

Big-game migrations are critical in many western landscapes and their conservation has broad support from western communities. Recent studies show that big-game migrations are important to ecosystem health, yet vulnerable to habitat loss and fragmentation. A diverse public is increasingly interested in their fate. Truly conserving the migrations of the West will require coordinated management across large landscapes. Federal land management and wildlife-friendly transportation infrastructure have important roles to play in the conservation of these migrations—but here we focus on private lands, offering a series of recommendations for how a new administration can engage the landowners who provide habitat to migratory wildlife.

Specifically, we recommend that the administration consider five priority areas:

- Support migration science and science-based decision making
- Involve private landowners in management and policymaking
- Use voluntary, positive incentives
- Improve collaboration among departments, agencies, tribes, and state and local governments
- Develop and implement a pilot project in the Greater Yellowstone Ecosystem

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# Overview

In the American West, some of the most important migratory wildlife are big-game species—elk, mule deer, pronghorn, moose, bighorn sheep, and bison—that travel long distances seeking food and shelter. Migrating big game cross mountains and plains, state and county lines, parks and wilderness areas, and extensive private lands. They maintain healthy open grasslands through their grazing, and their abundance sustains the region's iconic predators and scavengers. Migratory herds also attract tourists and hunters, with ripple effects throughout rural economies. Many migrations persist around the West due to a combination of public lands protections, state big-game management, and effective private-land steward-ship. Yet these herds and their habitats face real threats. Urban sprawl, energy development, fences, and roads reduce habitat while invasive plants degrade what remains.

As public interest in wildlife migrations and corridors has grown, federal and state governments have introduced new policies to conserve them. These include, for instance, a 2018 Secretarial Order in the U.S. Department of Interior, executive orders by the Governors in Wyoming and Colorado, and the Wildlife Corridors Act passed by the New Mexico legislature. These policies recognize the value of voluntary and incentive-driven programs to support private land stewardship of migrations and encourage coordinated, landowner-focused programs. There is, however, additional opportunity for near-term federal policy initiatives to better engage private landowners in conserving migrations, supporting landowners with additional resources and tools to ensure tangible outcomes on the ground.

We recognize that federally managed lands and transportation infrastructure are important parts of connectivity. The recommendations presented here, however, focus on the conservation of working lands. Private landowners are essential partners in the conservation of migrating wildlife. Working lands that sustain wildlife and the landowners who provide and conserve migration corridors should be recognized for their contributions to wildlife conservation and overall ecosystem health. Indeed, in many areas of the West, economically viable working lands serve as a stronghold against the threat of subdivision and development that fragments habitat. The positive role that working lands play in connecting large landscapes, therefore, should be supported.

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In the heart of the West, the Greater Yellowstone Ecosystem is a microcosm of these issues and has been at the forefront of migration science and conservation in recent years. Research here shows, for instance, that elk in more than a dozen major herds fatten up on green grasses in the high country all summer, then shelter from deep snow in valleys and plains during winter. Meanwhile, in this same landscape, mule deer and pronghorn migrate up to 200 miles twice each year, spending a quarter of their year fattening up in stopovers within their corridors. All these migrations depend in part on private lands. For instance, some migratory elk—including those viewed by tourists inside Yellowstone and Grand Teton National Parks each summer—spend 80 percent of their winter on private land. Providing this habitat incurs costs to private landowners. For example, Montana State University Extension found landowners in Montana lose more than \$31 million in livestock forage to wildlife each year. There is also potential for wildlife such as elk to transmit the disease brucellosis to cattle, creating risk of financial ruin for ranching families. Researchers with the University of Wyoming estimate the average cost of quarantining a herd of 400 cattle suspected of having brucellosis is \$140,000—almost three times the average annual income for ranchers. Here, conserving migrations and supporting working lands are critical for the long-term health of the ecosystem.

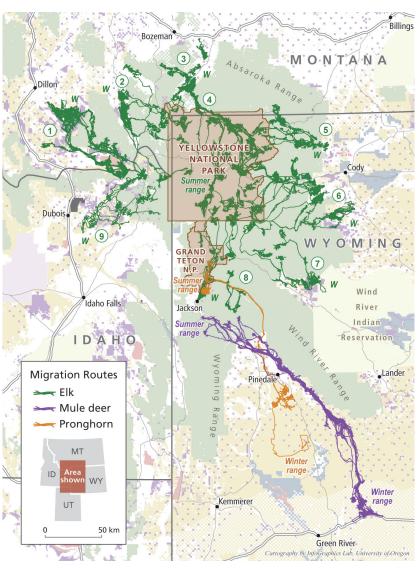
As the Biden administration considers how to support and conserve wildlife migrations, we propose the recommendations below to effectively work with private landowners through science, partnership, and conservation incentives. These recommendations reflect the fact that America's greatest conservation challenges must be tackled at large landscapes scales, integrate diverse stakeholder interests, and implement partnerships with private landowners.

## Recommendations

As the administration addresses the conservation of wildlife migrations and associated habitats, it is important to employ the following approaches:

# Support migration science and science-based decision making

- There is a wealth of new science on ungulate migrations, and it is essential that migration management decisions are informed by this science.
- Work with states and tribes through the existing secretarial order or other partnerships to gather better data on migrations, migration habitats, barriers, threats, and opportunities.
- Conduct and publicize scientific research on migrations, including ecological and social science to identify, understand, and conserve migrations and associated habitat.
- Include local and landowner knowledge in research to enhance transparency around the data used to designate corridors and to increase buy-in for habitat improvements.
- Strive to respect and safeguard landowners' privacy when using private-lands data, while still making data available for targeting of activities that benefit both landowners and wildlife.



Reprinted from: Middleton, et al. "Conserving transboundary wildlife migrations: recent insights from the Greater Yellowstone Ecosystem" in Frontiers in Ecology and Environment, 2019. doi:10.1002/fee.2145

## Involve private landowners in management and policymaking

- Engage landowners early and often in wildlife management and policy decisions.
- Recognize that decisions and regulations governing migration corridor management have implications for landowners, their livelihoods, the people they employ, and their communities.
- Consider and meaningfully address the impacts of policy and management decisions on landowners and, consequently, their willingness to conserve habitat.

# Use voluntary, positive incentives

- Recognize that regulatory approaches to conserving migrations can make landowners less likely to engage in proactive conservation measures.
- Emphasize voluntary incentives such as improved technical assistance, public-private partnerships, and diversified funding streams to reduce the costs borne by landowners.
- Develop portfolios of potential solutions in recognition that private lands vary in their ecological context and landowners vary in their attitudes, values, and financial capacity.
- Identify opportunities to partner with and borrow models from successful collaborative programs that are known to advance conservation across large landscapes, including the Partners for Fish and Wildlife Program, Sage Grouse Initiative, Migratory Bird Joint Ventures, and the NRCS Technical Assistance Program

# Improve collaboration between departments, agencies, tribes, and state and local governments

- Recognize that landowners attempting to balance agricultural operations with wildlife conservation interact with multiple agencies because the Department of Agriculture (USDA) manages most agricultural conservation programs, while the Department of the Interior (DOI) manages certain wildlife and wildlife research.
- Improve private-land conservation programs in the USDA and DOI by improving coordination among departments and with outside partners.
- Recognize that state and tribal wildlife managers typically have jurisdiction over migrating ungulates. Involve and communicate clearly with state wildlife agencies about policy proposals and management actions.
- Work with state agencies and local governments to present a coordinated message to private landowners to facilitate success of programs and partnerships.
- Prioritize activities and strategies that support landowner participation and engagement in collaborative and coordination efforts related to wildlife management and private land habitat. Consider administrative capacity needs in development of collaboratives.



## Migration initiative pilot project in the Greater Yellowstone Ecosystem

- With its iconic migrations, willing landowners and partners, and existing research, the Greater Yellowstone Ecosystem provides an ideal environment for a pilot project in which to implement on-the-ground mechanisms for migration support on private lands. We recommend standing up a pilot project and exploring these opportunities:
  - » Assess the barriers and opportunities that currently exist on working lands.
  - » Develop a landowner advisory council to inform decisions.
  - » Develop a symbiotic relationship between agencies and landowners/landowner groups to share information and provide input into conservation strategies.
  - » Involve other stakeholders, including hunters, outfitters, conservation groups, agricultural groups, local governments, and scientists, in policy development.
  - » Apply accessible federal programs, such as Farm Bill programs, Land and Water Conservation Fund programs, and the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program, to support working lands in migration corridors.
  - » Evaluate and implement programs to insure cattle producers against disease (particularly brucellosis) carried by wildlife.
  - » Encourage initiatives to leverage resources from tourism and tourism-related businesses.
  - » Explore market-driven incentive payments that encourage and quantify landowner contributions to supporting migration habitats.

# We, the undersigned, offer our organizations' support to enact the proposed recommendations and implement this pilot project.

Greater Yellowstone Coalition

Property and Environment Research Center

Western Landowners Alliance

Jackson Hole Land Trust

Heart of the Rockies Initiative

Madison Valley Ranchlands Group

Montana Outfitters and Guides Association

National Wildlife Federation

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