



U.S. DEPARTMENT OF AGRICULTURE

MIGRATORY BIG GAME



A FRAMEWORK FOR
CONSERVATION ACTION





Executive Summary

Photo: Craig Zerbe/Adobe

Across the West, the future of migratory big game depends on the health of working range and forest lands. While these lands span a mix of ownership and management, privately owned lands provide the essential seasonal habitats and connectivity required to sustain healthy, resilient herds. Today, the West has an opportunity to build on a long-standing history of collaboration and further align state and Tribal wildlife priorities with the capacity

and resources of the USDA. This Framework establishes a strategy to coordinate USDA financial programs with technical assistance, outreach, and technology transfer to ensure that state and Tribal wildlife priorities are translated into effective, on-the-ground action across all big game habitats. This integrated state, federal, and private approach seeks to achieve landscape-scale results for working lands, amplify existing efforts from shared partners, bolster rural economies, and sustain healthy big game herds for generations to come.

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Cover photo: Mark Gocke



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Photo: New Mexico Department of Game and Fish

Introduction & Background

Photo: New Mexico Department of Game and Fish

CONSERVING AMERICA'S MIGRATORY BIG GAME

Migratory big game rely on large and connected landscapes to meet their daily, seasonal, and annual needs. Throughout the year, animals move through a diverse array of habitats — including forests, high deserts, desert shrubland, sagebrush communities, semi-arid grasslands, grasslands, and wetlands — because the highest quality forage for any given season is rarely contained within a single pasture, ranch, or landscape.

State fish and wildlife agencies, which hold management authority over migratory big game populations, have identified that these species face increasing threats to habitat quality and connectivity. Improving habitat quality requires restoring native plant communities, improving forest health, and addressing invasive species. Improving connectivity requires mitigating physical barriers, such as highways and fences, and minimizing landscape fragmentation.

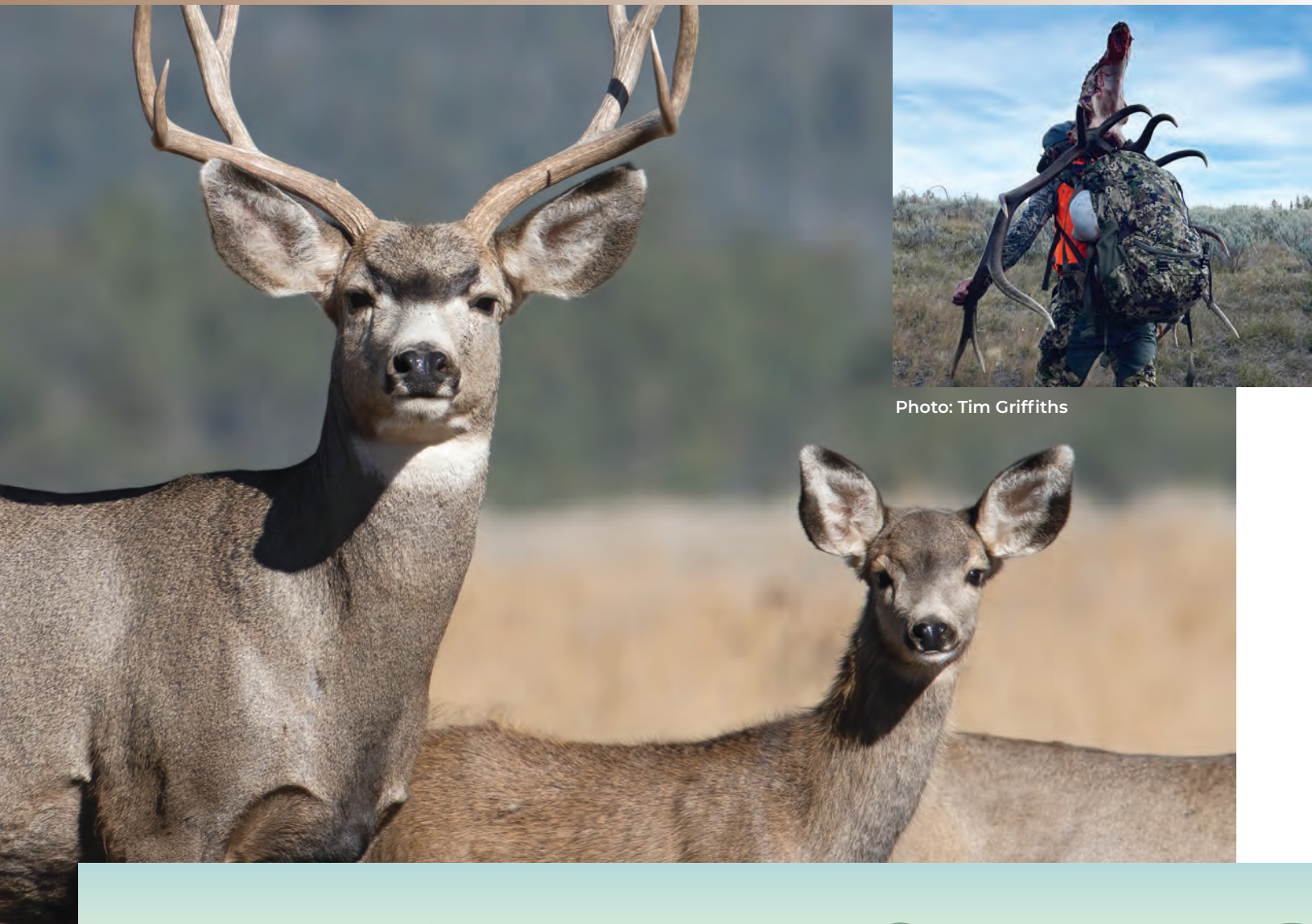


Figure 1: Working lands are the backbone of large, connected, and functioning ecosystems that support icons of western landscapes such as mule deer, elk, pronghorn, and others. Figure: WLFW



Photo: Paul Freidel

IMPORTANCE OF WORKING LANDS

During their movements, big game often cross both public and private lands. Maintaining seamless connectivity across these jurisdictions ensures that herds can access high-quality nutrition necessary to be resilient and healthy. Robust

herds of migratory big game serve as vital economic pillars for the West through big game hunting, wildlife viewing, and outdoor tourism that inject billions of dollars into rural communities annually. Securing connected landscapes sustains the working lands and wildlife that underpin western economies and the nation's supply of food and fiber.



Allen Hogg, Owner, Lazy VB Cattle, Wyoming

“On our ranch, we’ve leaned into the full strength of the Farm Bill – incorporating a multitude of programs to enhance this operation. By partnering with the USDA, together we’re ensuring that this stays a family ranch for generations to come.”

~Allen Hogg, Owner, Lazy VB Cattle, Wyoming



USDA'S WORKING LANDS FOR WILDLIFE APPROACH

Working Lands for Wildlife (WLFW) is the USDA's premier approach for conserving America's working lands to benefit people, wildlife, and rural communities. WLFW implements solutions to target voluntary, incentive-based conservation that improves agricultural productivity and wildlife habitat on working lands. WLFW takes an ecosystem approach and uses focal wildlife species as barometers of success to help guide conservation delivery. In the western United States, the Sagebrush and Great Plains Frameworks for Conservation Action provide a collective roadmap for the conservation of working rangelands.

Spatial targeting is fundamental to WLFW's threat-reduction strategies. WLFW prioritizes proactive conservation in and around intact but vulnerable rangelands. This focuses



Photo: NRCS

efforts in places where they are more likely to be effective and cost efficient. As the flagship achievement of WLFW, the Sage Grouse Initiative demonstrated what can be achieved through voluntary conservation, helping reduce threats benefiting wildlife, and precluding the need for listing sage grouse under the Endangered Species Act. Interwoven into this framework for big game migrations are lessons learned from 15 years of WLFW implementation, along with new science and technology to inform future delivery.



Source: Arizona Game and Fish Department

Successful conservation of migratory big game is most effective when federal resources are coordinated with state fish and wildlife agencies (SFWAs) and Tribal nations. These entities hold the primary responsibility for managing migratory big game herds within their respective jurisdictions and provide the foundational data necessary for prioritizing landscape-scale conservation.

SFWAs operate under a long-standing legacy of proactive stewardship, using State Wildlife Action Plans and other management plans to map migratory herds and identify important seasonal habitats. Similarly, Tribal nations exercise inherent sovereign authority over wildlife and habitat within their borders, offering critical leadership in maintaining cross-boundary connectivity. By aligning USDA's voluntary,

incentive-based programs with the state- or Tribal-collected animal movement data and population goals established by these authorities, this Framework seeks to ensure that USDA investments are spatially targeted to provide the highest biological return.

“This Framework represents a historic alignment, ensuring that the management authority of states is backed by the full strength and resources of the USDA to collaboratively conserve the West’s iconic migrations.”

~Zach Lowe, Executive Director, WAFWA



The conservation of migratory big game is governed by a unique division of responsibility known as the Public Trust Doctrine. Under this framework, wildlife are a Public Trust Resource, and the legal authority to manage these herds rests primarily with SFWAs. Similarly, Tribal nations exercise inherent sovereign authority over wildlife and habitat within their borders. This Framework does not shift management authority; rather, it coordinates USDA authorities to serve as the infrastructure to support state- and Tribal- identified conservation goals. By providing voluntary, incentive-based tools on private lands, the USDA helps states fulfill their trust responsibilities to all citizens.

The following initiatives serve as important spatial guides for implementing this Framework:

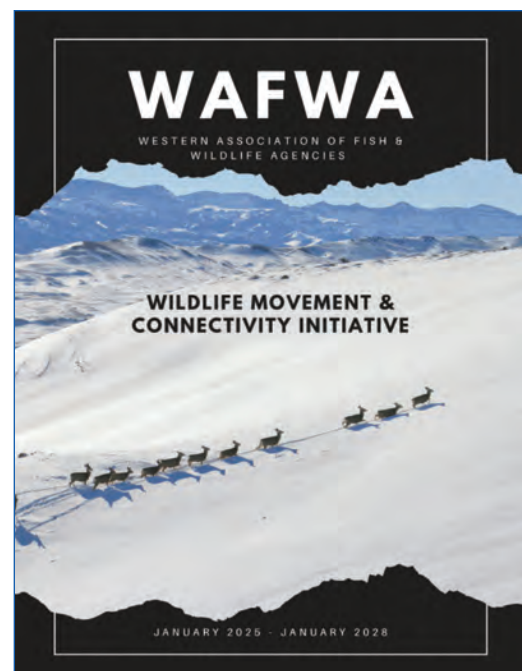
- Western Association of Fish and Wildlife Agencies (WAFWA) Wildlife Movement and Connectivity Initiative:** Established in 2025, this initiative facilitates the development of individual State Wildlife Action Plans. These plans are the primary mechanism used to intentionally align NRCS and FSA efforts with the specific seasonal ranges and movement corridors defined by each state.

- Western Governors' Association Resolutions:** Recent resolutions (such as 2024-03) establish a regional mandate for protecting connectivity, emphasizing that the West's iconic big game herds are essential to both the ecological health and the rural economies of the region.

This alignment is formalized through several key policy drivers that ensure federal resources are coordinated with state, Tribal, and regional priorities:

- 2024 USDA-WAFWA Memorandum of Understanding:** This landmark agreement between the Western Association of Fish and Wildlife Agencies (WAFWA) and the USDA (FSA, NRCS, and USFS) establishes the formal relationship between federal program delivery and state-led conservation visions. It ensures that Farm Bill investments are directed by the best available, state-collected data on big game movements.

- Secretarial Order 3362:** This federal mandate directs the Bureau of Land Management, National Park Service, United States Geological Survey, and the United States Fish and Wildlife Service in the Department of the Interior to work in direct support of states to improve the quality of big game winter range and migration corridors. It recognizes SFWAs as the primary lead in identifying where conservation is most urgently needed.



Seventeen states have State Wildlife Action Plans and other management plans that provide guidance and priority areas for big game conservation. Find action plans [here](#).



Photo: NRCS

COORDINATION AND CONTRIBUTIONS OF OTHER FEDERAL ENTITIES

Effectiveness of this Framework relies on the seamless transition of conservation practices across the boundaries that separate private and public lands. While the USDA focuses its voluntary programs on the private working lands that often serve as critical habitats or movement corridors, these efforts complement the management actions of federal land managers. Aligning the timing and location of private land conservation with federal land management actions is a key strategy for achieving the scale of protection and restoration necessary to maintain the connected tapestry of habitats supporting migratory big game.

To ensure this multi-agency alignment is durable and efficient, WAFWA uses its internal committee structures to serve as the central hub for technical coordination. These committees bring together state wildlife managers and federal program leads to review progress, share emerging movement data, and identify upcoming opportunities for cross-boundary projects. This structured coordination ensures that this Framework remains a living strategy that can adapt to new information while maintaining a unified focus on state-identified priority landscapes. Each federal entity provides a distinct contribution to this landscape-scale effort:

- **U.S. Forest Service (USFS)** manages the high-elevation national forests that often serve as summer range, ensuring these habitats remain intact and accessible.

- **Bureau of Land Management (BLM)** is the West's largest federal land manager, stewarding vast holdings that encompass vital winter ranges and the connective corridors between seasonal ranges.

- **U.S. Fish and Wildlife Service (USFWS)** extends conservation reach through its network of national wildlife refuges and its Partners for Fish and Wildlife private land programs.

- **U.S. Geological Survey (USGS)** provides science that supports the management of migratory big game across jurisdictional boundaries, including leadership in facilitating the state- and Tribal-led western migration corridor mapping team.

- **National Park Service (NPS)** manages iconic landscapes that provide seasonal habitats for migratory herds. The agency provides long-term monitoring and research that informs the cross-jurisdictional management of movement corridors and protected areas.

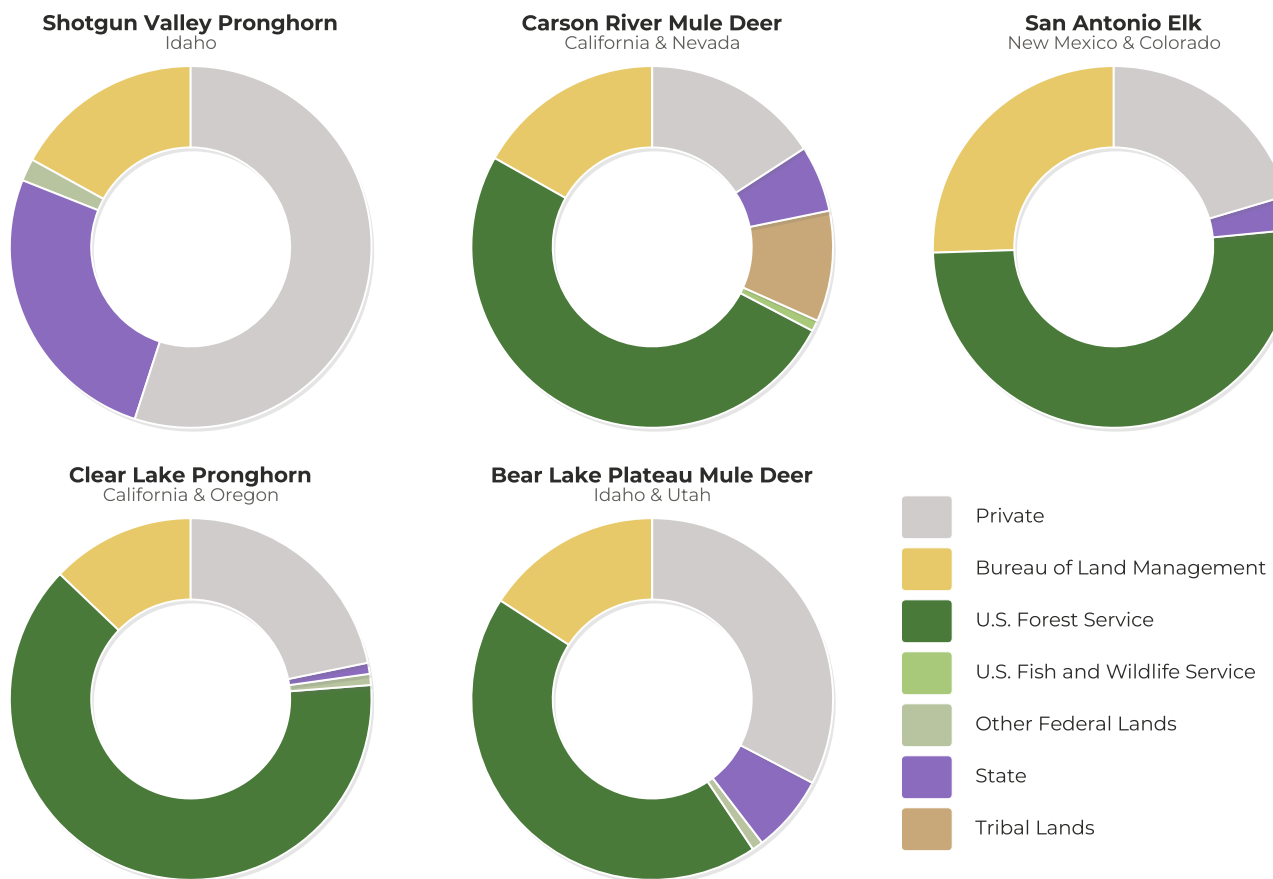


Figure 2. Donut charts depicting how the movement corridors of multiple big game herds overlap with both public and private land, highlighting the necessity of cross-boundary conservation strategies to maintain connectivity. Data from <https://apps.usgs.gov/western-migrations/>.



Photo: Mark Gocke

USDA Frameworks provide the common vision and coordination to address resource concerns and ecosystem threats across boundaries. Frameworks guide the conservation successes achieved by individual producers into a landscape strategy that sustains the productivity of working lands and landscape integrity. By integrating state- or Tribal-collected movement data and state-developed Wildlife Action Plans to de-

lineate where to prioritize conservation actions for migratory big game, the USDA can strategically deploy Farm Bill and other USDA resources to maximize beneficial outcomes. This Framework is designed to guide NRCS and FSA leadership and staff as they consider opportunities to support big game and working lands. Similarly, this Framework can also be used to support similar collaboration with Tribal nations and with other federal, state,

and local entities who wish to work in a similar manner with private landowners to solve problems and enhance natural resources through a voluntary and incentive-based approach.

Building upon USDA's established conservation legacy, this Framework marks the first time the FSA has adopted a WLFW strategy. The focused coordination of NRCS's and FSA's programmatic authorities is built on the principle of enabling producers to more easily navigate the full suite of available Farm Bill tools to

enhance the integrity of migratory landscapes. This Framework marks the third installment in the western WLFW portfolio, following the established success of producer-driven strategies detailed for the Sagebrush and Great Plains biomes. By expanding this approach to migratory big game, WLFW continues to demonstrate that the most durable conservation outcomes are those that support the people who live and work on the land.

Across the 17 contiguous states within the WAFWA jurisdiction, this Framework brings together producers, rural communities, and conservation partners under the collective shared vision of achieving:

Wildlife Conservation Through Sustainable Ranching



Figure 3. Map denoting the 17 states included in this Framework as well as their overlap with WAFWA mainland jurisdiction and current western biomes.



Photo: UT-DWR



Photo: James Waxe



Photo: NRCS

LEVERAGING FARM BILL CONSERVATION PROGRAMS

This Framework provides a unified strategy that coordinates program implementation, science, technology, and communications necessary to scale voluntary conservation. It functions through four areas that empower NRCS and FSA field staff and their partners to achieve landscape-scale outcomes:

- **Integrated Program Delivery:** Provides the financial and technical assistance for landowners to implement on-the-ground practices across the full suite of Farm Bill programs through FSA and NRCS.
- **Science:** Catalyzes the development of spatial targeting tools and outcome-based evaluations, enabling strategic direction of Farm Bill resources.
- **Strategic Communications:** Builds a shared culture of communicating conservation outcomes through producer-led success stories.
- **Technology Transfer:** Serves as a pipeline for bringing new conservation solutions to range, forest, and livestock managers.

This Framework is designed to be adaptive, continually seeking opportunities to integrate new USDA authorities that further the goal of maintaining landscape integrity on working lands.

The following Farm Bill programs have a strong history of supporting the conservation goals of producers while improving habitats that support migratory big game:

- **Environmental Quality Incentives**

Program supports farmers, ranchers and forest landowners in integrating conservation practices directly into their working lands.

- **Agricultural Conservation Easement Program - Agricultural Land Easements**

provides matching funds to partners to purchase permanent, voluntary conservation easements preventing conversion to noncompatible uses.

- **Conservation Reserve Program**

supports agricultural producers and landowners to convert environmentally sensitive cropland to perennial cover or maintain grassland that supports conservation goals. CRP offers 10- to 15-year contracts to landowners for restoring and/or maintaining important habitat, while protecting soil and water resources.

- **Regional Conservation Partnership**

Program is a partner-driven approach that co-invests in regional solutions to landscape-scale threats across multiple jurisdictions.

- **Conservation Stewardship Program**

provides 5-year contracts to support increased conservation practices on an entire property.

- **Technical Assistance** provides professional conservation expertise and management design without a contract to all producers, regardless of financial enrollment.

STRATEGIES FOR ACHIEVING OUTCOMES

To achieve meaningful outcomes for migratory big game, conservation must saturate target geographies where the right practices are applied in the right places at a scale that restores landscape integrity. Maintaining the habitats necessary for a migratory landscape requires commitment to coordinated actions—such as fence modifications, invasive annual grass treatments, and land protection—that ensure functional connectivity. By saturating state- and Tribal-identified priority areas, this strategy moves toward fully maintaining or restoring the ecological potential of the land for wildlife and agriculture.



Figure 4. WLFW maximizes outcomes for wildlife and working rangelands by focusing efforts in intact landscapes where local data shows there are wildlife strongholds, and where communities are willing to participate in conservation actions.



Photo: NRCS

Addressing Threats to Migratory Big Game

This Framework organizes conservation action into three categories that address the most pressing threats to migratory big game:

1) Protecting Habitat and Connectivity: Secures the intact working lands that facilitate big game movement through voluntary easements and term-based contracts.

2) Reducing Barriers to Movement: Optimizes physical infrastructure to ensure animals navigate landscapes easily and safely.

3) Improving Habitat: Restores the ecological health of seasonal ranges and movement corridors through the removal of encroaching woodlands and the management of invasive species.

Together, these coordinated strategies ensure the West's iconic herds have access to the high-quality forage and connected habitat necessary for their long-term resilience.

This Framework is designed to work in tandem with existing WLFW biome-based frameworks, which provide the foundation for large-scale habitat restoration. Several core threats to big game are already extensively addressed in the WLFW frameworks for the Sagebrush and Great Plains biomes. To avoid duplication and ensure a unified approach, conservation partners should refer to wlfw.org/landscapes for detailed roadmaps on the following:

- **Land Use Conversion:** Preventing fragmentation to maintain intact movement corridors and seasonal ranges.
- **Invasive Annual Grasses:** Conserving native forage and reducing wildfire risk.
- **Woodland Expansion:** Removing conifer encroachment to restore open and productive rangelands.
- **Mesic Habitats:** Securing the “green groceries” for survival and raising young.
- **Barriers to Movement:** Modernizing fencing infrastructure to facilitate safe and easy movement across landscapes.
- **Degraded Forest Health:** Restoring forest habitats to provide high-quality summer range nutrition.

THREATS ADDRESSED BY FRAMEWORKS



Figure 5. Threats address by USDA's Sagebrush, Great Plains Grasslands, and Migratory Big Game Frameworks.
Figure: WLFW



Photo by University of Wyoming - Eric Van Beek

1. PROTECTING HABITAT AND CONNECTIVITY

1.1. Land Use Conversion: Preventing fragmentation to maintain intact movement corridors and seasonal ranges

Conversion of rangelands to crops or new housing developments destroys grazing lands and fragments previously intact landscapes. Conversion to cropland disproportionately affects the most productive soils, taking them out of use by livestock and wildlife. While the impacts from constructing homes or other buildings are more localized, the surface disturbance is more severe and virtually impossible to reverse. Further, the indirect impact of houses or other developments can create habitat loss that extends well past the infrastructure itself. Both forms of development can sever big game migration movement corridors and reduce habitat quality and quantity.

Partners can secure high-value habitats in perpetuity through voluntary conservation easements, ensuring these lands remain intact for future generations. Simultaneously, the Conservation Reserve Program (CRP) provides 10- to 15-year contracts that maintain environmentally sensitive lands in grass cover, offering the flexibility and financial stability producers may choose to sustain traditional ranching operations. For more details on addressing conversion risks, refer to the [Sagebrush](#) and [Great Plains](#) frameworks.

2. REDUCING BARRIERS TO MOVEMENT

2.1. Modernizing fencing infrastructure

Fencing is a foundational component of western agricultural operations, yet traditional designs can inadvertently restrict or alter the movement of migratory big game. Maintaining the functional connectivity of the landscape requires a strategic approach to fencing

that aligns livestock management with the habitat requirements of migratory big game.

Functional Strategies for Fencing Infrastructure

This Framework prioritizes voluntary, incentive-based strategies and solutions to ensure that infrastructure serves both agricultural productivity and habitat connectivity for migratory big game:

- Modification of Existing Barriers:** This strategy adjusts fence height and wire spacing to facilitate easier passage for both adult and juvenile individuals. This includes the installation of smooth bottom wires at heights that prevent injury and allow for movement under the fence, as well as lowering top wires to facilitate crossing above the fence without destroying the fence itself via entanglement.
- Structural Replacement and Removal:** In high-priority movement corridors, this strategy supports the full replacement of obsolete or high-density fencing with wildlife-friendlier designs. Further, where redundant or non-functional fences exist, the Framework incentivizes their removal to eliminate physical obstructions and restore open movement corridors.
- Deployment of Virtual Fencing Technology:** As a modern alternative to physical fences, this Framework supports the adoption of virtual fencing. This technology allows producers to manage livestock distribution and grazing patterns with high precision through GPS collars on livestock, reducing the need for internal physical fences while maintaining the open landscapes required for migratory big game.

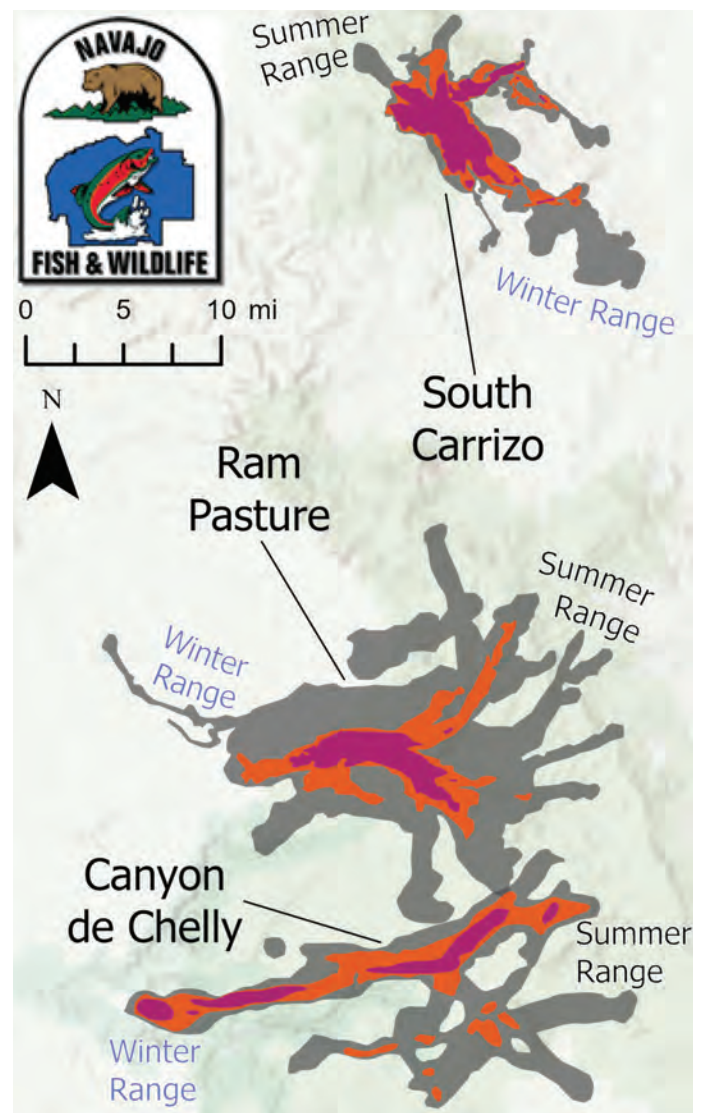


Figure 6. Mule deer migration corridors are guiding on-the-ground conservation work on Tribal lands. Data collected and analyzed by the Navajo Nation Department of Fish and Wildlife. Purple polygons represent high use and gray represent low use. Figure: Navajo Nation Department of Fish and Wildlife

- Geographic Prioritization:** Implementation is directed toward state-identified movement corridors and seasonal ranges where big game currently move but current fencing density poses the greatest threat to continued connectivity. By focusing resources on these specific locations, fence improvement strategies can enhance infrastructure investments that provide the highest return for ranching and big game.



Success Spotlight: The Upper Green Fence Initiative

The work occurring in Wyoming's Upper Green River Basin is an impactful example of saturating a landscape with conservation. This area serves as the heart of the world-renowned Path of the Pronghorn and the Red Desert to Hoback mule deer migration. Recognizing that thousands of animals were encountering hundreds of miles of legacy fencing, this partnership set out to modernize the landscape.

To date, partners have modified or removed over 750 miles of fencing. By focusing on high-traffic movement areas identified through GPS-collar data, the project has replaced dilapidated barbed-wire and woven-wire fences with wildlife-friendly designs and, in places, removed physical fences entirely. This concentrated effort has transformed the area into a permeable landscape, reducing wildlife mortality and helping herds access critical habitats throughout the entire year.

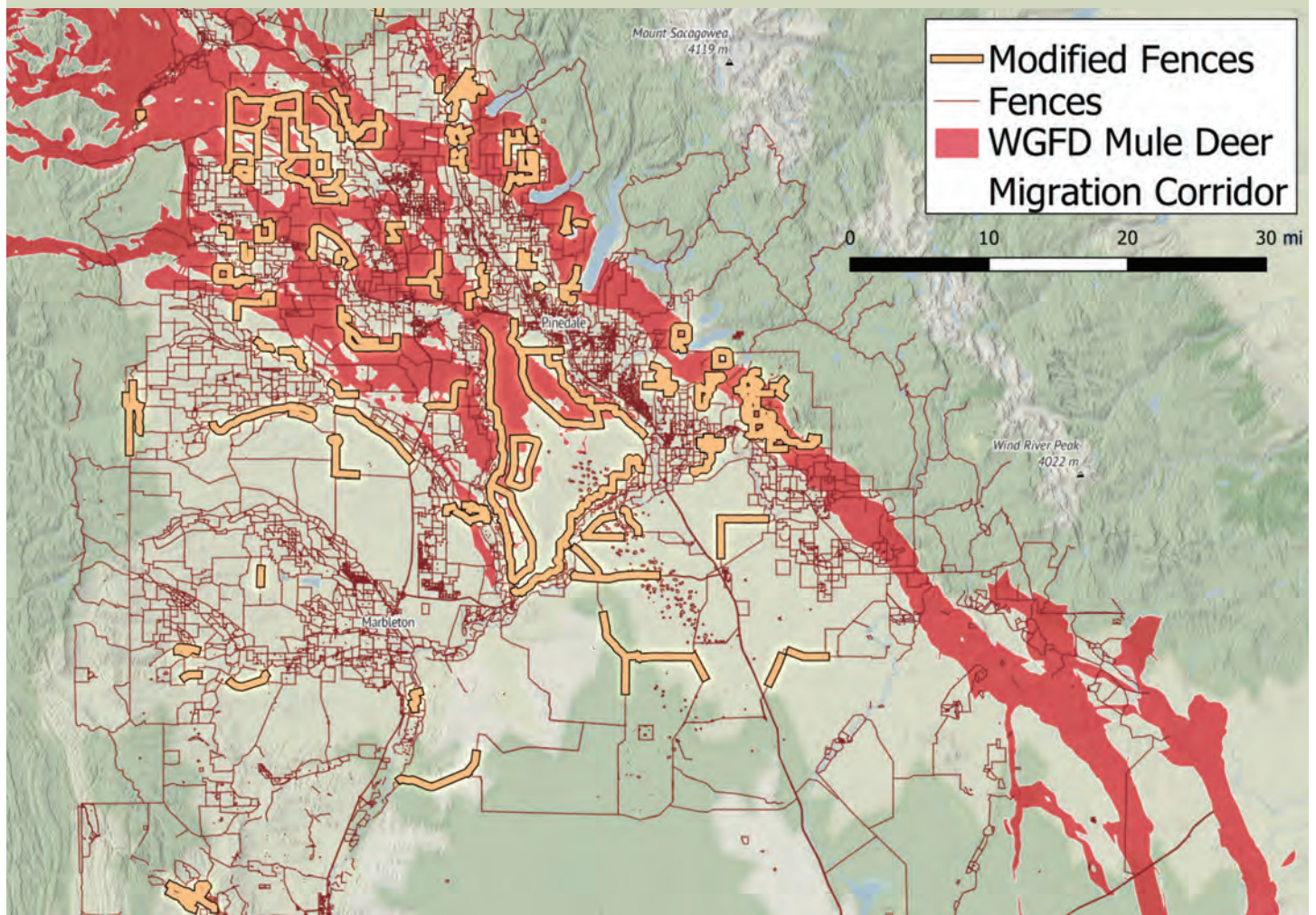


Figure 7. As of 2025, 750 miles of fence have been removed in Wyoming's Upper Green through a multitude of agencies and partners.



Cows with virtual fencing collars near Centennial Valley, Montana.
Photo by: Pat Fosse



A virtual collar. Photo: Lindsay Coe/PERC

Innovation Highlight: Virtual Fencing in the Centennial Valley

Montana's high-elevation Centennial Valley is a critical migration corridor for elk and pronghorn. But traditional wire fencing here is often a liability. The valley contains hundreds of miles of fences that aren't wildlife friendly, such as barbed wire fences with six to eight strands. Plus, elk often destroy ranchers' fences, creating a significant financial burden for landowners.

The Southwest Montana Flexible Grazing Project aims to solve this problem. This producer-driven, collaborative effort involves eight ranches, which are adopting adaptive, custom grazing plans using virtual fencing, among other tools. Physical fences are replaced with digital boundaries, giving producers precise control over livestock distribution while also improving wildlife migration corridors. This project shows that virtual fencing technology can eliminate the risk of big game getting tangled in—and destroying—fences, restore landscape connectivity, and improve the operational needs of working ranches.

3. IMPROVING HABITAT

3.1. Reducing invasive species and woody encroachment

Invasion of cheatgrass and other exotic annual grasses, such as medusahead and ventenata, likely represents the single-largest threat to America's western rangelands. These weeds reduce forage productivity and threaten reducing forage productivity and threatening wildlife habitat and rural economies. Bold and coordinated action is needed to ensure working lands remain resilient and productive for current and future generations. Specific actions to reduce this threat vary with landscape context and condition but generally include some combination of herbicides, seeding, and prescribed grazing. Defending relatively uninvaded landscapes from annual grass conversion is a top priority. Key strategies include: detection and prevention of early invasions, targeted herbicide use to eliminate or reduce invasive annual grass seed sources, and grazing management to maintain and promote perennial grass health.

Woodland expansion takes rangeland out of agricultural production and displaces rangeland wildlife. Scattered young trees may look harmless to a casual observer, but science shows conifer expansion can erode rangeland resilience if left unchecked. This Framework prioritizes the maintenance of treeless rangelands and restoration of early phase expansion areas. Strategies include detection and prevention of early invasions, with a combination of prescribed fire and targeted herbicides to eliminate dispersing seeds and halt the growth of young woody plants.*



Photo: Mark Gocke

3.2. Mesic habitat: Securing “green groceries” for survival and raising young

In the West, water is life. Streamsides, wet meadows, and other mesic areas—places where land meets water—are rare but disproportionately important to working lands and wildlife. These areas are reservoirs of late-season productivity. They provide reliable water and forage for livestock and wildlife during the dry summer and fall. Wet habitats comprise less than 2% of western landscapes yet 80% of wildlife depend upon them for habitat.

Restoration and management strategies include: improved riparian grazing management, low-tech restoration of degraded streams and meadows using Zeedyk structures and beaver dam analogues, and conifer removal around headwater springs and meadows.*

**For more details on addressing invasive species, woody encroachment and restoring mesic habitats, refer to the [Sagebrush](#) and [Great Plains](#) frameworks.*



Great Plains Spotlight: Connecting Grazing Lands and Wildlife Conservation

Kansas and Nebraska are ~97% privately owned and connectivity for migratory big game is defined by large intact grazing lands. By integrating the Great Plains Grasslands Initiative with the Kansas 2026 Grassland Strategy and Nebraska's State Wildlife Action Plan, both states are tackling the primary threat to this connectivity: woodland encroachment. The spread of trees acts as a functional barrier to species like pronghorn and mule deer, fragmenting vast prairies into smaller, riskier patches.

To counter this, Farm Bill resources are concentrated in priority landscapes like the Flint Hills, Smoky Hills, and Nebraska Sandhills. This coordinated effort conserves the states' multi-billion-dollar beef industry while maintaining the permeable grasslands required for migratory herds to move safely across the landscape. Ultimately, this approach demonstrates that protecting the integrity of intact grasslands is synonymous with securing the connectivity required for big game to thrive on productive working lands.



Supporting grass-based agriculture is a win-win for livestock production and big game conservation. Photo: NRCS



Managing conifer encroachment in aspen stands like this promotes both aspen and understory growth, providing critical nutrition for big game and livestock during the summer. Photo: Wyoming Migration Initiative

3.3. Restoring summer range habitats through improved forest health

Within the West's forested systems, decades of fire suppression have led to overly dense, closed canopy stands that provide little habitat for big game and are increasingly vulnerable to catastrophic wildfire. When forests become dense, water becomes limited and sunlight is blocked from reaching the forest floor. This results in less of the diverse grasses, forbs, and shrubs that provide the high-quality forage needed for replenishing fat reserves and raising young. In addition to restoring these forests for big game, maintaining healthy forests helps protect water resources and rural communities from the rising threat of catastrophic wildfire.

Active management such as thinning dense stands, strategic clearing, and prescribed burns encourages forests to shift back toward their natural, fire-adapted structures. Importantly, biologically diverse aspen stands are rapidly declining due to conifer encroachment, changing water availability, and a lack of disturbance. Further, aspens function as natural fuel breaks due to their

relatively high moisture content, making them essential for wildfire resilience. This Framework prioritizes practices that facilitate healthy forests, including resilient aspen stands.

- **Promoting High-Quality Forage:**

Strategic forest management increases water availability and daylight the forest floor, stimulating understory vegetation and timed forage growth that provides the critical nutrition needed by both big game and livestock while on summer range.

- **Reducing Wildfire Risk:** Strategic forest management reduces fuel loads, promotes a mosaic of age-structure stands, and decreases the risk of crown fires through removal of ladder fuels. Collectively, these outcomes reduce the likelihood of catastrophic fires which destroy habitat for decades. Further, managed forests support low-intensity fires or small-scale, stand-replacing fires that recycle nutrients, create healthy forest mosaics, and produce a more fire-resilient landscape that benefits livestock and rural infrastructure.

Anticipated Outcomes

This Framework prioritizes an outcomes-based strategy to evaluate the actual impact of these investments. Outcomes answer the “so what?” by measuring the functional benefits of coordinated conservation. By shifting the focus to landscape-scale results, this Framework aims to ensure that USDA and others are helping to improve the health and resilience of the West’s iconic big game herds—from southwestern deserts to northern forests—by generating the following outcomes.

RESTORING CONNECTIVITY: FENCING

- **Outcome:** Improved landscape connectivity, reduced direct mortality, and enhanced ranching operational efficiency.
- **Upshot:** Removing obsolete fencing and adopting wildlife-friendlier or virtual alternatives lowers mortality and movement costs to big game and increases big game access to seasonal habitats. For producers, these options cut labor and material costs of repairing fences damaged from wildlife or weather, delivering a clear financial return.

IMPROVING SUMMER RANGE: FOREST AND ASPEN HEALTH

- **Outcome:** Increased quality and quantity of available forage in forested habitats.
- **Upshot:** Thinning or burning dense forest stands and removing encroaching conifers from aspen groves allows understory plants to flourish. This stimulates the timing and

growth of high-quality forage required to meet nutritional demands during summer, while simultaneously decreasing wildfire risk to protect water security and rural communities.

SECURING HIGH-QUALITY HABITATS: RANGELAND PRODUCTIVITY

- **Outcome:** Enhanced forage availability and livestock management flexibility.
- **Upshot:** Conservation actions that promote healthy and intact habitat—such as invasive species control and conifer removal—increase the available forage base for both wildlife and livestock. These efforts help producers sustain resilient cattle herds.

SECURING LANDSCAPE INTEGRITY: PERMANENT AND TERM PROTECTIONS

- **Outcome:** Long-term preservation of open space, grazing resources, and habitat connectivity.
- **Upshot:** Voluntary conservation easements and 10- to 15-year CRP contracts provide anchors for connected seasonal habitats. These tools protect high-value working land habitat while providing producers with the financial stability to maintain traditional grazing operations across generations.

LANDSCAPE RESILIENCE: MESIC AND RANGELAND HEALTH

- **Outcome:** Increased resistance to catastrophic wildfire and improved water security.
- **Upshot:** Prioritizing conservation in high-quality habitats, including mesic meadows and unfragmented range and forestlands, creates a resilient landscape. Maintaining these areas ensures reliable water filtration and sustains late-season forage production for both livestock and big game.

“Success depends on being accountable and transparent. Science can help assess outcomes and continuously improve our work”

~Dr. Jerod Merkle, WLFW Migratory Big Game Science Advisor





Photo: NRCS





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