed to stress the fact that various interseeded species were not true natives and therefore would not survive in the climate, leading to wasted costs and time: “So when they’re looking at these, they need to look at the cost of ‘em. ‘Cause some of these producers may not do it if it gets so expensive ‘cause you’re basically giving away one year, two years of your rental rate to do these, with all these rules... So that goes to your decision making do I wanna put it back in or do I want to farm it.” The cost, time, and perceived benefit of interseeding seemed to factor in to producers’ decision-making regarding re-enrolling land. Another producer remarked: “it’s more paperwork, it costs money, you didn’t gain enough from what you did, in my opinion.” Producers were generally in favor of species they thought would survive and persist in the climate, such as alfalfa or clover. They were less favorable towards wildflowers which did not sound familiar for the region, such as the Illinois Bundleflower.

Interseeding from the agency perspective

Agency staff did not speak about interseeding and enhancements as much as disking and grazing, yet had an idea around improving the process to reduce weeds. Agency staff in two different counties suggested first establishing CRP with grass species only to allow mowing to control weeds without killing more delicate forbs. Interseeding with forbs could then be done at a later date. Some staff thought interseeding made sense to add diversity in more uniform stands. Agency staff also noted that pollinator strips were not a popular practice due to high costs.

Disking

Light disking is one of the practices producers commonly choose for mid-contract management; however, it is also one of the practices many producers feel irritated by. A prevailing opinion around disking is that it has little actual benefit to the grass stand. I heard various standards of disking depending on what county or state I was in but in general producers explained that the practice meant running a disk behind a tractor to lightly till the ground at a shallow depth to create disturbance, break up clumps, and enhance diversity. It is a popular option for mid-contract management because most producers have this implement or can find someone who does. Disking is usually done in strips versus disking an entire field and many producers spoke of not being able to tell where they had strip disked. As mentioned previously, producers also

voiced concern over disking allowing for weeds to come up and tearing up equipment or wearing out disks from pulling them through thick grass.

A smaller amount of producers noted disking as a positive, one explained that “the whole purpose of the light disking basically is to knock back the grasses a little bit allow some of the weedy forb mixes to come in, and it does do that. And if it’s done lightly enough it does real well if it gets too heavy than that can totally destroy the grass.” Another producer valued CRP for increasing pheasant populations and explained the positive aspect of light disking:

“Well, if you put them strips out there in the spring, and then it starts to get a little, opens that ground up a little bit to where it’s not so matted down with CRP, let’s say you’ve got an old hen pheasants and quail, they’ll lay their eggs and hatch them in there. Then they can move around in there a little bit, you know, and the weeds will draw more bugs, you know, and that’s protein for the chicks. So the problem with straight CRP and like you’ve seen it out here, it’s real thick, most of it. You take an old hen pheasant, and let’s say she hatched a dozen chicks out in CRP... She’s got to go up and over and around, and then they get left behind. It’s not a good environment for baby chicks. It sure isn’t. For birds. Because they can’t follow the old hen. And so that’s why I say that the disking is a good thing because it opens up that ground a little bit more, gets some weeds in there, and draws the bugs.”

Disking was still seen as a negative by some, even as it relates to wildlife. For example, one producer explained, “when we disk, and this year we had to disk half of it, but we went in and did it March 15th, a month early. And you still were bumping and hitting pheasants off nests, so you were ruining nests even at that time... You’re supposed to get some weed species... But I don’t know, I think it hurts so much as it helps.” Other concerns were disking creating more blowing or wind erosion; producers seemed to think this is why disking is done in strips and were in favor of that method. A less mentioned idea around disking was stirring up the wheat streak mosaic virus and allowing it to spread. Some producers seemed to think that disking was old-fashioned in today’s no-till generation: “In this area, any time you're saying to run a disk like no one disks their fields. That's irrigation practices. And they're telling us to disc our fields, our CRP for improvements. Which, a disc is like, the worst tool. We consider that tool illegal for conservation. It's the most drying out.”

While the practice of disking in strips made sense for many producers to reduce blowing, several still questioned the benefit over input and if it was 'worth it'. They did not think the benefit of increased diversity was enough or even existent to justify burning diesel and wearing out disks. The idea that more prevalent grasses would eventually take over was another reason producers noted disking as wasteful. Several explained that they would much rather mow, graze, or burn CRP. One farmer drove me to look at some CRP fields asking to challenge me to see where he had strip disked. To solve this perceived issue, another producer suggested having a spreader on the back of a disk to spread clover and alfalfa seed after light disking, instead of using an expensive drill and interseeding. In conclusion, disking was indeed a common practice among the suite of CRP mid-contract management practices, yet did not fit well in terms of cost-benefit analysis.

Disking from the Field Staff Perspective

The benefits of disking varied across staff. Some seemed to think that the depth and type of disk used would impact the result, and that "what it's designed to do is to actually create small bare areas and to turn that soil so that there will be sunflowers and seeds that's out there just laying there that once you turn it over they will you know, come up." Some staff spoke of seeing fields that had been light disked and "come back beautiful" and others where it was just "a bunch of weeds." Staff realized the confusion in CRP's goal of establishing a grass stand and switching to favor forbs: "I think they feel like we're telling them, we want that grass, we want that grass, we want that grass, and now we're telling them to go drop the disc and tear up some of that grass and it just, you know, just kind of chokes them a little bit, like what? You want me to do what?" Another staff member also contended that producers did not like disking or having to disturb or break soil when it is "good grass". This staff member went on to say that after getting a hang of the correct way to do the practice and during wetter years, she even had a couple producers in the office asking if they could disk at their own expense because it made the grass look so good. Another staff member commended the habitat benefits of disking and breaking up clumps to allow hatched chicks to find food. Even so, other staff members had more negative opinions of disking:

“See Department of Wildlife wants it done, they want it disked hard, and we don’t think it does a damn thing, we don’t want it but we just keep our mouths shut...[W]e’re in the field; we don’t see any improvement from it, even after we go and look... nobody does but they want it and they think they know more about grass than we do, and because they’re providing the money...and we have to do all this stuff that doesn’t make any sense even to us and we have to be straight-faced about it.”

Grazing

Grazing was overwhelmingly seen as the most favored and beneficial management practice in producers’ eyes. Even so, two main issues could be addressed to improve fit: the nesting season requirements and payment reduction for grazing. Producers drive home the mismatch between cattle and grazing as what is wrong with CRP. Given myriad gripes and opinions regarding other management practices and their cost-effectiveness, grazing in producers’ minds would create the best benefit for the land at the lowest cost, yet it is structured to be a disincentive. Current grazing requirements mean cattle are not allowed on CRP land until July 15th, for a 60-day grazing window at low stocking rates coupled with a 25% reduction in the annual rental payment. Moreover, depending in what county or state one resides, grazing may only be done every few years. Some counties are now allowing producers to graze a third of their CRP every year. The payment reduction creates a disincentive because by the time the cattle are allowed on CRP after the nesting season, many producers contend the grass is very low in forage quality and nutrient value since it is “stemmy” and “filler”. Several producers lamented the fact that their cattle did not like being on CRP grass and would rather go back to their native buffalo grass pastures.

Several things do not work with CRP grazing in many producers’ minds, one of which is the nesting season. For one, many producers contend that cattle and birds can co-exist and that the issue of cows stepping on nests is not likely to occur. Several producers explained that they had spent extensive time in pastures after being grazed and had never seen a nest stomped on: “They’re gonna see that little bird there and they’re gonna walk around it.” Additionally, I was told that the best value and benefit to utilize CRP grazing would be before the July 15th date, to take advantage of the green-up period when forage quality is highest. Several producers explained that grazing, much like farming, is all about watching the soil, vegetation, and

weather, and quickly responding when needed. This idea of using climatic windows of opportunity applies very much to grazing and knowing when to put cattle on grass and when to remove them. Some producers explained that cattle can control undesirables and actually push seeds into the ground through hoof action to enhance diversity. Some producers expressed frustration over the height requirement since they believe grass in the region evolved to be short, in addition to the fact that cattle don't graze at uniform heights. The diminished forage quality means many producers supplement CRP grass with protein tubs that house protein blocks for additional nutrition. While this may be a minor annoyance, the main hassle factor in addition to the payment reduction is fencing and hauling water: "So anyway, they can't charge you 25% of that, because that would be stupid. There's hardly any grass out there anyway, and a lot of trouble to fence, and a lot of trouble to have water, and it's a lot of trouble." One producer commented, "the biggest pain with CRP grass is hauling water to it." Indeed, producers described that "most people won't even mess with it" because of the short grazing window, hauling water, installing hot wire and fencing, moving cattle to the pasture, and less than desirable stocking rates.

The economic factor of grazing producers often did not agree with was that cash lease prices for grazing in the region did not equate with the payment reduction for the benefit gained: "The negative about grazing it is we have to give up 25% of the payment to graze it, well if you're giving up 25% of 34 that's \$8.50, that's awful high rental rate for grass around here." Producers explained that being able to graze at a more affordable rate or with leniency around the nesting season would cost producers and the government less money in the long run and achieve a better result. As one producer commented, "I'm just saying you shouldn't be penalized for doing something good to the grass. Or if you're gonna do it they ought to get it down to a rate that is affordable, because right now that's not an affordable rate." When asked about why they thought the penalty existed, some would attribute grazing restrictions to 'the wildlife people' and deterring agricultural activity on CRP land. Other producers explained that the payment reduction was steep but made sense because producers had to have "some skin in the game" if they were using it for production. Indeed, their cows were getting some weight gain from CRP and "if you wanna dance you gotta pay the fiddler." Ideas to amend grazing to be a better fit included reducing the payment reduction, and creating flexibility with nesting season

requirements, especially if there was CRP land at a different stage adjacent to grazed CRP so the birds would have additional habitat nearby. The general sentiment was that the balance between CRP and grazing could be improved to actually increase conservation benefit, create less of a footprint from equipment and fuel, and realize its potential to be the most cost-effective management practice.

Grazing from the Field Staff Perspective:

Grazing was also a highly advocated management practice of field staff for CRP maintenance. Many staff members explained they would like to see CRP change to add some flexibility around grazing, the nesting season, and payment reductions. One NRCS person explained, “grazing is a very, very good option, and they, they’ve gotta, at least the cost for our area is so high that it’s hard for us to get people to do it. And they do it because it’s a state-wide cost and in Eastern Kansas you can, you know it’s probably a little more favorable on the cost.” Other staff members talked about ecological benefits of grazing such as hoof action pushing seeds into the soil, enhancing grass growth, reducing competition with undesirables, possibly controlling mosaic virus, and being complimentary to wildlife habitat. Most agency staff sided with producers on the nesting season preventing optimal use of forage quality: “That window they have missed, ok western wheat grass which is a cool-season grass, is done... so you have your warm season grasses left but they’ve started getting stemmy, you’re missing the ideal time to do the grazing.”

Staff also recognized the importance of grass species favored by cattle producers. “You know the wildlife special interests are like well this plant’s really wonderful for birds, and yeah it is, but they weren’t thinking that maybe somebody might graze it for contract management or what’s gonna happen when that contract expires is that rancher gonna wanna pull it into production.” One staff member thought it was an oxymoron that NRCS promoted grazing in programs like EQIP and stressed the beneficial relationship between cattle and prairie chickens, yet CRP remained very strict. Another NRCS staff member explained that grazing during the nesting season would not be the worst thing that could happen to it and if the payment reduction were reduced, it would benefit the land and curtail producers dropping out of the program due to strict requirements around grazing.

Other Practices: Mowing, Haying, and Burning

Less mentioned practices for CRP maintenance were mowing, haying, and burning. The common thread between these three practices were that producers generally had nothing negative to say about them; however, they are less common because rules have changed around their use. Mowing was allowed as a management practice in the 80s and 90s but is currently only allowed during the establishment phase to control weeds in cover crops. One producer explained that biologists' opinions had resulted in mowing becoming discouraged because while it promoted grass growth, it did less for forbs and diversity enhancement. Another was in favor of mowing no longer being allowed because it "takes all that dead stuff that's up here and lays it down on the ground on top of your planting and around in the little open area between your plants, and it'll choke that plant. So they were smart when they said no more." Haying is similar to mowing in that a swather cuts the grass but then the grass is removed when it is baled for hay. Producers like haying because they can use it for winter feed for cattle, yet restrictions around only haying parts of CRP at certain times seemed to lead some producers to feel it was more effort than it was worth. As one producer noted:

"All you can do is half the field this year... If you had 160 acres, you could swath and bale 80 acres. You don't have to do it in strips, but you could do 80 on one side and then leave the other 80. It makes you have to come back next year and finish up the project, which I don't like doing. I like to get it done. That's why I like the grazing or the burning better. Well, I can't say I like it better, but I'd say it works better for me, because I don't have to go back later on."

Some producers in the region recognize the valuable role fire played historically in shaping the landscape of the region and regard burning as a beneficial management tool for grass. Nevertheless, concurrent periods of drought and the high perceived risk of burning a field make this a less popular management practice. Some producers contend that burning during a wet year or after rain can have tremendous benefit for a grass stand, but only if the timing and conditions are right. This is critical, as I heard several stories about burning CRP and the resulting flames and smoke being quite intense. The positive aspect of burning in producers' minds is that after rain, the grass rebounds and is very green and beneficial for wildlife, diversity, and grazing. One producer recalled: "I've burned a lot of acres of CRP in the last 20 years, and in my opinion,

what the burning does is, because it's done in March and April in this country, it takes off all the residue, but then it opens up the ground for your spring varieties to come first." With that said, there were a smaller number of producers who did not like burning because they believed fields after burning looked like a "wasteland" and that it was detrimental for wildlife habitat since they would see birds fly out of fields as it was burning. Currently burning is allowed in Kansas but is not allowed anymore in Colorado.

Field Staff Interactions

In understanding producer concerns with CRP and various program misfits, it is important to note that the majority of producers seemed to think the issue originated from higher-ups, state offices, and Washington D.C., not with their local field staff. Producers generally had positive relationships with NRCS and FSA field staff and a couple producers even thought their local NRCS conservationist should be in charge of CRP altogether. Producers who have formed relationships with local FSA and NRCS staff seem to think that their hands are tied as far as how much allowance they can give on CRP contracts: "So I think that's probably the biggest change that is needed is more local input. Even if it's a NRCS employee they have a pretty good understanding of what works here and what doesn't... The local office basically said they're helpless in this case. They can't say anything. They can't do anything. They just have to make sure that they check." One producer explained how the local staff always make things easy for him and "go the extra mile". Another producer expressed that the local offices were stretched thin on staff and resources and would like to see them receive more help.

Less common were for producers to recall challenging or controversial relationships with field staff. This seemed to occur variably depending on the county and personalities involved, or producers not necessarily agreeing with the vision of new hires: "Well, these are all young people getting out of college. This is their first job. So they go in there with all this authority, and their zeal, and still stuck behind a desk and it's hard to let common sense prevail in that case, too." A couple producers brought up the time it would take to get a decision from a local office on amending a contract or getting approved for something. A couple of producers also expressed frustrations with hearing different things from different staff members or FSA versus NRCS. In

general, however, relationships between producers and local FSA and NRCS were described as agreeable and up against the same larger design issues of the program.

CHALLENGES FACED BY FIELD STAFF

FSA and NRCS are faced with juggling myriad Farm Bill program requirements, protocols, and timelines; CRP is but one responsibility among a suite of other tasks. In general, field staff echo many of the sentiments of producers. Producers explanations of their main frustration not being with local staff but with state and nationwide policies, mirror that of program field staff who often feel like they are not being heard by higher-ups and have to face producers with inconsistent and constantly changing program rules and regulations. Several field staff felt CRP has become over-regulated with extensive and confusing rules, and as providers of the program feel they are expected to do more with less. Staff explained that they felt overwhelmed and understaffed, and that they did not have enough hours allocated to work specifically on programs like CRP.

Both FSA and NRCS staff wished CRP would be recognized as a heavy workload program and hoped for more streamlined software to deal with impending timelines. Other program wants were to reduce rolling out programs before they had been fully flushed out to improve consistency in delivery, and to be able to have more one-on-one time with producers. Some voiced concern over the back-and-forth between NRCS and FSA regarding CRP and thought the program could be improved by being managed by solely one agency. NRCS writes CRP management plans and handles the technical side such as determining soil rental rates and species mixes; however, FSA must still approve plans, any amendments once into a contract period, and all financial actions. Some staff regarded this dual-agency management as onerous, as well as confusing to producers. In general, program staff felt CRP could be improved to alleviate various administrative burdens.

Top-Down Complications

Frustrations with CRP stem from the fact that the program is designed as a nation-wide program

implemented in a top-down fashion with management decisions being made at the higher level. Implications for those on the ground mean they are dealing with management prescriptions that may or may not be appropriate for their regions: “Yeah they don’t let us do anything that’s common sense anymore... And they don’t let the decision be made anymore at the field level it’s all done in Washington D.C.” One staff person even thought, “my opinion doesn’t matter.” Dealing with the inherent bureaucracies of a large USDA nation-wide program means that processes can be lengthy and often cumbersome. Staff explained that amendments to contracts could often be a “nightmare” since they had to be signed by FSA, producers, NRCS, and sometimes the Soil Conservation District. Changes in contracts do not happen overnight, and this can cause some contention with producer/staff relationships when producers need to expedite management to take advantage of windows of opportunity. When CRP sign-ups occur, they must get ranked at a national office before decisions can be made as to who gets in, after which Conservation Plans must be created in a timely manner. One staff member lamented: “We’re terribly understaffed and they expect us to do all this other stuff we never [used to have to do]. And the things that are priorities to the higher ups are not the priorities to the farmers.” Another issue is who is interpreting the rules and the consistencies in what is expected of program requirements. Staff feel they have little preparation to learn about program changes. One staff member said that they aren’t informed about a new program change “‘til it’s on the ground and we’re supposed to be writing it.” They attribute this to the lack of attention it receives at higher levels, concluding that the state or national offices “expect us to do it all, and we don’t have the time.”

Office Frustrations

One commonly mentioned frustration in-office was the software program which had recently been changed to combine all farm programs. Some staff spoke about lag time between FSA and NRCS and getting paperwork back on time. This can cause complications “because... on a revised contract you have 30 days to get it back otherwise... we delete it and you’re out of it. And then they don’t have that contract any more, and then it’s not available to put it in, and then you’re just kind of lost on that.” One staff person expressed a strong need to have another field tech person who was highly knowledgeable on writing plans. The frustration with being understaffed was a common theme voiced among staff, and the recognition that filling roles was

not easy since producers and field staff value people who know the program well and can do the job efficiently and in a knowledgeable manner. Having experienced staff reduces the likelihood of management plans and other documents needing to be re-done if they are not adequately completed.

Rules and Complexity:

The prevalence of rules and their innate complexity was paramount in both producer and agency opinions of CRP. New Farm Bill rollouts bring different rules, and along with funding changes and increased interest from wildlife groups, CRP rules and practices become more complex. One NRCS person suggested eliminating some of the rules and explained why:

“It shouldn’t be that hard. You put grass out to control erosion and I mean it’s doing what it’s supposed to do, but too many people have got involved in it and they’ve made it too complex. I mean we have all these CP codes now that we can go through and shortgrass prairie mixes... There’s just so many things, and to try to keep records of everything and to remember it all and to apply it all correctly has been a challenge. And, to be honest... because of that there’s been a lack of consistency throughout the area and that’s created issues.”

Indeed, lack of consistency played into adding confusion around the rules. Agency field staff explained going through processes with producers and then having the rules change all of sudden to do a management practice from 50% of a field to 100% of a field. Confusion over mowing and the fact that producers could mow during establishment but not part of mid-contract management was another example. Changes from state to state and county to county cause confusion as one staff member expressed:

“Our Colorado field tech guide is pretty contradicting to itself. Like you read dates for doing a certain practice over here which contradicts the dates over here. And so that’s caused a lot of confusion with producers and definitely contractors that work in multi[ple] counties because some counties are using this date whereas other counties are using this other date.”

Producers who may have had CRP fields re-enrolled throughout the years may also express discontent over mid-contract management: “So a lot of them are used to not having to do [mid-contract management]. And then when we had to require them to do it, then they got kind of ouchy because they, well ‘I never had to do it before.’ Well, you had an easy 10 years. Now it’s time to get back and do something to keep it in the grass so it doesn’t die.” Rules were sometimes viewed as extraneous, sometimes as necessary, and occasionally put strain on agency-producer relationships, but for the most part both staff and producers seemed to stand in solidarity against frustrations created by their complexity.

Producer Relationships:

‘Relationships with producers’ was the most commonly mentioned highlight or reward of FSA and NRCS staff members. They thoroughly enjoyed forming relationships with farmers and ranchers and working to guide and advise them on program choices and procedures. One staff member enjoyed their role as a form of customer service and working with producers to have a purpose and “feel like you’re doing something good for them, but then also the entire area, you know, of Kansas, all of southwest Kansas, this whole geographic area, conservation-wise, it kind of feels like the right thing to do.” A FSA staff explained the principal duties they have:

“To make sure that they understand the details of their contract and what’s expected of them, and educating them and that kind of thing. So trying to make sure that they walk the straight and narrow, that they meet their requirements. I don’t think anybody intends not to meet their requirements...they intend to. It’s just keeping track of when to do it and the parameters of time frames and that kind of thing.”

Another explained that the FSA staff spent a lot of time explaining to absentee landowners what was required of them on CRP maintenance. A common theme arose in the wearing away of the accountability and internalization of one’s CRP land as it is passed down through generations, or to family members who live outside the region. This is one reason why agency staff expressed a desire to have more dedicated one-on-one time with producers to thoroughly explain the responsibilities that come with owning CRP land. One FSA member recalled interacting with an absentee landowner:

“I mean, they don’t realize that they have to do a management or they don’t want to, or they don’t want to pay for it, or how do I find somebody to do it? I mean, that’s why we come up with lists to help them get through stuff I mean, and to explain to them, yeah, you have to do it. That’s a requirement, that’s what you signed to.”

The biggest fear or worry in many staff’s minds was of CRP acres getting reduced nation-wide. “People want in it and we have to tell them no. We’re out of acres. That’s my biggest gripe. I mean, you constantly, there’s constantly people asking about CRP and wanting to go in, and if I can get – I am a big fan of CRP, if I can get them in it let’s do this.” Agency field staff explained that they very much valued CRP as a conservation program, and thought producers participated because it was “a good deal”, “a sure thing”, and “a predictable thing”. Staff expressed fear that if the program were to disappear that their counties would be devastated financially, and from acres being broke out. Even with burdensome rules and bureaucratic headaches, agency staff related that CRP is worth it to them to be able to connect with producers and perform their role in balancing conservation with viable farming communities.

DISCUSSION

Exploring themes of frames and fit of CRP as perceived by landowners and field staff has elucidated the various ways CRP is viewed and the degree to which it matches with those views. My study’s focus on emphasizing the producers’ and field staff’s points of view increases the clarity with which program participation and needs are understood. The results of this research could lead to more user-friendly programs that meet both landowner needs, ecological objectives, and alleviate field staff’s concerns. CRP in southeast Colorado and southwest Kansas holds great promise for continued conservation of grasslands if producer and agency perspectives and needs are brought to bear on program adaptations that increase fit. Similarly, if CRP can be communicated and adapted in a way that speaks to landowners’ background system of frames and corresponding needs, greater participation may be achieved as well as a deeper internalization of the responsibilities associated with having land in CRP. My use of a human-centered design lens using ethnographic methods may serve to fill a knowledge gap in which

little studies exist that use a field-based, deep dive approach to understand a conservation program in a given community.

Frames provide a schema for producers to communicate the various ways CRP fits into their lives. These frames of CRP help producers communicate the historic, economic, and socio-cultural underpinnings that drive perceptions connected to their lived experiences. Frames help paint a picture of producers' thought processes and motivations when making decisions like enrolling in CRP. Although this study evolved without an a priori framing theory, the concept of frames emerged as a result of inductive, landowner-centered inquiry. This was also true of Jansujwicz (2013) who found that framing emerged during analysis of landowner-expressed views. Like Jansujwicz (2013) we "used participants own words to build framing categories" (p. 950). The frames presented in this study evoke general conceptions of farmers' place in the world. Understanding lived experiences and frames can enhance future program design and tailor programs to meet needs that are grounded within landowners' frames. Understanding frames can aid managers in program messaging, such as tailoring program benefits that emphasize economic gains or doing the responsible thing for erodible soil. Jansujwicz (2013) contends that, "natural resource professionals must forge meaningful connections between a program's objectives and a landowner's background system of frames" (p. 946). This concept directly correlates to the purpose of human-centered design in tailoring programs to meet people's needs.

While previous research regarding landowner participation in voluntary conservation programs suggests other motivations are equal to monetary incentives (Sayre 2004; Sorice and Donlan 2015; Brunson and Huntsinger 2008; Didier et al. 2004; Kennedy and Brunson 2007; Grigsby 1980), my study did not find strong intrinsic stewardship motivations that would persist without payments. Similar to Moon and Cocklin (2011b), economic motivations were found to take precedence in program involvement, as evidenced by heavy emphasis on economic framing in my results. Also, I found conservation concerns were generally secondary to economic concerns as was also determined by Lute et al. (2018). Most producers in this study expressed that they would only continue conservation behavior consistent with CRP (leaving land in grass) if they were able to maintain some practical use of the land. 'Letting land sit' was not a feasible option for most landowners, although some would engage in this with the intention of waiting for a new

program sign-up. In the absence of payments, others explained they would either graze the land or re-cultivate if it was suitable to do so. My study supports the findings of Caldas et al. (2016) which found retirement plans and land values to influence producers' decisions to keep land in the program, as well as Isik and Yang (2004) who found the uncertain risks of farming to be a driver of participation. Finally, results presented also align with Reimer and Prokopy's (2013) study on Farm Bill participation which found soil conservation benefits and improved hunting habitat as agreeable program attributes. The authors also reached the equivalent conclusion that farmers see CRP as a financial solution for marginal land which would be better used for environmental benefits than risky agricultural pursuits.

Farmers did express a strong obligation to keep land in cover with grass if it was considered rough and likely to blow. The framing embedded in 'CRP as a conservation program' describes farmers' preoccupation with envisioning certain types of land as un-farmable. While producers generally consider CRP an economic decision, it is important to remember farmers' notions of stewardship and the idea that maintaining cover may be considered a responsible act in light of the region's unsustainable use of erodible land. Indeed, the heeding call of 'it should've never been broke out' serves as a possible latent stewardship ethic that could be leveraged for CRP messaging; in a way, righting the wrongs of past farming practices. In this sense, farmer's conservation or stewardship ethic in this study was rooted in local knowledge of conserving the resource, the land, in a practical way that honors past experiences. Conservation values, along with what makes sense structurally on land, and economically for the bottom line, seem to mirror each other to become something which is very practical and synergistic.

A farmer needs to farm to make ends meet, and while some understand that the region's harsh climate is maladapted to dryland farming, they make do with the best land they can and put the rest in CRP or use it as pasture for cattle. This echoes Opie's (1995) assertion that sustainability is grounded in lived experience informed by the history and geography of a place. While it seems that, "the Old Dust Bowl region has been an inadvertent experiment station in crisis management," (p. 254) the farmer is charged with the task of conserving the resource while balancing risk and quality of life. Federal assistance through programs like CRP helps alleviate risk and enables responsible land actions to prevent a future Dust Bowl from occurring. Indeed,

it is “not that the climate has changed but that government and society had learned to compensate,” (p. 251). The role of CRP in shouldering some of the agricultural risk and restoring environmental balance should not be overlooked. Brunson (2012) suggests that building resilience in rangelands requires an understanding of “human-system influences that shape conditions on the land today.” Therefore, solutions may arise from understanding land-use legacies. Understanding CRP’s impact on social, economic, and ecological trajectories informs producer’s framing of their human-land relationship and the decision to participate. Although conservation program practices may be viewed primarily through an economic lens, they should strive to strike a balance with perceived positive program benefits, stewardship and lifestyle motivations, and the various frames in which CRP is conceived. Crafting solutions to conservation issues in production-oriented regions is best informed by marrying the needs of ecosystems with the people whose future also depends on the land.

I found a few key themes that relate to the institutional fit of CRP to producers’ needs and desires. Producers recognize and value CRP’s purpose in maintaining cover to reduce wind erosion and improve wildlife habitat. They like CRP practices that fit with a common sense, utilitarian ethic of taking advantage of opportunities at ideal times that work with the climate. Producers expressed favorable opinions of CRP as increasing wildlife numbers, improving soil health, and as a beneficial tool for young cattlemen. Consistent with Diebel et al. (1993), producers regularly noted increases in deer from CRP, followed by pheasant. Practices such as grazing and haying are preferred for utilizing the grass as needed, and leaving it alone when it does not need interference. By the same token, producers favor grass species they consider regionally appropriate and that can be used by cattle such as buffalo grass, clover, and alfalfa. This study found overwhelming support for the *Beginning Farmers and Ranchers Program* allowing young cattle producers to graze CRP at no cost. Burning fits with producers’ local ecological knowledge and understanding that grass needs fire at times. Some producers also commend recent changes in CRP that add flexibility such as amending contracts to allow for different management practices during a drought. The general concept of CRP appeals to producers; however, as one Kearny County landowner said, “It’s a great idea, it’s the details.”

Producers and agency staff contend that CRP rules could be crafted in a way to exercise greater common sense and improve fit with the variable climate and farming practices. Many producers feel that CRP rules exist as hard lines with unachievable goals and may be better used on an as-needed basis. Myriad program mismatches exist which do not ‘make sense’ in producers’ minds regarding changes in CRP’s focus, species of grass grown, conditions and timing during the establishment phase, and various required management practices. The largest perceived benefit in management actions championed by producers and agency staff alike would be accomplished through greater flexibility around cattle grazing. The nesting season and short window of a grazeable time period lack congruency with producer and agency notions of grazing as a powerful tool compatible with grasslands and wildlife. Themes emerged among agency staff in voicing a need for greater one-on-one time with producers, allocation of resources specific to CRP, streamlined program processes, and consistent rules and direction from higher-ups to increase program delivery effectiveness.

My study supports the findings of previous research which stress the importance for landowners in conservation programs aligning with production goals, (Moon and Cocklin 2011b, Kennedy and Brunson 2007; Lubell et al. 2013; Briske et al. 2016, Gutwein and Goldstein 2013; Wollstein and Davis 2017), as well as the need for flexibility in program design (Sorice et al. 2013; Young 2014; Swann 2016; Race and Curtis 2013). Results also echoed those of Lute et al. (2017) in identifying rule complexity as an emergent theme of CRP in which both producers and practitioners would favor increased flexibility and simpler rules. My study reflected research which found producer-agency relationships in CRP arrangements to be generally positive (Reimer and Prokopy 2015; Lute et al. 2017). Similarly, Lute et al. (2017) found mistrust in local practitioners to not be a chief concern among producers, and that agency staff made a point to maintain positive relationships with producers. Additionally, my study adds to research which found landowners become incentivized through practices that have a certain ecological response (Race and Curtis 2013), and a degree of high observability such as decreased erosion and more wildlife (Swann 2016).

Notions of common sense and local knowledge were found to be a prevalent theme among producers in southwest Kansas and southeast Colorado. My study affirmed the disconnect found

by Peterson and Horton (1995) in which producers tend to value experiential knowledge, or common sense, over knowledge put forth by experts. The authoritative knowledge from higher-ups or those who live outside the region was generally disregarded by producers engaged with CRP, who felt these proceedings ignored their experience on the land. This author suggests that negating ranchers' common sense may thwart stewardship values since common sense is tied to their concept of what it means to be a steward (Peterson and Horton 1995). CRP practices that honor producers' common sense may in turn shore up knowledge and experience that reflect many producers' innate capacity to make decisions that are best for the land. Abrams et al. (2017) suggest that voluntary programs reach their highest potential through incorporation of rancher knowledge. Similarly, enhancing resilience in complex systems calls for adaptable approaches that value local ecological knowledge and experiences (Folke 2016).

An overarching insight from examining institutional fit of CRP is the problem of one-size-fits-all management. Replacing a top-down, one-size-fits-all management regime with a flexible and climate-suited management approach informed by local-level actors, may increase program interest, in turn, maximizing conservation benefits (Race and Curtis 2013; Sayre 2004; Wollstein and Davis 2017). Furthermore, dovetailing conservation benefits with production needs in a way that values producers' and agency field staff's experiential knowledge can allow participants to take advantage of opportunities which may improve overall quality of CRP grass and increase program participation and retention. Conservation programs that leverage local input and focus on producers' needs and experiences can promote adoption and persistence of conservation practices to enhance the health and viability of rangeland ecosystems (Sorice and Donlan 2015). This type of innovation could capitalize on opportunities and the given context of farms/ranches and attract producer participation (Gutwein and Goldstein 2013). CRP adaptations which emphasize environmental benefits grounded in producers' frames, and management practices which match the local landscape, site conditions, and producer resources may in turn increase overall satisfaction and improve the institutional fit of CRP.

CONCLUSION AND MANAGEMENT IMPLICATIONS

Adapting natural resource management to meet both human and environmental needs represents one of the greatest challenges of modern times. Particularly in the working landscape of rangelands, human livelihoods and complex biophysical factors are inherently in flux making nation or statewide management prescriptions difficult (Brunson 2012). Applying adaptive management principles that recognize local knowledge and site-specific conditions will require a great deal of flexibility and innovation which may be strengthened by human-centered design and ethnographic methods. Understanding CRP in southwest Kansas and southeast Colorado through this case study allowed for emergent insights to help address these complex natural resource management issues. These results may better inform program improvements to achieve multilayered economic, ecological, and social benefits.

Frames are rooted in the cultural and ecological landscape history which structures the way farmers organize and interpret the world around them. The Dust Bowl and social memory of wind erosion plays a pivotal role in how producers frame and think about programs like CRP. Frames influence how decision-making in land management occurs and the degree to which programs like CRP fit well or poorly with producers' lives. For some, CRP may ease the transition to retirement, or realize its conservation potential for others as an answer to the legacy of land blowing. My study revealed that conserving the soil is innately woven into the mindset of the region. Producers also hold intimate local knowledge and respect for wildlife and some may even conduct wildlife enhancements on their land without financial compensation.

Understanding producers lived experiences, background system of frames, and human-land relationships influences how landowners perceive programs. Implications for program design point to tailoring program messages and benefits to be grounded in frames.

The rules and requirements of CRP repeatedly did not fit with producers and field staff local knowledge. Opposing views on how grass should look, complications from a shifting program, inconsistent implementation, issues with enrollment and establishment, and mid-contract management practices all coincide to create discontent with program experiences. Moreover, these command-and-control (Holling and Meffe 1996), top-down programs often create the feeling of marginalization and exclusion of local actors' voices as is evidenced in this

study. Participants of this study expressed a need to better incorporate local knowledge, and to allow regional tailoring to take advantage of environmental windows. My study adds to the broader debate around increasing flexibility with grazing. Grazing was noted as the largest program misfit; clearly considered an underutilized tool by both producers and field staff. In general, this study encourages CRP to incorporate more bottom-up management with regional jurisdiction by county offices to address various mismatches such as grazing and concerns with management practices.

Results from this study point to various design recommendations which in turn may increase long-term participation and renewal of contracts for continuation of conservation actions. Increased time and funding to strengthen producer relationships, and allow for more individualized management prescriptions tailored at the farm-level, would enhance communication of management plans to realize CRP's conservation potential. As did Lute et al. (2018), this study suggests individualized management plans during the enrollment process as a way to involve farmers in conservation planning. Ultimately, this would better match local conditions, and the increased communication and co-production through individualized plans could serve the multipurpose function of increasing trust with agencies. This may impart greater accountability for landowners to take ownership of their CRP, and foster conservation solutions that take advantage of environmental windows to maximize benefits.

Young (2016) also suggests looking at CRP on "a smaller geographic scale" by county or community-level to create "more targeted and effective approaches to encourage enrollment" (p. 52). Designing CRP at the farm-level and with jurisdiction by counties could achieve this. This study encourages the suggestions of Swann (2016) in that increasing flexibility can increase ownership of conservation land-use choices and enable adaptive management to occur so that landowners' can adapt practices with shifting climatic events or environmental conditions. The author also discusses the importance of active involvement with landowners in program processes and practices through shared learning to build trust and confidence. This study agrees with Briske et al. (2016) who suggested establishing "missing information feedback loops between conservation practices and their agricultural and environmental outcomes to promote learning, adaptive management, and innovation." This may be reached through collaborative

monitoring efforts involving landowners using outcome and evidence-based monitoring of CRP to achieve desired conservation objectives.

My results point to the criticality of drought and recognition that manipulation or disturbance of CRP grass during dry periods should be avoided, yet this often occurs because of intransigent rules in place. Drought-dependent and production-friendly management such as a greater emphasis on grazing would allow CRP grass to flourish within the landscape where the rules are enacted. A reexamination of the compatibility between grazing and grasslands with regards to CRP nesting season restrictions may lead to solutions that nudge re-enrollment when skepticism exists regarding choices after contracts expire. Moreover, greater clarity and consistency of rules may alleviate the confusion which sometimes accompanies the CRP process. If staff can have clearer communication from higher-ups regarding program rollouts, program delivery can achieve greater results and avoid constrained interactions with producers around program inconsistencies.

My research presented an exploration of producers' lived experiences as they relate to perspectives on a widespread, voluntary conservation program. Employing a human-centered design framework which uses ethnographic methods to understand needs informed by culture can help prepare a roadmap to adapt CRP to match conservation with the needs of agricultural communities and field staff offices. Understanding why producers participate, re-enroll, and exit the program helps identify program inadequacies in a way that is grounded in the lens of the users of the program. The success of programs like CRP may be strengthened through a landowner-centered understanding of the need for flexibility and site-specific management, alignment with production goals, emphasis on perceived conservation benefits, and the input of local actors across scales and status quo boundaries. As such, this type of innovation in CRP may achieve multiple benefits of dovetailing conservation goals with production needs, enhancing landscape-scale grassland conservation, and sustaining thriving rural communities who take pride in their CRP land.

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