

Landowner Perspectives on Big Game Migration Corridor Conservation in Wyoming

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The Whitney MacMillan Private Lands Stewardship Program within the Ruckelshaus Institute at the University of Wyoming focuses on a range of pressing issues affecting private landowners and private lands throughout the West through expertise and interdisciplinary collaborations across natural resource management, rangeland ecology, business and finance, law, decision-making, collaborative processes, and other fields.

Research Summary

In the summer of 2019, researchers at the Ruckelshaus Institute of Environment and Natural Resources at the University of Wyoming conducted interviews with landowners and agency personnel with a stake in migration corridor conservation. The purpose of the interviews was to capture local attitudes and opinions towards big game migration corridor management and conservation, with an emphasis on the specific concerns and opportunities presented by corridor identification and designation. We heard a diversity of perspectives, including both support for and opposition to corridor designations. Landowner concerns focused primarily on the potential for increased regulations and restrictions on private lands, minerals development, and public land grazing leases. Some landowners also saw opportunities arising from the focus on corridor conservation, including potential for increases in funding for ranch improvements that benefit wildlife, conservation easements, and wildlife crossings on highways. Additional topics that emerged included an interest among landowners to be more engaged in the science informing designations, the importance of including local knowledge in managing corridors, and clear communication with stakeholders around what designation looks like on the ground. Involving landowners more collaboratively as partners in the conservation of migration corridors could help increase support among this community and mitigate concerns over corridor identification and designations.



CONCERNS: REGULATIONS AND RESTRICTIONS

- Limitations on private property
- Barriers to development of mineral rights
- Changes to public land grazing leases



OPPORTUNITIES: FUNDING AND INNOVATIVE SOLUTIONS

- Increase in available funding for voluntary ranch improvements, conservation easements, and highway crossings
- Emergent ideas for adaptive management



ADDITIONAL CONSIDERATIONS FOR CORRIDOR MANAGEMENT

- Role of science and local knowledge
- Importance of relationships and trust-building
- Recognition and a seat at the table

Introduction

Migration is critical to maintaining healthy big game populations. In Wyoming, mule deer, pronghorn, elk, moose, and big horn sheep make these seasonal movements to take advantage of nutritional resources and environmental conditions. As land-use patterns in the West have shifted towards development associated with housing, transportation, and resource extraction, migrating ungulates have been subject to the increased pressures of a fragmented landscape. Mule deer numbers have been in decline since the 1960's, with data suggesting this is due to changing environmental conditions such as habitat fragmentation and avoidance of infrastructure associated with human activity (Kauffman et al. 2018). The decline of mule deer populations and the increasing challenges facing migrating big game more generally, has led to greater attention to conserving the corridors these animals require for their seasonal movements.

Management of all wildlife species in Wyoming falls under the jurisdiction of the Wyoming Game and Fish Department (WGFD), directed by the Wyoming Game and Fish Commission. The Commission is tasked with oversight of WGFD, providing policy direction, and supervision of existing mandates. In 2016, the Commission adopted a Migration Corridor

Strategy, with one of the four key actions being to “Designate Ungulate Migration Corridors” (WGFD 2019). Following this action, WGFD will consider migration routes in designated corridors when making management and planning decisions, analyze potential threats, and comment on projects such as energy developments taking place in the corridor on a case-by-case basis. To date, the Commission has designated three corridors in Wyoming: the Baggs Mule Deer Corridor, the Platte Valley Mule Deer Corridor, and the Sublette Mule Deer Corridor. Two additional corridors have been identified and may be designated in the near future: the Sublette Pronghorn Corridor and the Wyoming Range Mule Deer Corridor.

Several federal agencies prioritized conserving big game migration corridors after then-U.S. Secretary of Interior, Ryan Zinke, issued Secretarial Order (SO) 3362 in early 2018. The order directed relevant agencies to work with states “to enhance and improve the quality of big game winter range and migration corridor habitat on Federal lands [...] in a way that recognizes state authority to conserve and manage big game species and respects private property rights” (Secretary 2018). SO 3362 also called for collaboration between all impacted parties. This federal acknowledgement of the high priority of corridors helped elevate the topic in Wyoming and nationally.

Also in February 2019, WGFD held a series of public meetings in various locations around Wyoming to gather input on proposed migration corridors in Sublette County and the Wyoming Range. Following this process, concerns about the pace and ultimate outcomes of corridor designations were expressed by several industry and local government associations in an open letter to the Deputy Director of WGFD. The letter asked for greater landowner and county involvement, and for the consideration of private property rights in any designation process. Wyoming Governor Mark Gordon convened a Wildlife Migration Advisory Group to address the specific issues raised in the letter and to develop recommendations related to the management of migration corridors. To this end, the Advisory Group held three, two-day meetings in June, July, and August 2019.

Given the growing concerns expressed by the landowners in the open letter and in other venues, and



the critical role of private lands in supporting migration corridors, we examined the views and attitudes of landowners on the conservation of migration corridors in Wyoming. Our goal in this report is to share these landowner perspectives with decision makers and natural resource managers so that they can be better understood when considering policies for the management and conservation of corridors. Capturing and summarizing landowner perspectives in one place provides a reference for those making and implementing policy related to migration corridors.

Approach

Researchers from the Ruckelshaus Institute interviewed landowners with property within or near designated, or identified, big game migration corridors and representatives of agencies and organizations that work closely with landowners on natural resource management issues. In these interviews, we asked about the landowners' views on the designation of big game migration corridors in Wyoming, and the specific concerns and opportunities they perceived. We also attended a three-hour meeting on August 2, 2019, organized by the Wyoming Stock Growers Association and the Western Landowners Alliance to discuss landowner views on the designation process. Following the interviews and meeting, we analyzed notes to identify consistent themes relating to specific concerns, opportunities, and other perspectives raised by participants. This qualitative approach allows for a better understanding of the different ways landowners view the designation of big game migration corridors. However, given the diversity of landowners, in terms of operations, habitat, and socioeconomics, we are unable to generalize our findings to the population of landowners in Wyoming. In total, we conducted 18 interviews and 11 landowners or land managers participated in the August 2 meeting. A list of the agencies and organizations that participated in the interviews or meeting is provided in the Appendix.

Findings

Landowners expressed a range of perspectives on designations of big game migration corridors in Wyoming. Reactions ranged from those who expressed trepidation

and gave no indication of perceived benefits, to those who expressed little concern and saw only potential benefits. Given that the landowner community in Wyoming is not homogenous, and there is significant diversity among ranching operations across the state, the divergent perspectives were not surprising. Below we outline the major concerns, perceived opportunities, and other perspectives expressed by landowners in our interviews.

Concerns

Restrictions on private land

A consistent concern raised in most of our interviews was the potential for corridor designations to lead to increased restrictions on private lands. Although the WGFD migration corridor designation policy does not address agricultural or recreational uses of private property, many landowners expressed uncertainty and skepticism about the policy. Because the policy and designations are new, some landowners expressed a general unease and felt that it could be a “slippery slope” to increased restrictions on their land. It was unclear how these landowners felt new potential restrictions or regulations would come about, but there was concern that once a designation is made, it will lead to new restrictions over time.

Landowners expressed concern over any new restrictions on private-land uses since it could decrease management flexibility and negatively impact

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agricultural operations, whose economic margins are often small. Concern was expressed by several landowners over the example of a hypothetical requirement for wildlife friendly fencing, approved by WGFD or another entity. One landowner mentioned that sometimes fencing is intentionally used to exclude big game to protect forage or prevent damage to infrastructure and trees, so restrictions on fencing designs could negatively impact their operations. Several landowners spoke to the importance of being able to take advantage of any economic opportunity their property provides, including the ability to subdivide or to extract resources. Landowners mentioned that even if they had no intention of ever doing so, those rights added to their property value and any limitations would devalue their land.

Although it was unclear how a corridor designation would result in new restrictions or regulations on private land, the newness of the corridor designations, experience with previous natural resource policies, and the uncertainty in how the designations will be used in the future, was a major source of concern for the landowners we spoke with.

Restrictions on minerals development

The current WGFD migration corridor policy asks the Bureau of Land Management (BLM) to defer minerals leases for leasing parcels that are 90 percent contained within the designated corridor. Should this policy remain in place or additional restrictions on minerals development be adopted, landowners expressed concern about how this would restrict the development of their own subsurface minerals. Energy and mining companies typically need to aggregate extraction rights to large areas to make mineral development economically viable due to the cost of infrastructure. If private mineral rights were to become isolated from other mineral rights due to deferrals, landowners could have limited opportunities to lease their minerals.

We also heard concern about the unintended consequences of restrictions on minerals development. One example related to potential outcomes of a WGFD policy to recommend strict No Surface Occupancy (NSO) on federal minerals leases in designated corridors. This change in policy could shift drilling and other infrastructure to privately-owned land, which may contain some of

the most critical portions of the migration corridors. Since WGFD recommendations would not impact minerals development on private lands, the NSO policy could result in the unintended outcome of shifting some of the greatest impacts to the most important areas within corridors. Although the likelihood of this scenario is uncertain, it underscored a preference among landowners to consider the specific context of a corridor and expected outcomes on the ground before implementing blanket rules on minerals development.

Changes in public land management and grazing allotments

Public land grazing leases are critical for the economic viability of many ranching operations in Wyoming. Many of the landowners and stakeholders we spoke with raised concerns that federal agency adoption or formal recognition of state corridor designations could put their public land grazing leases at risk. The primary concern was that federal recognition of the corridor could open up their grazing leases to legal actions from environmental groups suing to protect habitat in big game corridors at the expense of ongoing grazing.

The loss of public grazing leases could also impact the efficiency of grazing privately-owned land in the checkerboard area of southwest Wyoming or other areas where private and federal parcels are intermixed. Ranchers in these areas manage their private land and public leases in an integrated way and rely on the public leases to make a ranching operation viable in the checkerboard landscape. Should a ranch lose their

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[There was a] preference among landowners to consider the specific context of a corridor and expected outcomes on the ground before implementing blanket rules on minerals development”

grazing leases on public land surrounding their deeded land, it would severely impact the viability of their ranching operation.

Even if the renewal of leases were not challenged, landowners expressed concerns that additional stipulations or restrictions could be placed on the leases and result in inefficiencies in their operations if state corridor designations were adopted or recognized by federal agencies like the BLM or the U.S. Forest Service. Multiple landowners and other stakeholders also expressed the sentiment that it is best to make decisions closest to the ground, and that federal recognition of designations could lead to management decisions being made further from the corridors, such as in offices in Washington, D.C. Landowners shared concerns that this process could result in “one-size-fits-all” rules being adopted for corridors throughout the West that do not reflect the specific conditions of corridors in Wyoming.

Opportunities

Incentives for ranch improvements

Multiple individuals we spoke with perceived increased opportunities from the current focus on conserving migration corridors to access financial incentives, such as cost share programs, to make ranch improvements. In many cases these were for projects desired by landowners, and the ability to access incentives made these investments possible. Improvements included installing new fencing or replacing old fencing with designs that are more easily passable for big game (i.e., “wildlife friendly”), restoring forage in degraded areas, and treating invasive species. One example cited was a ranch that still had old sheep fencing in place though the ranch had transitioned to a cattle operation years ago. With funding help from an incentive program, the ranch was able to install fencing tailored to the needs of their current operation.

Several federal and state agencies, including the Natural Resources Conservation Service (NRCS), the U.S. Fish and Wildlife Service, and Wyoming Wildlife and Natural Resource Trust, foundations, and other private donors, have prioritized funding for voluntary conservation actions. For example, the National Fish and Wildlife Foundation recently administered a request for proposals



to award \$2.6 million to projects focused on conserving elk, mule deer, and pronghorn migration in 11 western states, and will partner with NRCS on another funding round later in 2019. Although the funding is not specific to migration corridors designated by the State of Wyoming, Wyoming projects are competing against projects in ten other states. We spoke with several individuals employed by natural resource agencies and organizations who felt that applications in designated corridors were more competitive for funding, and that Wyoming’s efforts to be at the forefront of migration conservation put these proposals ahead of projects in other states. However, the longevity of corridor-focused funding opportunities is uncertain.

Several landowners and land managers also expressed an interest in technical assistance or partnerships to help them better manage for wildlife or pursue other ranch goals that benefit wildlife. One suggestion was to explore or expand existing opportunities to engage a broader community in migration-related management efforts such as labor assistance with laying down fences seasonally in corridors, or help with removing old fences that are no longer used. Although this was suggested by a couple land managers, it may not be of broad interest as several landowners suggested that it may not be worth their time to coordinate such efforts.

Funding for conservation easements

Similar to the financial incentives described above, the focus on big game migration corridor conservation has created funding opportunities to purchase conservation easements from willing landowners. Although conservation easements may not be compatible with all landowners' goals, some landowners see an opportunity to receive fair-market compensation for an easement on their property. The sale of a conservation easement allows a landowner to extract some of the financial value of their property and use the proceeds to reinvest in their ranching operation, implement estate plans, diversify their assets, or achieve other goals.

In several interviews, representatives of conservation organizations felt there was increased interest in pursuing the sale of a conservation easements among some landowners with properties in designated or potentially-designated corridors. These individuals felt that some landowners were keying in on the current funding opportunity and decided to move forward now given the uncertainty of funding in the future.

Wildlife crossings for improved highway safety

Several landowners mentioned the attention on migration conservation could result in additional investments in highway overpasses and underpasses in designated corridors. These landowners described the safety hazard that large numbers of moving animals present to drivers in corridors, including their families and neighbors that frequently drive these routes. Construction of additional overpasses and underpasses in key locations would provide increased safety benefits to landowners in these areas by helping reduce vehicle collisions with wildlife. For example, a study published in 2016 showed an 81% reduction in wildlife vehicle collisions three years after constructing six underpasses and two overpasses along a stretch of U.S. Highway 191 near Pinedale, WY (Sawyer et al. 2016). Interviewees noted that crossings improve the likelihood of survival for animals and appreciated reports from the Wyoming Department of Transportation demonstrating the reduction in collisions in locations where highway overpasses and underpasses have been constructed.

New opportunities

Beyond the existing opportunities described above, several new and creative ideas emerged in our interviews to incentivize landowners for maintaining or improving habitat in migration corridors. One idea is to develop a program to lease habitat on a short- or medium-term basis. The specifics of how habitat leases could be implemented was not entirely clear, but there was general support among most of the individuals we interviewed to explore the concept. One suggestion was to model leases on termed conservation easements, but with the duration of the leases running five to fifteen years. Another suggestion was to provide financial compensation for landowners to provide forage on their property during critical migration periods, such as forgoing a third cutting of hay, or a set amount of grazing in pastures (e.g., 50 animal unit months, or AUMs) in key stopover areas for migrating animals. In these examples, compensation could be tied to the current fair market value of hay or private grazing leases. While there was strong interest in exploring these ideas, there were also significant questions about how these efforts would be funded, the overall benefits to migrating animals, and impacts to agricultural productivity. Some interviewees suggested that they

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could see opportunities for short-term funding to pilot the concepts, but longer-term funding would likely need to be built into more durable programs such as state funding programs or through the Farm Bill funded Environmental Quality Incentives Program or Conservation Stewardship Program, both administered by NRCS.

Several individuals suggested that the best way to reward landowners in corridors for ongoing stewardship and conservation practices would be through a small number of transferable hunting tags that landowners could use themselves, support an outfitting enterprise, or sell to other hunters. While this approach has worked in other states, interviewees acknowledged that this would be politically challenging and may not be supported by WGFD or other stakeholders.

An additional creative idea was to explore the potential to increase the flexibility of federal grazing permits and implement more adaptive management on allotments in exchange for ongoing management that is compatible with conserving big game migrations. The specifics of this idea would need to be tailored to each allotment and ranching operation, but suggestions included allowing flexibility on the timing of when livestock grazed leased ground, allowing herds to be combined into a single herd and rotated through allotments to maintain the same number of AUMs, and authorizing nonrenewable AUMs when forage conditions allowed. Several individuals felt that increased flexibility on their public leases would enable them to manage in ways that enhanced habitat for migrating animals and would benefit their grazing operation. State agencies, agricultural extension, conservation districts, and other entities could help landowners engage with federal agencies to pursue increased flexibility on leased land through technical support, monitoring, and facilitating communication.

Other Perspectives

Skepticism of Science and Actions

Improved understanding of migratory corridors has come from better science made possible by technological advancements. Global Positioning System (GPS) data can now be collected through collars placed on migrating animals and provide precise locations of animal movements. These data are informing agency



Photo credit Greg Nickerson

decisions and identification of migration corridors. Some landowners raised questions about the sufficiency of these data to make formal corridor designations, especially when only a handful of animals have been collared in a potential corridor, or the GPS data did not align with their own observation and experiences on the landscape. Landowners spoke to their own, sometimes decades-long, observations of wildlife on their property, the value of local knowledge, and the role that knowledge could play in corridor management by ground-truthing GPS and other data points.

Landowners were also curious about the efficacy of habitat projects and their cost effectiveness. For example, one landowner asked about the evidence showing that dollars were going towards the best use, and would like analyses such as those showing whether fence replacement was a better cost-benefit to wildlife than a spring improvement. Another rancher commented, “It’d be nice to see an analysis of the benefits of these projects shared with the public.” Several other landowners raised questions about the effectiveness of “wildlife friendly fencing” and suggested that existing fencing was not problematic. Overall, we heard the sentiment that involving landowners in

scientific studies and data collection would greatly enhance transparency around the data used to designate corridors, and increase buy-in for habitat improvements such as fence replacements.

Lack of Recognition

Although corridor conservation may be a novel idea for agencies, managing for wildlife is not new to many landowners. Several landowners we interviewed spoke to the habitat enhancements they have been doing for many years—often at their own expense. They also spoke to a lack of popular understanding around the critical role private land plays in corridor conservation, and the value it adds to the landscape as a whole. These landowners felt the fact that healthy migrations were still passing through their land was a reflection of their stewardship and the management practices of their neighbors. Yet, many landowners did not feel that their actions are recognized by wildlife conservation groups or appreciated in the broader discussion on corridor conservation. Instead they felt that they were more often discussed as stakeholders that needed to be targeted for conservation actions, rather than central to the health of corridors in the first place. This recognition did not necessarily need to take the form of financial compensation; as one landowner expressed, he did not appreciate “being treated just like another stakeholder.” Rather, these landowners felt that they needed a seat at the table and recognition that they have been leading on this issue for years.

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Wildlife as a key renewable asset for Wyoming

A couple of landowners we spoke with expressed strong support for corridor designations and felt a lasting commitment to wildlife conservation. They expressed concern over the critical importance of wildlife to Wyoming and centrality to the state’s long-term economic viability. They felt wildlife represented a key renewable asset and sacrificing this asset for the short-term gain of non-renewable resources was not sound policy in the long-term. A few landowners mentioned the special nature of corridors in Wyoming, and their pride in being in close proximity to migration paths. “It’s a wonder to watch,” said one landowner, speaking to the awe of witnessing seasonal migrations in his backyard.

Trust and relationships

Landowners expressed different levels of trust among stakeholders engaged in corridor conservation. Most relevant to corridor designations, we heard significant variation in the relationships landowners have with their local WGFD game wardens. Some landowners suggested that their local game warden was difficult to work with and not entirely transparent with the corridor designation process or other wildlife management issues. In these situations, landowners were more skeptical about corridor designations and were more likely to express concerns. In other areas, however, landowners expressed a strong working relationship with their game warden that has increased their trust and perceived transparency in the corridor designation process. Game wardens are often the primary point of contact for landowners with WGFD on wildlife issue, and their interactions can set the tone for a collaborative working relationship.

Education on Designations

All parties expressed a desire for a shared understanding of what designations look like on the landscape. We heard that “designation” often makes people associate that term with other designations at the federal level—such as “wilderness”—and creates an association with restrictive legislation. One WGFD employee spoke to the importance of outreach with landowners

and “dinner table conversations” in communicating with landowners about corridor management. The complex land management scenarios and science has led to uncertainty and misconceptions about what a corridor designation would entail and how it would impact private landowners. Some also questioned whether formal designation would truly lead to better outcomes for wildlife populations.

Conclusion

Wyoming has been a national leader in conserving big game migration corridors and there is support for the goals of ensuring migration continues and maintaining healthy wildlife populations among the landowners we interviewed. Yet, the designation of migration corridors is a new concept and there are significant questions that remain about how this designation could impact the management of private lands and ranching operations. Our research suggests that by working to address the concerns of landowners while maximizing the potential benefits of recent attention to corridor conservation, landowners can be key partners in ensuring the long-term health of migration corridors.

Maintaining the financial incentives currently available to landowners in corridors is one critical way to support ongoing benefits of managing land in corridors. There are also opportunities to gain additional support and buy-in from landowners by involving them in data collection and integrating local knowledge into the science guiding management decisions for the corridors. An effort to better involve landowners could increase the transparency of the designation process and demonstrate how management decisions made on a single property contribute to the larger effort to conserve the corridor. Landowners may also have innovative solutions for managing corridors given their knowledge of the landscape and relationships with other land managers. Engaging them collaboratively could stimulate new thinking, help coordinate efforts across ownership boundaries, and generate locally-appropriate and supported solutions.

Ultimately, landowner goals for their property often align with the objective of conserving big game migrations. Most landowners recognize their role in corridor



Photo credit Greg Nickerson

conservation and typically want to be included in decision making processes related to corridor management. By its nature, corridor management requires cross-boundary communication and emergent solutions. There are several areas where joint-gains for landowners and wildlife are possible, and these intersections offer a way forward in the process of corridor management.

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References

Kauffman, M.J., J. E. Meacham, H. Sawyer, A. Y. Steingisser, W. J. Rudd, and E. Ostlind. 2018. *Wild Migrations: Atlas of Wyoming's Ungulates*. Oregon State University Press, Corvallis, Oregon.

Sawyer, H., P. A. Rogers, and T. Hart. 2016. "Pronghorn and Mule Deer Use of Underpasses and Overpasses along U.S. Highway 191". *Wildlife Society Bulletin* 40(2): 211-216.

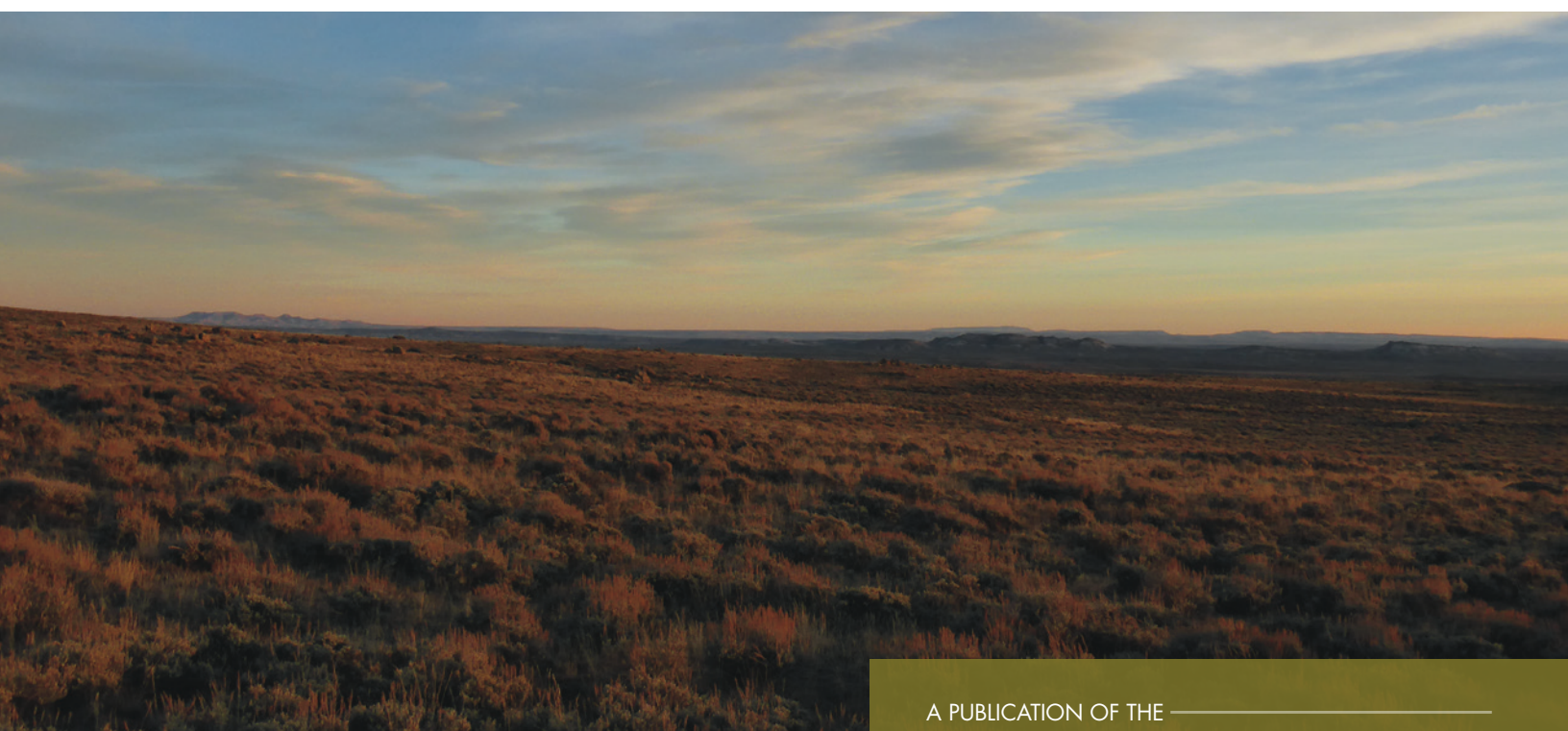
Secretary of the Interior (Secretary). 2018. *Improving Habitat Quality in Western Big Game Winter Range and Migration Corridors*. Order No. 3362. U.S. Department of the Interior. Accessed September 10, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/so_3362_migration.pdf

Wyoming Game and Fish Department (WGFD). 2019. "Wyoming Game and Fish Department Ungulate Migration Corridor Strategy". Accessed September 10, 2019. https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Habitat%20Information/Ungulate-Migration-Corridor-Strategy_Final_012819.pdf

Appendix

Representatives from the organizations and agencies below participated in interviews or meetings.

- Landowners and land managers in Carbon, Fremont, Sublette, and Sweetwater Counties
- Sublette County Conservation District
- The National Fish and Wildlife Foundation
- The Nature Conservancy
- Wyoming Association of Conservation Districts
- Wyoming Department of Agriculture
- Wyoming Farm Bureau Federation
- Wyoming Game and Fish Department
- Wyoming Stock Growers Association
- Wyoming Stock Growers Land Trust
- Western Landowners Alliance



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