WORKING LANDS FOR WILDLIFE
A FRAMEWORK FOR CONSERVATION ACTION

Talking Points

- *Corresponding maps, graphics, or figures from the Frameworks are available at: https://drive.google.com/drive/folders/1fQY5MIAX9eNCnSV5gkQM9U3VzSETvQVD?usp=sharing*
- *Full library of materials under each framework at https://wlfw.rangelands.app*

About Working Lands for Wildlife:

- Working Lands for Wildlife (WLFW) is the USDA Natural Resources Conservation Service's (NRCS) premier approach for conserving America's working lands to benefit people, wildlife and rural communities.
- WLFW uses win-win solutions to target voluntary, incentive-based conservation that improves agricultural productivity and wildlife habitat on working lands.
- WLFW takes an ecosystem approach, but focal wildlife wildlife species guide conservation delivery.
- The success of focal species helps measure the impact and success of private lands conservation because these species require healthy, functioning ecosystems as habitat.
- Popular with the agricultural community, more than 7,400 producers teamed up under WLFW and conserved over 10 million acres, an area more than triple the size of Yellowstone National Park.
- Resulting conservation outcomes were instrumental in the 2015 decision by the U.S. Fish and Wildlife Service not to list sage grouse under the Endangered Species Act.

About Frameworks:

- In 2020, a multi-state planning effort - built on past achievements of the Lesser Prairie-Chicken and Sage Grouse Initiatives - produced the first biome-scale Frameworks for Conservation Action on sustainable working rangelands in the Great Plains grasslands and sagebrush biomes.
- New WLFW frameworks provide an approach to target the most severe and large-scale threats causing biome-level impacts: specifically exotic annual grass invasion, woodland expansion, land-use conversion, and riparian/meadow degradation.

WORKING LANDS FOR WILDLIFE
A FRAMEWORK FOR CONSERVATION ACTION

- The 2021-2025 frameworks provide the common vision and coordination to address resource concerns and ecosystem threats across state boundaries, while maximizing local decision-making and flexibility in program delivery.
- As states implement strategies locally, the WLFW team supports them with annual tracking of progress, reporting of milestones, assistance in spatial targeting, and ongoing science-based assessments of conservation outcomes.

States Involved:

- **Sagebrush Biome:** California, Colorado, Idaho, Montana, Nevada, North Dakota, South Dakota, Oregon, Utah, Washington, Wyoming
- **Great Plains Grasslands Biome:** Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming

Rangelands:

- Covering one out of every three acres in the contiguous U.S., rangelands constitute the lower 48's single largest land use. West of the Mississippi River, 70 percent of all land is rangeland.
- Grazing by livestock is the common thread that maintains these working rangelands at an ecosystem scale.
- Maintaining rangelands provides an opportunity to reduce climate impacts by storing above and below-ground carbon.
- Rangelands are being lost at an alarming rate to land-use conversion, woodland expansion, invasive grasses, and dewatering of mesic sites.
- More than a million acres of working rangelands are lost to these threats annually.

Sagebrush Biome:

- The sagebrush biome is the largest habitat type in North America, spanning 175 million acres in 13 western states and two Canadian provinces.
- More than 350 plant and animal species thrive in rangelands, most notably a host of sagebrush songbirds, migratory big game populations and sage grouse.
- Two-thirds of rangelands are privately owned, encompassing the most productive grass and shrublands west of the Mississippi River.

Great Plains Grasslands Biome:

- The Great Plains of North America is home to some of the world's largest remaining and most intact grasslands.

WORKING LANDS FOR WILDLIFE
A FRAMEWORK FOR CONSERVATION ACTION

- Private landowners hold the key to prairie conservation since 90 percent of the Great Plains is privately owned.
- As valued grazing lands in mixed agricultural operations, working grasslands are the backbone of the U.S. beef industry.

WLFW Approach to Conservation:

- WLFW uses Farm Bill resources to help landowners voluntarily implement conservation actions that reduce threats facing working rangelands.
- WLFW uses co-produced science to develop frameworks that guide conservation actions spanning multiple states and focal species.
- WLFW prioritizes proactive conservation in and around intact but vulnerable 'core areas.' This focuses efforts where they are more likely to be effective and cost-effective, rather than reactive in regions that are already highly degraded.

Threat to the Sagebrush Biome & Great Plains Grasslands Biome: Land-Use Conversion

- Conversion to cropland disproportionately affects the most productive soils, taking them out of use by livestock and wildlife.
- Preventing future land use conversion on 10 percent of the region's grasslands saves the same amount of carbon as removing 2.5 million cars off the road each year.
- Keeping grazing lands connected is more effective when done early, before crops and houses creep in, and when local actions are informed by landscape context.
- Using conservation easements to proactively remove the risk of development maintains vast open spaces required for ranching and wildlife.
- Voluntary participation in easement acquisitions enables producers to expand their grazing operations and to pass their ranches onto future generations.

Program Highlight - Transitioning Expiring CRP into Grazing Lands

- Since 1985, the Conservation Reserve Program (CRP) has enrolled private landowners in 10- to 15-year contracts for re-establishing grasses on former cropland in exchange for annual rental payments.
- Exiting CRP is the largest source of grassland loss nationally.
- Programs mitigating for large-scale habitat loss and fragmentation help mitigate for population declines of prairie chickens.
- This framework provides a novel approach for retaining grassland that is exiting CRP by replacing landowners' lost annual CRP payments with revenues from livestock grazing.

- Interested landowners can get the help they need to design sustainable grazing systems, including installation of water and fence needed for grazing.

Threat to the Sagebrush & Great Plains Grasslands Biome: Woodland Expansion

- Woodland expansion into grasslands and shrublands is a global problem as trees displace rangeland wildlife and reduce productivity of grazing lands.
- Scattered young trees may look harmless to a casual observer, but science shows conifer expansion can erode rangeland resilience if left unchecked.
- Early phase conifer removal reduces woody fuels, mitigating risks of high-severity fire effects, and prevents the loss of perennial grasses that are key to maintaining resilience to fire and resilience to cheatgrass.
- Conifer removal to prevent woodland expansion sustains ranch income and carrying capacity.

Addressing Woodland Expansion in the Sagebrush Biome

- Conifer expansion fragments and degrades sagebrush habitat, reduces forage production, and increases the risk of wildlife and cheatgrass invasion.
- Sage grouse are particularly sensitive to trees, abandoning otherwise suitable habitat with as little as one or two trees per acre.
- Conifer removal can increase sage grouse nest, brood, and adult survival.
- WLFW prioritizes maintenance of treeless sagebrush rangelands and restoration of early phase expansion areas, primarily using mechanical tree removal (hand-cutting, shredding) and slash treatment, which reduces or eliminates conifer seed sources, preserves perennial shrubs and grasses, and minimizes sage grouse predator perches.
- Conifer removal is highly targeted to vulnerable sagebrush sites, leaving abundant pinyon-juniper and conifer forests elsewhere in the watershed to support woodland-dependent species.

Addressing Woodland Expansion in the Great Plains Grasslands Biome

- Woodland expansion is resulting in direct grassland loss at a rate equivalent to that of cultivation.
- Prairie chickens avoid otherwise suitable grasslands at just two trees per acre and stop breeding altogether as infestations continue. Nesting songbirds decline as trees increase in density.
- Producers experience a 75 percent decline in forage production as grasses are replaced by bare ground under trees.

- Detection and prevention of early invasions, prescribed fire, and targeted herbicide use keeps out or eliminates dispersing seeds and recruitment of young woody plants.
- This integrated approach removes the source of risk and prevents future proliferation of seeds and saplings.

Threat to the Sagebrush Biome: Exotic Annual Grass Invasion

- Invasion of cheatgrass and other exotic annual grasses, such as medusahead and ventenata, likely represents the single-largest threat to America's sagebrush rangelands.
- Exotic annuals green up faster than native plants and dry out earlier, robbing soils of limited moisture, exacerbating drought conditions, extending fire seasons, and reducing forage for livestock.
- Conversion of deep-rooted perennial systems to shallow-rooted cheatgrass has climate change implications as it results in loss of persistent below-ground carbon.
- WLFW's approach for tackling this threat relies on statewide maps identifying large, intact core areas with relatively low, or no, annual grass invasion.
- Specific actions to reduce this threat vary with landscape context and condition but generally include some combination of herbicides, seeding, and prescribed grazing.

Threat to the Sagebrush Biome: Riparian and Wet Meadow Degradation

- In the sagebrush biome, wet habitats comprise less than two percent of the landscape, yet 80 percent of wildlife depend on them to complete their life cycle.
- These areas are reservoirs of late-season productivity providing reliable water and forage for livestock and wildlife during the dry summer and fall.
- Over half of riparian areas and more than 80 percent of wet meadows are privately owned, reflecting the importance of these habitats to working lands.
- 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.
- Restoration increases valley bottom productivity by 25% and kept plants greener longer, leading to higher drought resiliency.
- Targeting conservation actions in close proximity to sage grouse breeding and nesting habitats helps ensure a reliable source of insects and forbs to feed growing chicks as uplands dry out in the summer sun.