

Special Report by Western Governors

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WESTERN
GOVERNORS'
ASSOCIATION

Sage-Grouse Inventory

2014 Conservation Initiatives



Sage-Grouse Inventory

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A photograph of two sage-grouse in a field of dry grass and shrubs. One bird is on the left, and another is on the right, both facing towards the center. The background is a blurred field of similar vegetation.

EXECUTIVE SUMMARY

The greater sage-grouse is found in 11 western states: California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming. The bird was listed as “warranted but precluded” under the Endangered Species Act (ESA) in 2010 by the U.S. Fish and Wildlife Service (FWS).

Western Governors are committed to conservation of greater sage-grouse and assert that the breadth and depth of voluntary conservation efforts across the region, if allowed to run their course, will provide the bird with the necessary habitat to live and thrive. The Governors believe that a listing of the greater sage-grouse by FWS later this year will diminish the amount of new voluntary conservation work undertaken and have a significant, negative economic impact across the West.

The Western Governors’ Association 2014 Sage-Grouse Inventory makes the case that the success of

voluntary conservation initiatives for sage-grouse provides compelling evidence that a listing of the bird as threatened or endangered under ESA is counterproductive and unnecessary.

While not intended to be exhaustive, the 2014 inventory has expanded its focus from previous years. In addition to recording state and local government conservation initiatives, it also includes reports from federal agencies, conservation districts, tribes, industry and nonprofits.

Some of the highlights from this year’s inventory include:

EXECUTIVE SUMMARY



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Conservation Plans

- **Colorado, Nevada, North Dakota and South Dakota** either completed or updated state plans for sage-grouse conservation during 2014.
- **Montana Gov. Steve Bullock** issued an Executive Order in 2014 establishing a statewide greater sage-grouse habitat conservation program and requiring state agency compliance.
- The **Bureau of Land Management** (BLM) is updating Resource Management Plans (68 in the greater sage-grouse range) covering approximately 65 million acres.
- The **U.S. Forest Service** is amending 21 forest plans, working closely with BLM and other stakeholders, with interim conservation recommendations already in place.
- **Nevada Mining Association** members have developed Habitat Conservation Plans on 1.2 million acres.

Easements

- **Colorado, Idaho and Montana** have collectively protected nearly 350,000 acres of greater sage-grouse habitat through purchase or conservation easements.
- The **Natural Resources Conservation Service** (NRCS) has put more than 450,000 acres of Western land into easements in the past five years, bringing its investment to \$165 million. (Partner matches bring that total to \$250 million).

Habitat Improvement

- **Idaho** wildlife and land agencies have spent \$4 million improving and restoring habitat.

- **Utah** has completed nearly 85% of a 560,000-acre project to ameliorate conifer encroachment in sage-grouse management areas.
- **Private landowners** working with NRCS have reclaimed over 400,000 acres of sage-grouse habitat through conifer removal.
- **Rocky Mountain Elk Foundation** has funded more than 90 projects that treat sagebrush habitat over 83,000 acres in eight western states.

Other Highlights

- **NRCS** has invested almost \$300 million in sage-grouse conservation efforts, matched by over \$125 million from partners and landowners, for a total of nearly \$425 million to conserve more than 4 million acres.
- **Nevada Gov. Brian Sandoval** (over \$5.1 million for FY 15-17) and **Idaho Gov. C.L. “Butch” Otter** (\$750,000 for FY 15) are directing significant funding at conservation.
- The **Oregon Cattlemen’s Association, BLM and Fish and Wildlife Service** signed an Oregon BLM Public Lands Sage-Grouse Programmatic Candidate Conservation Agreement that has registered at least 1 million acres of participation.
- **Solitario Exploration and Royalty Corp., Ely Gold Corp., Noble Energy and Wyo-Ben** are among many companies voluntarily restricting operations in ways that promote conservation.
- **Wyoming’s** legislature awarded approximately \$2 million for additional research work on greater sage-grouse



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Addressing Threats to Sage-Grouse

PART I: Conservation Efforts Completed To Date

The decline in greater sage-grouse population numbers from historic levels is thought to be tied to a variety of factors, including development, drought, wildfires, invasive species and predators. A Conservation Objectives Team (COT) comprised of state and federal representatives identified threats that need to be reduced to conserve greater sage-grouse and preclude the need for a listing. These threats are outlined in “Greater Sage-

grouse Conservation Objectives: Final Report,” also known as the [COT Report](#), which was released in October 2013. This WGA report highlights examples of voluntary conservation initiatives that have been implemented and how they address the threats identified in the COT report. The full responses from federal agencies to Western Governors’ questions about sage-grouse conservation are available on the [WGA website](#).

Conservation Plans

Putting solid, long-term plans into place is a critical element of sage-grouse conservation. The array of plans in the bird's 11-state western range address the threats identified in the Conservation Objectives Team (COT) Report. Not all locations face all threats, nor are the greatest threats the same across the greater sage-grouse range. Western Governors are confident that these plans, taken together, provide the comprehensive structure needed for conserving greater sage-grouse and their habitat.

States

Montana Gov. Steve Bullock issued [Executive Order No. 10-2014](#), establishing a statewide greater sage-grouse habitat conservation program and requiring state agency compliance. The program provides a regulatory structure for development of new sage-grouse habitat. The order also establishes a stewardship fund for habitat conservation work. Full implementation of the order is dependent on legislative funding in 2015. Montana Fish, Wildlife and Parks has spent an estimated \$1.5 million during the past four years, and over \$6 million between 2000 and 2014 on sage-grouse management and conservation.

Colorado developed a statewide greater sage-grouse [conservation plan](#) in 2008 and updated it in 2012. Fish and Wildlife Service (FWS) provided feedback on the plan in 2013 and the state provided its [Colorado Synthesis Report](#) in 2014 in response to agency feedback. Since 2005, Colorado Parks and Wildlife (CPW) has spent more than \$9.2 million on annual operations in support of greater sage-grouse.

CPW also managed development of the Parachute-Piceance-Roan (PPR) Greater Sage-Grouse Conservation Plan, which informs and guides the activities of participants of the local PPR Greater Sage-Grouse Work Group and other stakeholders.

South Dakota Department of Game, Fish and Parks spent approximately \$7,500 to update its [greater sage-grouse statewide conservation plan](#), approved by the game commission in November 2014. The revised plan helps guide management practices, addressing threats identified in the COT report.

North Dakota completed its [greater sage-grouse management plan](#) in December 2014. The plan is voluntary, but structured to conserve a self-sustaining greater sage-grouse population. The North Dakota Game and Fish Department estimates it has devoted more than 11,000 staff hours and provided over \$400,000 for sage-



More than 11,000 staff hours and over \$400,000

What the North Dakota Game and Fish Department estimates it has devoted for sage-grouse conservation since 2004.

grouse conservation since 2004.

Nevada's Sagebrush Ecosystem Council adopted the [2014 State Plan](#), which builds upon recommendations from the Governor's Sage-Grouse Advisory Committee. The state's resource agencies have spent over \$7.4 million since 2012 in support of greater sage-grouse conservation efforts using pooled state, federal and local funds.

Idaho Gov. C.L. "Butch" Otter's [alternative](#) submitted for the land use plans being updated by the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) is being melded with the other co-preferred alternative for incorporation into the federal land use plans. This approach addresses all of the threats on BLM and USFS lands as identified in the COT report.

California's Department of Fish and Wildlife (CDFW) is cooperating with BLM in the California/Nevada subregion on land use plan revisions and identification of Priority Areas for Conservation. State and federal partners developed a preliminary priority habitat map in 2012, which was updated in 2014 to support interim guidance to provide regulatory mechanisms to conserve sage-grouse habitat. CDFW estimates it has spent over \$800,000 since 2010 on greater sage-grouse conservation.

Washington's Department of Fish and Wildlife reviewed and provided input during 2014 on BLM's draft

About Greater Sage-Grouse

The greater sage-grouse is a bird found on sagebrush lands in 11 western states (California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming) and two Canadian provinces, its range stretching across 257,000 square miles. Greater sage-grouse rely on sagebrush for both food and shelter. During the spring breeding season, male sage-grouse gather to perform courtship displays in areas called leks. Population estimates suggest that greater sage-grouse numbers have dropped by one-third in the past 30 years. Factors that threaten greater sage-grouse vitality are described in greater detail later in this report.

In 2010, the U.S. Fish and Wildlife Service (FWS) listed the greater sage-grouse as “warranted but precluded” under the Endangered Species Act (ESA), meaning that the species should be listed based on the best available science but that listing other species takes priority because they are more in need of protection. In 2011, the FWS reached settlement agreements with WildEarth Guardians and the Center for Biological Diversity

requiring the agency to review all species listed on its 2010 Candidate Notice of Review, including the greater sage-grouse. Under the settlement agreement, FWS has until Sept. 30, 2015, to reach a “warranted” or “not warranted” decision for the greater sage-grouse.

Beyond the agency’s consideration of whether to list the greater sage-grouse in the 11 states where it is found, there are populations of greater sage-grouse that FWS is evaluating separately for listing under the ESA. The bi-state population of greater sage-grouse found in Nevada and California has been proposed threatened. The Columbia Basin population of greater sage-grouse located in Washington state is a candidate for listing. Another grouse species, the Gunnison sage-grouse, was listed as “threatened” by FWS in November 2014.

This inventory primarily addresses greater sage-grouse conservation activities, but a section is included on Gunnison sage-grouse conservation as well.

Resource Management Plan to help ensure the plan contains appropriate conservation measures for greater sage-grouse and other shrub-steppe species.

Federal

Bureau of Land Management: In 2011, the agency began the most comprehensive land-use planning initiative in its history, updating Resource Management Plans (RMP) covering approximately 65 million acres. Of these plans, 68 fall within the range of greater sage-grouse. One of those, the Lander RMP, received final approval in 2014. The USFS, FWS, state wildlife agencies and other stakeholders advised BLM on plan updates.

U.S. Forest Service: The agency is amending 21 forest plans within greater sage-grouse range, working closely with BLM and other stakeholders. Interim recommendations for greater sage-grouse and sage-grouse habitat have been in effect since 2012, until Records of Decision are signed for the amended plans. The recommendations are designed to promote conservation of sustainable sage-grouse populations and their habitats while also enhancing consistency between management approaches taken on USFS and BLM lands.

Counties

Garfield County, Colorado: Officials raised concerns about proposed updates to BLM’s Resource Management Plans to manage habitat for greater sage-grouse. From the county’s perspective, BLM did not offer a wide enough range of alternatives and used a habitat map with errors. To address those concerns, the county developed its own [greater sage-grouse conservation plan](#).

Jackson County, Colorado: The North Park Greater Sage-Grouse Working Group and the county developed a [conservation plan](#) to establish and implement approaches to maintaining stable populations of greater sage-grouse and provide adequate habitat.

Elko County, Nevada: According to county officials, its [Greater Sage-Grouse Management and Conservation Plan](#) is “designed to provide greater sage-grouse management, conservation, preservation and rehabilitation measures, strategies and funding sources to ... benefit sage-grouse without the loss of the county’s heritage, culture and economy.” Expenditures for development and implementation of the plan exceed \$100,000 and no federal funding was used.



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Conservation Districts

Conservation districts actively cooperated with BLM and USFS to update their sage-grouse management plans. The **Foster Creek Conservation District** in **Washington** completed and submitted to FWS its [Douglas County Multiple Species Habitat Conservation Plan](#). The plan is intended to cover a 50-year period from its approval by FWS. Participating landowners under the plan will develop “farm plans” that guide them in minimizing, mitigating and monitoring impacts to greater sage-grouse while continuing agricultural activities. Foster Creek Conservation District will provide assistance to landowners in implementing their farm plans.

Industry and Nonprofits

Nevada Mining Association members have developed Habitat Conservation Plans on 1.2 million acres.

The **North American Grouse Partnership** has partnered with other conservation organizations to review and provide comments to BLM and the USFS on their land management plans for greater sage-grouse, as well as to states on their conservation plans.

State-Federal Sage-Grouse Task Force

Western Governors and former Interior Secretary Ken Salazar formed the State-Federal Sage-Grouse Task Force in 2012 to implement high priority conservation actions and integrate ongoing efforts necessary to preclude the need for listing the greater sage-grouse. Representatives appointed by Governors from the 11 states with greater sage-grouse convene with representatives from the U.S. Fish and Wildlife Service, U.S. Department of the Interior, Bureau of Land Management, U.S. Forest Service, Natural Resources Conservation Service, and the U.S. Geological Survey to collaborate on sage-grouse management strategies, conservation tools and related policies. The task force met four times in 2014.

Easements, Leases and Regulations

Conservation easements are legal agreements voluntarily entered into by private property owners that put permanent restrictions on the use or development of land to protect conservation values, while keeping land in private ownership. Easements protect habitat from loss due to development of new infrastructure (roads, pipelines, transmission lines, etc.), energy development, exurban development, and conversion into croplands. Easements also are a means of implementing conservation practices such as grazing management. The permanency and durability of easements make them a vital part of successful sage-grouse conservation. In cases where an easement is not possible, leases may be used to provide a long-term, though less-than-permanent, protection from uses adverse to sage-grouse. Regulations are another valuable tool for driving conservation efforts. State, local and federal regulations help ensure that greater sage-grouse considerations are brought to the forefront of planning and operations.

States

Colorado: Since 2003, over 80,600 acres of greater sage-grouse habitat has been protected by Colorado Parks and Wildlife (CPW) either through fee title purchase or conservation easements, at a cost of approximately \$52.8 million.

Wyoming: The state since 2006 has approved funding for more than 70 conservation easements in sage-grouse core areas encompassing more than 150,000 acres. And, with other funders, it has allocated more than \$100 million to long-term habitat conservation.

Idaho: The state has conservation easements on over 65,000 private acres within core and important greater sage-grouse management zones.

Montana Fish, Wildlife and Parks now holds 30-year leases on approximately 200,000 acres protecting sagebrush grassland habitats from conversion or fragmentation. Additional signups are planned for 2015 if funding is available.

Federal

The **Natural Resources Conservation Service** (NRCS) has put into place more than 450,000 acres of conservation easements during the past five years via its [Sage Grouse Initiative](#) (SGI), a partnership of ranchers, agencies, businesses and other groups that embrace wildlife conservation through sustainable ranching. Of those easements, more than 70% are targeted to populations threatened by urbanization or agricultural conversion. Between FY10 and FY14, NRCS invested \$165 million, with another \$85 million in partner match,

More than 450,000 acres

of conservation easements have put into place by the Natural Resources Conservation Service (NRCS) during the past five years via its Sage Grouse Initiative (SGI). Over 70% of those easements are targeted to populations threatened by urbanization or agricultural conversion. NRCS has invested almost \$300 million in various sage-grouse conservation efforts, matched by over \$125 million from partners and landowners, for a total investment of nearly \$425 million to conserve more than 4 million acres.

for a total conservation easement investment of \$250 million. NRCS has invested almost \$300 million in various sage-grouse conservation efforts, matched by over \$125 million from partners and landowners, for a total investment of nearly \$425 million to conserve more than 4 million acres

[The 2014 Farm Bill](#) included a “Sodsaver” provision that reduces the risk of sagebrush lands being converted into cropland by reducing the federal crop insurance premium subsidy on land recently converted to a cropping system.

Over the last five years, the **Bureau of Land Management** (BLM) has provided guidance to agency staff. [Instruction Memoranda](#) were released on considerations for energy development, wildland fire and fuels management, wildfire and invasive species



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assessments in greater sage-grouse habitat, and greater sage-grouse interim management policies and procedures.

Counties

Routt County, Colorado: The county has a [master plan](#) to evaluate land-use applications for habitat impacts. Multiple county regulations call for mitigation or avoidance of impacts to critical wildlife areas to obtain project approval. The county has also used a voter-approved mill levy that raised over \$20 million to protect, in cooperation with other partners, over 40,000 acres of land including significant areas of sage-grouse habitat.

Jackson County, Colorado: Developed a GIS tool which was used during 2014 to assist with assessment of land-use applications within sage-grouse habitat.

Conservation Districts

The **North Yakima Conservation District** in **Washington** has a new approach to developing conservation easements that prioritizes keeping large rangelands intact and removes development rights in order to provide more contiguous habitat for greater sage-grouse.

The **Sweetwater County Conservation District** in

Wyoming passed [zoning regulations](#) in 2014 to prohibit wind energy development in sage-grouse core areas.

Industry and Nonprofits

When it comes to establishing easements, land trusts take a leadership role.

The **Nevada Land Trust**, **Wood River Land Trust** in **Idaho**, **Deschutes Land Trust** in **Oregon**, **Continental Divide Land Trust** in **Colorado** and the **Chelan-Douglas Land Trust** in **Washington** all reported having easements beneficial to sage-grouse that protect the land in perpetuity.

The **Colorado Cattlemen's Agricultural Land Trust** (CCALT) holds permanent conservation easements on over 45,000 acres of sage-grouse habitat. At the request of **Colorado Gov. John Hickenlooper**, CCALT gathered information from all of the land trusts working in greater sage-grouse range in Colorado and found that as of March, 2014, nearly 125,000 acres of private land had been permanently conserved with easements (that number would be even higher with the remainder of 2014 included). CCALT is putting significant dollars (mostly from federal or state grants) into easements; the four easements CCALT completed in 2014 used about \$10 million in such funding.

Personnel and Oversight Groups

Executing greater sage-grouse conservation actions on the ground requires dedicated staff and volunteers. The commitment and enthusiasm of voluntary contributors is particularly inspiring. Local “working groups” are comprised of community members who are responsible for developing and implementing conservation plans, then adapting them as needed to be successful.

States

Montana, South Dakota and **Colorado** are among states hiring staff that cooperates with the Natural Resources Conservation Service’s (NRCS) Sage Grouse Initiative (SGI) and other programs to implement conservation measures. **Colorado Parks and Wildlife** (CPW) maintains, on average, nine full-time employees who spend greater than 50% of their time implementing greater sage-grouse conservation efforts. **Nevada** created a new Rangeland Health Program Coordinator to assist private landowners in developing enhanced methods to complete rangeland health assessments and rangeland monitoring techniques, as well as act as a liaison between landowners and public land managers. Nevada also added three conservation staff specialists to collaborate and implement habitat protection and enhancement projects at a cost of over \$450,000.

The **Wyoming** legislature in 2014 passed a bill providing statutory backing for the **Sage-Grouse Implementation Team** (SGIT). SGIT, created in 2007, is a diverse stakeholder group that reviews data and makes recommendations to the governor regarding actions and funding to maintain and enhance the state’s greater sage-grouse populations and greater sage-grouse habitats.

Federal

A key to the success of the SGI program is getting out in the field and visiting landowners. **Natural Resources Conservation Service** (NRCS) partners with the **Intermountain West Joint Venture** to manage a **Strategic Watershed Action Team** (SWAT) that works with landowners. SWAT made over 11,000 field visits, which considerably magnified SGI conservation efforts.

U.S. Fish and Wildlife Service (FWS) added 10 dedicated staff positions to help complete Candidate Conservation Agreement with Assurances (CCAAs), further invest in private lands restoration via FWS’s Partners for Fish and Wildlife program, and to continue support for SGI. FWS also provided technical assistance to the **Bureau of Land Management** (BLM) and **Forest**



Radio tagging of greater sage-grouse. Jeremy Roberts / CONSERVATION MEDIA 2010

Service (USFS) at the national, regional and state levels to support revisions to 98 land management planning documents covering more than 70 million acres in 11 states. In addition, FWS serves on the Range-wide Interagency Sage-Grouse Conservation team that provides scientific and technical support for implementation of the 2006 Western Association of Fish and Wildlife Agencies (WAFWA) Greater Sage-Grouse Conservation Strategy.

Counties

Jackson County, Colorado: Representatives attend and actively participate in North Park Greater Sage-Grouse Working Group meetings and participated as a Cooperating Agency in BLM’s Northwest Colorado Sage-Grouse Environmental Impact Statement (EIS).

Beaver County, Utah: Hired a private consultant to help implement an effective sage-grouse conservation strategy and incorporate it into the county’s Resource Management Plan. That plan will aid the county in coordinating with BLM and other agencies in habitat restoration, predator control, wild ungulate management and wildfire mitigation.



Once tagged, greater sage-grouse can be tracked in the field. Jeremy Roberts / CONSERVATION MEDIA 2010

Conservation Districts

To conduct their outreach and implement programs, conservation districts leverage their personnel assets and hire additional staff to implement greater sage-grouse programs. The soil and water conservation districts in **Crook County** and **Malheur County** in **Oregon** reported hiring natural resource / rangeland specialists to develop their CCAAs.

Sweetwater County Conservation District in **Wyoming** serves as the chair of the Wyoming Landscape Conservation Initiative and provides personnel to participate in the Southwest Wyoming Sage Grouse Working Group and related regional planning efforts. **Washington County, Idaho** and **Iron County, Utah** have working groups actively promoting sage-grouse conservation projects.

Sublette County Conservation District in **Wyoming** hired a SGI range conservationist to work on sage-grouse conservation efforts and also hired a raven control specialist to interrupt raven nesting in greater sage-grouse nesting areas.

Industry and Nonprofits

Marathon Oil, operating in **Wyoming's** Bighorn Basin, has provided personnel to participate in the Bighorn Basin Local Sage Grouse Work Group since its inception in 2004 and will continue to do so going forward.

The **Farm Bureau Federation** in Idaho provided a representative to serve as a member of **Idaho Governor C.L. "Butch" Otter's** Sage-Grouse Task Force.

Habitat Improvements

Research shows that greater sage-grouse avoid areas with abundant conifers, and that as this vegetation grows in abundance and size, habitat quality decreases for greater sage-grouse. Juniper also requires large amounts of water, drawing this resource away from sagebrush and native grasses. Non-native invasive grasses and other plants can also reduce habitat quality by diminishing availability of native forbs and grasses that greater sage-grouse use for food, cover and nesting. Having learned more over the past five years about how damaging these factors can be, efforts to address them have accelerated.

States

Idaho's wildlife and land agencies worked extensively with partners to improve riparian habitat, restore habitat burned by wildfires, remove junipers and reseed the areas where the trees were removed. State agencies and partners spent over \$4 million on this work alone. Between 2010 and 2014, the Idaho Department of Fish & Wildlife estimates spending an additional \$4 million on sage-grouse for research, technical assistance, development, management, harvest season setting and assessment, enforcement and public outreach.

Utah has completed, in the past 10 years, about 85% of projects designed to ameliorate the threat of conifer encroachment in sage-grouse management areas. In all, the projects comprise more than 560,000 acres.

Washington Department of Fish and Wildlife has worked on wildlife habitat improvements through the Natural Resources Conservation Service's (NRCS) Conservation Reserve Program and the State Acres for Wildlife Enhancement Program.

Federal

The **NRCS** has taken a leading role in promoting conifer removal on private lands. Landowners working with Sage Grouse Initiative (SGI) have reclaimed over 400,000 acres of sage-grouse habitat through conifer removal. NRCS also completed weed management on more than 15,000 acres and restored over 150 acres of wet meadows.

Seed supplies are critical to restoration efforts and the **Forest Service** (USFS) is working with state agencies, other federal agencies and the private sector to make native plant seeds and container stock available for restoration of greater sage-grouse habitat.

USFS implemented habitat improvement on almost 90,000 acres over the past five years, spending \$1.2 million in agency funds, which was leveraged by another

\$1.4 million in partner dollars. In its response to Western Governors, USFS expresses the belief that “[its] efforts to conserve Greater Sage-Grouse habitats are generally durable but acknowledge that environmental factors often affect the long-term success of treatments.” USFS takes such factors into account prior to implementing habitat improvements and monitoring is done to learn which approaches are most successful.

Since 2010, the **Bureau of Land Management** (BLM) has treated invasive species on over 500,000 acres at a cost of \$22 million. USFS indicated it does not have invasive species treatment programs aimed at sage-grouse conservation objectives, but the agency did treat over 7,000 acres since 2012 against high risk invasive annual grasses.

Counties

Jackson County, Colorado: Invested more than \$230,000 over the last five years for noxious weed control to improve sage-grouse habitat.

Conservation Districts

Conservation districts have collaborated with landowners to make significant habitat improvements. The **Weiser River Soil Conservation District** in **Idaho**, the **Paradise Sonoma Conservation District** and **Smith Valley Conservation District** in **Nevada**, **Crook County Soil and Water Conservation District** and **Malheur County Soil and Water Conservation District** in **Oregon**, and **Sweetwater County Conservation District** and **Powell Clarks Fork Conservation District** in **Wyoming** all reported work to control invasive plants. Sweetwater County Conservation District reported spending \$50,000 on weed removal coordination. Crook County Soil and Water Conservation District reported spending over \$240,000 from 2010-2014 on greater sage-grouse conservation.

Wetland restoration and other water quality projects



Removing conifer to improve sagebrush habitat. Jeremy Roberts / CONSERVATION MEDIA 2010

The U.S. Forest Service implemented habitat improvement on almost 90,000 acres over the past five years, spending \$1.2 million in agency funds, which was leveraged by another \$1.4 million in partner dollars. Since 2010 BLM has treated invasive species on over 500,000 acres at a cost of \$22 million. Across the spectrum of conservation efforts made by Western Energy Alliance members, they report spending more than \$6.5 million covering more than 700,000 acres since 2004.

were also reported by **Owyhee, Crook County** and **Weiser River Conservation Districts** in **Idaho** and **Bowman-Slope Soil Conservation District** in **North Dakota**. **Lincoln County Conservation District** in **Nevada** is leading efforts to restore and maintain grade control structures to keep valley bottoms with greater sage-grouse habitat stable.

Butte Conservation District in **South Dakota** provides ongoing assistance to producers to re-vegetate crop lands to rangelands by providing technical assistance and use of a no-till grass drill. **Foster Creek Conservation District** in **Washington** has designed a program to use direct seed tillage practices to significantly reduce soil erosion and improve water quality. **Malheur County** in **Oregon** is reseeding in areas where NRCS cannot provide funding.

Industry and Nonprofits

Habitat improvements are a particular area of focus for industry and nonprofits. **Solitario Exploration and Royalty Corp.** and **Ely Gold Corp.** in **Nevada**, **Simplot Phosphate** in **Utah**, **Marathon Oil** in **Wyoming**, and members of the **Western Energy Alliance** are removing juniper to increase habitat for greater sage-grouse. Marathon has spent over \$40,000 on juniper removal from 2008 to 2012 and more than \$300,000 total (2004 - 2015) on conservation efforts more broadly. Marathon estimates that if it included in-kind services, equipment donations, etc., it would double the cash investments made.

Marathon and Western Energy Alliance members reported completing projects to increase water availability for greater sage-grouse and other wildlife. Across the spectrum of conservation efforts made by Western Energy Alliance members, they report spending more than \$6.5 million covering more than 700,000 acres since 2004.

Energy and mining companies also reported work on re-establishment of disturbed areas (utilizing seed mixes conducive to greater sage-grouse), noxious weed control, and removal of predator habitat.

The **Rocky Mountain Elk Foundation** has funded more than 90 projects over 83,000 acres in eight western states that directly treated sagebrush habitat to benefit elk, sage-grouse and other wildlife. The Foundation spent more than \$600,000 on sage-grouse conservation efforts between 2010 and 2014.

Land trusts such as the **Nevada Land Trust**, **Chelan-Douglas Land Trust** in **Washington**, and **Wood River Land Trust** in **Idaho** are also doing restoration and habitat improvement projects.

Ranchers from the **California Cattlemen's Association**, **Oregon Cattlemen's Association** and **California Farm Bureau Federation** are working to restore and improve habitat on private and public lands, many times using their own capital. Habitat improvement projects include new water developments to reduce pressure on riparian areas, juniper treatments, invasive grasses treatment, and placing of fence markers.

Modified Operations

Livestock grazing can have a negative impact on greater sage-grouse habitat if not properly managed. Ranchers operating on private and federally-leased lands have taken considerable steps to modify practices to support greater sage-grouse, often with assistance from conservation districts and the Sage Grouse Initiative (SGI). Disturbance from noise and dust is also thought to negatively influence greater sage-grouse, particularly during their spring breeding season. As a first step, many energy companies reported avoiding greater sage-grouse habitat whenever possible. When habitat cannot be avoided, companies have taken the voluntary initiative to modify operations to minimize disturbance.

Candidate Conservation Agreements

One way that proper grazing management is encouraged is through the development of **Candidate Conservation Agreements with Assurances** (CCAAs). Under such agreements, private landowners agree to implement certain conservation actions. In return, landowners are assured they will not be required to implement additional conservation measures beyond those in the agreement, and additional land, water or resource use limitations will not be imposed on them should the species become listed in the future – unless they consent to such changes.

A **Candidate Conservation Agreement** (CCA) is analogous to a CCAA. A CCA also represents voluntary commitments to conduct conservation measures, but does not contain the assurances of a CCAA. Also: a CCAA is only between non-federal property owners and U.S. Fish & Wildlife Service (FWS), whereas a CCA may be on federal or non-federal lands.

Federal

In 2013-2014, **FWS** completed landscape-scale CCAAs for grazing in Wyoming, Idaho and Oregon. FWS is also offering a new toolkit to streamline CCAA development.

Conservation Districts

Sublette County Conservation District in Wyoming is leading efforts to acquire CCA and CCAA agreements within the county. As a CCAA participating agency, the district will be assisting CCAA holders in the development of conservation plans to guide land management with conservation of greater sage-grouse at the forefront.

Industry and Nonprofits

The **Thunder Basin Grasslands Prairie Ecosystem Association** works with its members –ranchers, oil and gas, and coal companies – in **Wyoming** and **Montana** to develop science-based land management approaches. The Association has developed a three-pronged conservation

strategy consisting of a CCAA for private property, a CCA for property with a federal nexus, and a Conservation Agreement (CA) that addresses conservation efforts associated with foreseeable energy development within the coverage area. The Association also has developed a suite of 66 conservation measures dealing with greater sage-grouse habitat. This strategy is one of the first of its kind in the West and can serve as a template for incentivizing greater sage-grouse conservation while addressing the likelihood of energy development.

The **Oregon Cattlemen's Association**, Bureau of Land Management (BLM) and FWS signed an Oregon BLM Public Lands Sage-Grouse Programmatic CCA that has registered at least 1 million acres of participation. Oregon's **Harney County** has a programmatic CCAA for private lands, and the other seven Oregon county Soil and Water Conservation Districts have begun the National Environmental Policy Act (NEPA) process preliminary to the signing of individual county programmatic CCAAs (signings are expected in early 2015).

The **Wyoming Stock Growers Association** has been providing landowners and federal grazing permittees with information and guidance on how to participate in the Wyoming statewide CCAA and the CCA. **Wyoming-based** mining company **FMC** also submitted a CCAA to FWS and BLM.

California Cattlemen's Association members are working to avoid leks and reduce disturbance from livestock. The association noted in its response that the best on-the-ground results occur when BLM permittees with grazing allotments work closely with their federal employee counterparts to implement adaptive management.

The **Idaho Farm Bureau Federation** reported that its members have voluntarily changed management of their operations to do all they can to benefit greater sage-grouse, following the guidance provided in the Idaho Sage Grouse Management Plan.

Reducing Disturbances

Counties

Promoting practices that balance forage availability while maintaining healthy habitat for sage-grouse is another Sage Grouse Initiative (SGI) priority. For example, **Petroleum County in Montana** reported working with SGI to adjust grazing practices to be more beneficial for greater sage-grouse.

Conservation Districts

Conservation districts provide advice and assistance to farmers and ranchers on how they can manage operations in a way beneficial to greater sage-grouse. The **Bowman-Slope Soil Conservation District in North Dakota**, the **Baker County and Malheur County Soil and Water Conservation Districts in Oregon**, and the **Butte Conservation District in South Dakota** helped producers install wildlife escape ramps in water tanks to reduce wildlife mortality rates.

Conservation districts also advise on grazing practices. **Butte Conservation District in South Dakota**, for example, worked with producers to introduce practices such as deferred grazing and rotational grazing.

Laramie Rivers Conservation District in Wyoming converted nonfunctioning windmill towers to solar well watering systems and added additional livestock watering locations, improving livestock distribution and hence rangeland condition while also removing raptor perches to reduce predation. **Malheur County Soil and Water Conservation District in Oregon** is replacing diesel generators and installing solar powered pumps.

Industry and Nonprofits

Solitario Exploration and Royalty Corp. and **Ely Gold Corp.** are voluntarily restricting all mine-associated traffic on 10 miles of road in **Nevada** that crosses priority habitat for greater sage-grouse. **Noble Energy**, working in **Colorado, Nevada and Wyoming**, has developed seasonal restrictions to operations and reduced project footprints, despite increased operational costs from these measures. The bentonite industry in **Wyoming** has been a leader in greater sage-grouse conservation. The bentonite mining company **Wyo-Ben**, for example, observes time-of-day and seasonal restrictions during the breeding and nesting seasons. Wyo-Ben also funded two research projects, at a cost of approximately \$80,000, to help the company better manage its operations during seasonal habitat use.



Jeremy Roberts / CONSERVATION MEDIA 2010

Another company is using on-site power generation to avoid the need for power lines that become perches for predatory birds. The **FMC Green River** trona mine in **Wyoming** addressed the perching risk by burying power lines where feasible. FMC Green River also voluntarily followed **Wyoming's** executive order for greater sage-grouse and its Density Disturbance Calculation Tool methodology to minimize disturbances for new projects inside core habitat areas.

One Western Energy Alliance member reported using a three-mile radius No Surface Occupancy buffer around active leks and paying into a conservation fund managed by a working group for disturbances in priority or general habitat. Another utilizes a Wildlife Mitigation Plan approved by Colorado Parks and Wildlife (CPW) to conserve and protect greater sage-grouse in the project area. The company implements best management practices to further avoid adverse impacts.

Energy companies report they are avoiding leks during construction to minimize disturbance. For instance, **Carbon Power and Light in Wyoming** reported that its construction practices and equipment usage have been altered to protect greater sage-grouse per the [Governor's Executive Order 2011-5](#). Another **Wyoming** co-op, **Bridger Valley Electric Association**, also reported adhering to distance and timing restrictions during construction of power lines. Our survey results suggest that many companies seek to consolidate development as much as possible so as to utilize existing roads and right of ways.

There are also land trusts which have made operational changes to benefit greater sage-grouse. On the **Continental Divide Land Trust's** property with sage-grouse in **Colorado**, the Trust does not allow cattle grazing on the portion of the property where there is sage-grouse habitat and fence posts have been removed to reduce perches for predatory birds.

Research and Education

There are many unknowns when it comes to managing sagebrush ecosystems to the greatest benefit for sage-grouse. To that end, a wealth of research is ongoing to improve the state of the science. Educational outreach also is necessary to raise awareness about threats to sage-grouse and how people can help reduce those threats. Educational outreach through the Sage Grouse Initiative (SGI) and other groups has been critical to the increase in conservation efforts.

States

Idaho Gov. C.L. “Butch” Otter requested, and the Idaho legislature approved, a \$250,000 supplemental to the FY14 budget and another \$250,000 for the FY15 budget to fund additional lek monitoring during spring 2014, as well as habitat restoration on state and private lands.

Utah’s local working groups are active contributors to sage-grouse research, doing studies on lek use and usage of areas where pinyon-juniper have been removed. Utah’s Community-Based Conservation Program also held an **International Sage-Grouse Forum** in November 2014 to summarize current scientific information regarding sage-grouse conservation. **Utah Gov. Gary Herbert** delivered remarks at the forum.

Colorado Parks and Wildlife (CPW) maintains a research unit to conduct key projects in support of conservation delivery for Gunnison and greater sage-grouse. Research efforts include development of Colorado-specific estimates of sage-grouse behavioral and demographic variables, assessment and development of Colorado-specific habitat structure guidelines, and development of rangewide and population-specific seasonal habitat use predictions.

Wyoming’s legislature in 2014 awarded approximately \$2 million for additional research work. Since 2006, the Wyoming legislature and agencies have allocated more than \$50 million to conservation of greater sage-grouse through habitat improvements, conservation easements, research, and professional services.

The **California Department of Fish and Wildlife** makes annual recommendations to the state fish and game commission on greater sage-grouse hunting. Hunting has continued through 2014 only in the North Mono Zone, where populations have been at record high levels. The **Idaho Fish and Game Commission** sets annual rules on hunting seasons. The department has spent over \$100,000 on season setting and harvest assessment between 2010 and 2014.

Federal

SGI educates potential partners with a range of communication tools, including a website, Facebook page, Twitter, e-newsletter and outreach materials like its Science to Solutions series.

Research is the central focus of sage-grouse conservation work by the **U.S. Geological Survey** (USGS), which compiled an [inventory](#) of the more than 100 research products that it has completed since 2010. The research, guided by the [Greater Sage-Grouse National Research Strategy](#), has four focal areas: sage-grouse biology, habitat management, change agents and decision support. USGS spent over \$3.5 million in support of these research efforts.

USGS hosted interagency workshops with the **Fish and Wildlife Service** (FWS) on predictive modeling and genetics and co-hosted a workshop with the **Bureau of Land Management** (BLM) to identify key management questions and science needs related to the conservation, restoration and rehabilitation of sagebrush habitat for the benefit of greater sage-grouse in the Great Basin.

USGS also provided technical support to FWS on its new tool, the **Conservation Efforts Database** (CED), which compiles and analyzes data as part of its status review leading to a listing decision. The CED has an online platform where registered users can upload data, including spatial data.

FWS assisted in development of the **National Technical Team** report and **Conservation Objectives Team** report, both of which have informed the approaches taken to address threats to greater sage-grouse. FWS personnel have also engaged in research exploring biocontrol methods for controlling invasive grasses.

In June 2014, the **Forest Service** (USFS), BLM and other partners developed a **Fire and Invasive Species Assessment** to identify priority habitat areas and management strategies to reduce threats to greater sage-

grouse resulting from impacts of invasive grasses, wildfires and conifer expansion.

USFS is also studying genetic diversity and genecology of big sagebrush and associated plants to guide the choice of adapted populations for restoration in the Great Basin and Pacific Northwest.

Counties

Elko County, Nevada: Implemented pilot projects to identify and restore historical land management practices. The **Northeastern Nevada Stewardship Group** in the county also conducted demonstration projects on the application of various vegetation treatments that can be used to rejuvenate sagebrush rangelands. The Stewardship Group also carried out watershed assessments to help inform management of greater sage-grouse habitat.

Conservation Districts

Conservation districts provide educational tools on sage-grouse conservation. For example, **Bowman-Slope Soil Conservation District** in **North Dakota** held a workshop on “Grazing for Land, Livestock, Wildlife, & People,” attended by some 40 producers and natural resource professionals. The workshop provided tools to improve rangeland health, wildlife habitat and livestock production. **Butte Conservation District** in **South Dakota** developed a “monitoring packet” with a booklet and tools to allow grassland managers to independently monitor and assess their grazing lands in sagebrush habitats. These tools allow managers to determine habitat conditions and make short-term planning decisions for their grazing systems.

Conservation districts also contribute to research. **Sublette County Conservation District** in **Wyoming** investigated a previously undocumented phenomenon, where greater sage-grouse were observed consuming soil during the winter, seeking to document and understand the motivation of the behavior.

Industry and Nonprofits

Several companies and nonprofits are participating in

Science to Solutions Conifer Removal Restores Sage Grouse Habitat

Sage Grouse Initiative



In Brief: The invasion of juniper and other conifers into sagebrush rangelands degrades habitat for sage grouse. A new study in eastern Oregon found no active leks where conifers covered more than 4% of the land area. As important, active leks were nonexistent not only where trees were well established, but even in early stages of encroachment where many small trees were scattered across the landscape. The most cost effective approach for conifer treatment is to target early encroachment stands (Phase I and II), where small trees can be completely removed and the existing sagebrush community sustained.



Cutting juniper invading the sagebrush-steppe is cost-effective.
Photo: Jeremy Roberts, Conservation Media

Targeted Conifer Removal Can Help Restore Sage Grouse Habitat

If you could stand back and watch a timelapse video of the West's sagebrush country over the past 150 years, you would see a wave of juniper and piñon pines sweeping across the landscape. Conifers have expanded well beyond their historical limits due to a combination of fire suppression, historic overgrazing by domestic livestock and favorable climate conditions. This invasion of the trees is not good for sage grouse or the many other species that depend on sagebrush-steppe habitats.

A recent study in eastern Oregon, carried out by The Nature Conservancy (TNC), University of Idaho and SGI, asked not only how much conifer invasion is detrimental to grouse, but what size and spatial patterns of trees affect sage grouse lek activity (Baruch-Mordo et al. 2013). They found that no leks were active at even very low levels of conifer encroachment: as little as 4% conifer cover on the landscape. Further, the pattern of trees was important: active leks disappeared where small trees were scattered throughout the sagebrush, typical of early juniper encroachment.



The researchers examined western juniper spatial patterns in relation to active and inactive leks across 6.2 million acres of eastern Oregon. Map courtesy S. Baruch-Mordo et al.

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Science to Solutions: Saving Sage Grouse from Conifer Encroachment

research and educational efforts to improve sagebrush ecosystems.

Simplot Phosphate in **Utah** is partnering with Utah Division of Wildlife Resources to experiment on how to improve the success of sagebrush vegetation in reclamation areas. Simplot is also experimenting with aerial seeding to compare success rates to traditional hand broadcast methods.

Members of the **Nevada Mining Association** have completed grazing inventories on 75,000 acres of private land, habitat assessments on public and private lands, and ecological system inventories and preliminary ecological response treatment modeling on 1.2 million acres. The association estimates its members have invested over \$1.8 million on sage-grouse conservation over the last five years.



Trapping greater sage-grouse at night with lights. Jeremy Roberts / CONSERVATION MEDIA 2010

Noble Energy estimates spending \$800,000 since 2012 on sage-grouse habitat studies, noise studies and simulations, monitoring and mitigation.

M-I SWACO in **Wyoming** has focused on identifying the causes of re-vegetation successes and failures, looking at soils-handling techniques, weed control measures and seed mix development. Between 2011 and 2014, the company estimates investing over \$60,000 on strategies that will benefit greater sage-grouse and sagebrush habitats (that figure does not include the use of equipment for such projects).

Marathon Oil in **Wyoming** provided \$10,000 and participated in fieldwork to collect data on greater sage-grouse mortality and predation. The study data was also used to determine range and areas of sage-grouse nesting, brood rearing and critical winter habitat. A **Western Energy Alliance** member contributed nearly \$50,000 to the **Utah** Division of Wildlife Resources to fit

greater sage-grouse with radio or GPS tracking collars to determine lek locations and migration habits.

The **Nevada Wildlife Federation** wrote a handbook for landowners on how to manage greater sage-grouse on private land. Over 10,000 copies of the handbook have been distributed and a new edition is under development. The **Northwest Farmers Union** working in **Washington, Idaho** and **Oregon** included information on greater sage-grouse in its 2014 policy handbook. The **Idaho Farm Bureau Federation** has expended resources to help educate its members and encourage them to participate in sage-grouse conservation. The Western Landowners Alliance published an op-ed in the *Salt Lake Tribune* encouraging landowner participation in recovery efforts.

Land trusts also are active contributors to sage-grouse science. **Wood River Land Trust** in **Idaho** has monitored greater sage-grouse leks and conducted educational programs on sage-grouse conservation.

Management Tools/Projects

There has been increasing adoption of management tools and practices aimed at providing healthy sagebrush ecosystems for greater sage-grouse and other wildlife. This section describes some of the innovative methods being used for improved management. Of particular note is the extensive fence-marking and fence-removal work that has been done. Fences present a collision risk and provide roosts for predators. Almost every sector featured in this report has participated in reducing fence-related risks.

States

In 2014, **Nevada's Sagebrush Ecosystem Council** adopted the Nevada Conservation Credit System. The credit system is designed to offset impacts from human-caused disturbances through enhancements and protections that result in a net benefit for greater sage-grouse habitat in Nevada. The state has invested \$650,000 so far to create this system.

The **Colorado State Land Board** (SLB) has undertaken two stewardship projects to better manage and protect greater and Gunnison sage-grouse habitat on State Trust Land. First, it is completing a comprehensive habitat assessment of lands that support greater or Gunnison sage-grouse habitat. Second, it has undertaken a realignment of the Stewardship Trust to focus on species conservation, including greater and Gunnison sage-grouse.

In **Idaho**, 183 miles of fence have been marked, removed or modified through the efforts of the state wildlife agency, local working groups, private landowners, school groups and volunteers.

Federal

The **Natural Resources Conservation Service** (NRCS) played a leading role to increase understanding of the benefits of fence marking and promoting its application. Having marked or removed 350 miles of high-risk fences, NRCS estimates that **Sage Grouse Initiative** (SGI) fence marking prevents over 2,500 fence collisions annually

Conservation Districts

Conservation districts also are leaders in encouraging fence marking. **Nevada** conservation districts **Washoe Storey, Smith Valley** and **Lincoln County**, as well



Fence marking helps reduce collision risk. Jeremy Roberts / CONSERVATION MEDIA 2010

as **Bowman-Slope** in **North Dakota, Baker County** in **Oregon**, and **Butte County** in **South Dakota** all reported fence-marking efforts.

Industry and Nonprofits

The mining company **FMC's** Green River Facility in **Wyoming** donated \$15,000 to Wyoming Wildlife The Foundation (WWTF) in support of wildlife-friendly fencing conversions and publication of a guide on such fencing.

The **Wyoming Stock Growers Association** has been participating in the development of the Wyoming Conservation Exchange, a marketplace for greater sage-grouse habitat enhancement credits. The Wyoming exchange is before the **Fish and Wildlife Service** (FWS) for final approval and is expected to become operative in 2015. The **Sublette County Conservation District** has also been a partner in the development of the Wyoming conservation exchange and the Upper Green River Conservation Exchange.

Rangeland Fire Management

Fire in sagebrush ecosystems can damage or destroy habitat that sage-grouse depend on for breeding and forage. Burned areas may take decades to recover. Reducing the threat of fire is a leading focus for parties concerned about sage-grouse conservation.

States

Utah's original [conservation plan](#) did not address wildfire, but the plan was amended by the Plan Implementation Council to include the objective of not allowing more than 30% of habitat to be burned in any sage-grouse management area. The amendment also assured that all fires will be actively rehabilitated and reseeded if necessary, or monitored for successful rehabilitation if conditions exist that allow native shrubs, grasses and forbs to establish naturally.

Nevada created a **Wildland Fire Protection Program** (WFPP) to provide year-round, mobile wildland firefighters who can be positioned in areas of critical need throughout the state. The WFPP also implements pre-suppression activities, prevention programs, and short- and long-term habitat restoration and rehabilitation after fires. Since the program began in 2013, the state has invested \$3.9 million.

In **California**, the Rush Fire of 2012 burned more than 300,000 acres – including some greater sagebrush habitat --and the local working group is meeting monthly to develop an updated conservation plan and implement actions.

Idaho increased its number of **Rangeland Fire Protection Associations** (RFPAs) from three to five. These associations facilitate increased coordination between private landowners and agency (local, state and federal) to improve initial attack on wildfires. Faster response times translate into reductions in acres burned. The five RFPAs cover approximately 3.6 million acres (686,000 of those acres on private lands) and include 230 ranchers and other private citizens.

Federal

Bureau of Land Management (BLM) has implemented strategies and tactical actions for wildland fire operations



Karen Wattenmaker

to benefit sage-grouse, including using predictive services to distribute firefighting resources and promoting improved firefighter awareness of the importance of sagebrush habitat. Almost 7 million acres have been treated by BLM after wildfires at a cost of almost \$110 million. BLM implements fuel treatments to reduce the potential for wildfire impacts to sage-grouse habitat. Those treatments mainly focus on building and maintaining fuel breaks, reducing conifer encroachment and treating invasive species. Over the past five years, BLM treated more than 900,000 acres at a cost of \$67 million.

The Forest Service (USFS) uses fuels management strategies to aid in fire suppression and reduce fire extent. The agency's wildland fire response operations include preparedness, prevention and suppression activities. In 2014, USFS treated more than 22,000 acres in sage-grouse habitat to reduce fuel loads.

Post-fire, USFS has its **Burned Area Emergency Response** program, but the agency says that in most cases, only a portion of the burned area is actually treated. USFS notes that treatments after fires should be done as soon as possible—"time is critical if treatments are to be effective."

In 2013-2014, the **Fish and Wildlife Service** (FWS)



Burned rangeland can take decades to recover. Karen Wattenmaker

worked with the **Western Association of Fish and Wildlife Agencies** (WAFWA) through a cooperative agreement to create the **Wildfire and Invasive Species Initiative** to identify existing tools and remaining gaps to preventing, suppressing and ultimately restoring areas at risk from invasive grasses or rangeland fire. This effort resulted in a [Department of Agriculture \(USDA\) report](#) on using resistance and resilience concepts to reduce the impacts of fire and invasive grasses.

Conservation Districts

Paradise Sonoma Conservation District led projects to re-seed and re-vegetate burned areas in **Nevada**.

The county reports expending over \$65,000 beginning in FY13 and extending through FY15, not counting donated and volunteer time. The county expects the level of expenditure to remain relatively constant into the foreseeable future.

Lincoln County Conservation District in **Washington** has partnered with BLM to offer landowners the opportunity to implement fuel breaks,

which can help stop or control wildfires, along roadsides on their property.

Industry and Nonprofits

The **Idaho Farm Bureau Federation** has been closely collaborating with the BLM and Idaho Department of Lands to help organize RFPAs.

Members of the **Oregon Cattlemen's Association** voluntarily participate in the state's 18 RFPAs, protecting private and public lands from wildland fires, which are the primary threat to greater sage-grouse in Oregon.

A **Western Energy Alliance** member reported restoring historical wildfire burn areas near greater sage-grouse populations in **Wyoming**.

When doing prescribed burns, the **Rocky Mountain Elk Foundation** tries to mimic what science indicates is a natural fire frequency. Mosaic patterns are used during the prescribed burns to ensure that islands of sagebrush are untreated to help provide a seed source for regeneration after the disturbance and a diverse age class structure in the plant community.

PART II

Planned Conservation Efforts, 2015 and Beyond

Not only have the diverse entities featured in this inventory made substantial contributions to greater sage-grouse conservation thus far, but more is planned for 2015 and beyond. In addition to the continued implementation of conservation plans, the following provides an overview of what is yet to come.

States

Nevada Gov. Brian Sandoval has requested legislative approval in his FY 15-17 Biennial Budget for over \$5.1 million for **Sagebrush Ecosystem Program** efforts, including a commitment of \$1 million each year for critical habitat protection and restoration projects in sage-grouse management areas. The state has requested an additional \$8.6 million to support statewide programs like its **Wildland Fire Protection Program** (WFPP) that address the threats to greater sage-grouse. Since 2012, Nevada's resource agencies have spent over \$7.4 million (a compilation of state, federal and local funds) in support of greater sage-grouse conservation efforts to treat 28,000 acres of state, private and federal lands. Nevada is also working on a new mapping layer due out in May 2015 to identify locations of core habitat being threatened by pinyon-juniper encroachment; the map will be used to guide future decisions regarding removal projects.

Idaho Gov. C.L. "Butch" Otter's FY16 budget proposal includes \$750,000 for greater sage-grouse management, including commitments to habitat work, mitigation planning and conservation on endowment and private lands.

In 2015, **Wyoming** began a planned review of the state conservation plan, which has been in place since 2007, to update scientific data and to make recommendations

for changes based on the latest science.

South Dakota Department of Game, Fish and Parks (SD GFP) has a partnership in place through 2017 with the Intermountain West Joint Venture, Pheasants Forever, and the Natural Resources Conservation Service's (NRCS) to fund a biologist working on Sage Grouse Initiative (SGI) implementation. SD GFP has spent more than \$40,000 towards this position.

Washington Department of Fish and Wildlife (WDFW) is working with the U.S. Fish and Wildlife Service (FWS) and agricultural and livestock operators to develop a Candidate Conservation Agreement with Assurances (CCAA) for greater sage-grouse. The state is in the middle of a multi-year effort to update management plans for all state-owned wildlife areas. The first plan being updated is for the Swanson Lakes Wildlife Area, which is in greater sage-grouse habitat. This effort will align management practices on the wildlife area with WDFW objectives, including shrub-steppe integrity and greater sage-grouse recovery.

The **Colorado State Land Board** (SLB) has undertaken a realignment of the Stewardship Trust to focus on species conservation, including greater and Gunnison sage-grouse. SLB staff has nominated properties to the Stewardship Trust based on greater- and Gunnison sage-grouse habitat. All SLB lands that contain or are



Jeremy Roberts / CONSERVATION MEDIA 2010

adjacent to leks have been nominated. The Board’s final action on the Stewardship Trust Realignment is expected in April 2015.

Idaho is conducting numerous research projects, including on the nutrition and chemical characteristics of sagebrush that greater sage-grouse consume, and on the effects of different spring grazing intensities on greater sage-grouse. An additional Rangeland Fire Protection Association (RFPA) is expected to be operational in the state by the 2015 fire season and citizens are interested in developing additional RFPAs.

North Dakota Game and Fish Department will complete the cooperative monitoring project it funded and is collaborating with the Little Missouri Grazing Association to provide recommendations on best management practices for grazing livestock in greater sage-grouse habitat.

Montana will continue working with other states to collect feathers on leks for genetic analysis to determine gene flow between leks. This work should increase understanding of landscape features that support (or inhibit) connectivity to more effectively target conservation within and between core areas.

Federal

Bureau of Land Management

In 2015, BLM will finalize 14 proposed land use plans that include conservation measures to maintain or

increase greater sage-grouse distribution and abundance. To facilitate implementation of greater sage-grouse conservation measures outlined in the plans, while simultaneously allowing for targeted new development, BLM is supporting the creation of compensatory mitigation programs and developing instruments to enhance durability and demonstrate “additionality.”

BLM is participating in three interrelated initiatives to help ensure its plans are effectively implemented once the Records of Decision are signed.

1. Development of out-year governance arrangements to encourage coordination and integration of conservation efforts across agencies and jurisdictions.
2. Working with other members of a newly created Rangeland Fire Task Force to prepare action plans for better addressing rangeland fire, a threat to sage-grouse. The Task Force and its reports were mandated by [Secretarial Order 3336 Rangeland Fire Prevention, Management and Restoration](#).
3. Working with partners to develop two regional greater sage-grouse implementation guides – one for the Rocky Mountain region and one for the Great Basin region. The guides will summarize commitments in the plans and identify policy and procedural guidelines to facilitate plan implementation across field offices and jurisdictional boundaries.

BLM is committed to seeking funding to fully implement its plans. The Bureau also wants to work with other partners to coordinate funding streams to effectively target priority activities.

To focus fire operations, fuels management and post-fire recovery on sagebrush habitats for the benefit of greater sage-grouse, BLM will continue to shift resources and realign staff to areas where fire suppression and vegetation treatments will have the greatest possibility of enhancing greater sage-grouse habitat. BLM also wants to increase coordination with NRCS's SGI.

BLM is leading the development of a **National Seed Strategy** with 11 other federal agencies and will be gathering and incorporating feedback from non-federal partners, such as the **Western Governors' Association**. The strategy is scheduled to be released at the National Native Seed Conference in April 2015.

U.S. Forest Service

The agency will complete revision of its 21 Forest Plans addressing greater sage-grouse in 2015. Upon completion of the plans, USFS will review the plans to identify the most strategic areas to scale up and accelerate greater sage-grouse conservation. USFS acknowledges that adequate funding and coordination with agencies and organizations with differing priorities and planning timeframes will be a challenge, but hopes that continued frequent communication will minimize difficulties.

Anticipated expenditures by USFS for sage-grouse conservation in 2015 are expected to continue at the same average levels as the last several years, i.e. \$1.3 million. Implementation of Forest Plans is projected to cost another \$1.5 million per year over the three-year implementation period.

USFS will continue working with FWS to offer a Candidate Conservation Agreement (CCA) for permittees on Forest Service lands.

Natural Resources Conservation Service

NRCS has committed another \$207 million for SGI work beginning in 2015 and, combined with partner match, brings the total SGI investment to over \$760 million. One partner, ConocoPhillips Company, contributed \$1 million in 2015 to support Strategic Watershed Action Team (SWAT) and SGI. NRCS estimates that with such resources, SGI will be able to nearly double past achievements and conserve 8 million acres by 2018.

U.S. Fish and Wildlife Service

Having collected information to populate its Conservation Efforts Database (CED), FWS will use it to assess conservation efforts as part of its Endangered Species Act (ESA) status review. FWS is also working with several partners to develop new predictive models to assist in the status review. Per its settlement agreement, FWS has said it will issue a "warranted" or "not warranted" decision by Sept. 30, 2015.

FWS will continue to provide technical assistance to state and federal partners on land management plans; develop new science and tools to answer questions about greater sage-grouse and their habitat needs; and work with private landowners and others who want to contribute by putting effective conservation measures in place. For instance, in 2015 FWS will have programmatic CCAs in place for every county in Oregon in greater sage-grouse range.

U.S. Geological Survey

USGS will continue to prioritize its research and technical assistance efforts on sage-grouse and sagebrush going forward. In 2015, USGS plans to again provide more than \$3.5 million to support this work. Technical support to the FWS CED will also continue.

Counties

Local Working Groups operating in numerous counties will continue their concerted efforts to coordinate greater sage-grouse conservation activities.

Jackson County, Colorado: The Planning Commission is looking at amending county zoning regulations and the county's comprehensive master plan to better address the protection of greater sage-grouse habitats and to mitigate adverse impacts from proposed development.

Conservation Districts

Smith Valley Conservation District in Nevada is pursuing additional funding for its greater sage-grouse conservation work and will continue efforts to eradicate noxious weeds.

Bowman-Slope Soil Conservation District in North Dakota will continue to assist producers and landowners in making decisions regarding greater sage-grouse and their habitat.

Foster Creek Conservation District in **Washington** estimates it will spend over \$80,000 per year for its portion of the Douglas County Multiple Species Habitat Conservation Plan (\$4.8 million for the expected 50-year life of the plan).

Industry and Nonprofits

Western Energy Alliance member responses indicated intentions to minimize project impacts to sage-grouse and to improve habitat for the species. Continued work with partners in developing conservation plans and implementing restoration efforts is expected.

Marathon Oil in **Wyoming** will continue to provide personnel to participate in the Bighorn Basin Local Sage Grouse Work Group. Marathon will also continue to evaluate and participate in greater sage-grouse and other wildlife management and conservation projects in the Bighorn Basin.

Noble Energy will partner with third-party consultants and USGS to implement further studies if it decides to develop an area it has leased.

Another oil and gas company reported that investments in pad reclamation and noxious weed control will continue. Additionally, new development will be conducted using existing pads, Rights of Way and roads wherever possible to limit new disturbance areas.

Simplot Phosphate in **Utah** has plans for additional sage-grouse conservation investments, plus the company is partnering with the Utah Department of Wildlife Resources on additional projects.

M-I SWACO in **Wyoming** will continue monitoring of greater sage-grouse habitat sites. The company is also planning for the enhancement of past reclamation projects, going back into old sites to establish small sagebrush islands that will function as future sagebrush seed sources.

The **FMC Green River** trona mine in **Wyoming** is working towards a “beyond-compliance approach” to greater sage-grouse conservation. The company will also continue its involvement with the Wyoming Mining Association Trona Subcommittee and the greater sage-grouse conservation work being initiated by that group.

The bentonite mining company **Wyo-Ben** in **Wyoming** will continue funding greater sage-grouse mitigation

research and Habitat Conservation Plan production and implementation.

Nevada Mining Association members are committed to continue work to preserve, protect and enhance sagebrush habitat.

The **California Farm Bureau Federation** will continue participating in its work with ranchers to proactively address threats that degrade greater sage-grouse habitat and diminish overall grazing suitability.

The **Colorado Cattlemen’s Agricultural Land Trust** plans to continue working at a pace at least equal to that of the past five years, during which the Trust protected at least 30,000 acres of sage-grouse habitat, more than double what it protected in the previous 15 years combined.

The **Wyoming Stock Growers Association** has already reached out to over 1,000 landowners about participating in the CCAA/CCA. This initiative will continue through at least September 2015.

The **Thunder Basin Grasslands Prairie Ecosystem Association** in **Wyoming**, in partnership with its members and other state and regional entities, will continue to implement sound conservation measures that benefit greater sage-grouse and other sagebrush obligates. The association also plans to conduct joint research with entities such as the USDA Agricultural Research Service and the University of Wyoming in the sagebrush-steppe biome.

The **North American Grouse Partnership** will continue to consult with state and federal land and resource management agencies and provide the expertise of its grouse scientists to aid in the implementation of plans and projects for the benefit of greater sage-grouse and their habitat.

The **Nevada Wildlife Federation** is printing a new edition of its landowner handbook on managing greater sage-grouse on private lands.

The **Wood River Land Trust** in **Idaho** plans to invest staff resources towards working with landowners to develop a CCAA, continued lek monitoring and habitat restoration, private lands protection, and education.

The **Nevada Land Trust** is committed to investing its skills and resources in greater sage-grouse conservation going forward.

Gunnison Sage-Grouse

Part I:

Conservation Efforts Completed To-Date

The Gunnison sage-grouse is a species found in Colorado and Utah that was listed as “threatened” by the U.S. Fish and Wildlife Service (FWS) in November 2014. The following describes some of the conservation actions taken for Gunnison sage-grouse.

State of Colorado

Colorado contributed to development of the [Gunnison Sage-Grouse Rangewide Conservation Plan](#).

Since 2005, **Colorado Parks and Wildlife** (CPW) has invested more than \$42 million in Gunnison sage-grouse conservation.

CPW finalized an umbrella Candidate Conservation Agreement with Assurances (CCAA) with FWS for the Gunnison sage-grouse in 2006. Thus far, a total of 40 Certificates of Inclusion encompassing more than 90,000 acres have been completed at a cost of over \$500,000. A CCA also applies on almost 400,000 federal acres of occupied Gunnison sage-grouse habitat, covering roughly two-thirds of the bird’s occupied habitat.

Gunnison County, Colorado

A committee appointed by the Gunnison and Saguache County Commissioners has been working since 1995 to implement programs and strategies for conservation of the species pursuant to the [Gunnison County Strategic Plan](#).

Gunnison County adopted [regulations](#) for the development of geothermal resources for electricity generation that require pre-application conference and consultation with the county’s Wildlife Conservation Coordinator and identification of possible mitigation suggested to protect sage-grouse habitat. The county also [amended its land use resolution](#) on noxious weed control to similarly require a pre-application conference for any proposed disturbance within Gunnison sage-grouse habitat with site-specific analysis utilizing the county’s Habitat Prioritization Tool.

Montrose County, Colorado

Montrose County has [regulations](#) requiring a separate

development permit to be secured prior to issuance of a land use approval within occupied Gunnison sage-grouse habitat. Mitigation may also be required for approval. The county commissioners also authorized seasonal closure of a road running through Gunnison sage-grouse habitat to reduce disturbance during lekking and brooding periods. In the last two years, the county estimates it has spent over \$55,000 on conservation measures.

\$42 million

Amount Colorado Parks and Wildlife (CPW) has invested in Gunnison sage-grouse conservation since 2005.

San Miguel County, Colorado

San Miguel County has a [land heritage program](#) to protect wildlife habitat, open space, riparian areas and encourage viable agriculture. Since the program’s 2000 launch, almost 3,000 acres of Gunnison sage-grouse habitat has been protected through conservation easements and/or fee title acquisitions.

San Miguel County helped fund a coordinator position for the San Miguel Basin Gunnison Sage-Grouse Working Group. The coordinator facilitated meetings, helped with habitat projects and provided public education.

Part II:

Planned Conservation Efforts, 2015 and Beyond

Gunnison County, Colorado

Gunnison County will continue developing Certificates of Inclusion (CIs) under the umbrella CCAA for Gunnison sage-grouse. Six additional CIs are under development and if completed will enroll an additional 21,000+ acres and exceed the enrollment goal set for the CCAA.

Ouray County, Colorado

Ouray County is in the process of adopting regulations to further protect Gunnison sage-grouse and their habitat.

San Miguel County, Colorado

In 2015, San Miguel County will complete their project to improve wet meadow habitat for Gunnison sage-grouse being conducted in coordination with the San Miguel Basin Gunnison Sage-Grouse Working Group and the nonprofit Uncompaghe Com.

CONTRIBUTORS

States

State of California
State of Colorado
State of Idaho
State of Montana
State of Nevada
State of North Dakota
State of Oregon
State of South Dakota
State of Utah
State of Washington
State of Wyoming

Federal Agencies

Bureau of Land Management
Natural Resources Conservation Service
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Geological Survey

Counties

Beaver County, Utah
Elko County, Nevada
Garfield County, Colorado
Gunnison County, Colorado
Iron County, Utah
Jackson County, Colorado
Montrose County, Colorado
Petroleum County, Montana
Routt County, Colorado
San Miguel County, Colorado
Sweetwater County, Wyoming
Washington County, Idaho

Conservation Districts

Baker County Soil and Water Conservation
District – Oregon
Bowman-Slope Soil Conservation District –
North Dakota
Buffalo Conservation District – South Dakota
Butte Conservation District – South Dakota
Carson Valley Conservation District - Nevada
Crook County Soil and Water Conservation
District – Oregon
Foster Creek Conservation District – Washington
Laramie Rivers Conservation District – Wyoming
Lincoln County Conservation District – Nevada
Lincoln County Conservation District- Washington

Malheur County Soil and Water Conservation
District – Oregon
Niobrara Conservation District – Wyoming
North Yakima Conservation District – Washington
Owyhee Conservation District - Idaho
Paradise Sonoma Conservation District – Nevada
Powell Clarks Fork Conservation District – Wyoming
Smith Valley Conservation District – Nevada
Sublette County Conservation District – Wyoming
Sweetwater County Conservation District – Wyoming
Washoe-Storey Conservation District – Nevada
Weiser River Soil Conservation District - Idaho

Industry and Nonprofits

Bridger Valley Electric Association
California Cattlemen's Association
California Farm Bureau Federation
Carbon Power and Light Inc.
Chelan-Douglas Land Trust
Colorado Cattlemen's Agricultural Land Trust
The Conservation Fund
Continental Divide Land Trust
Deschutes Land Trust
Eagle Valley Land Trust
Ely Gold Corp.
FMC Corporation
Idaho Farm Bureau Federation
Marathon Oil Company
M-I SWACO
Nevada Land Trust
Nevada Mining Association
Nevada Wildlife Federation
Noble Energy
North American Grouse Partnership
Northwest Farmers Union
Oregon Cattlemen's Association
OXY USA
Rocky Mountain Elk Foundation
Simplot Phosphate
Solitario Exploration and Royalty Corp.
Thunder Basin Grasslands Prairie Ecosystem Association
Western Energy Alliance
Western Landowners Alliance
Wood River Land Trust
Wyo-Ben
Wyoming Stock Growers Association

ACRONYM GLOSSARY

BLM – Bureau of Land Management

CA – Conservation Agreement

CCA – Candidate Conservation Agreement

CCAA – Candidate Conservation Agreement with Assurances

CCALT - Colorado Cattlemen’s Agricultural Land Trust

CDFW – California Department of Fish and Wildlife

CED – Conservation Efforts Database

CI – Certificate of Inclusion

COT – Conservation Objectives Team

CPW – Colorado Parks and Wildlife

ESA – Endangered Species Act

FWS – U.S. Fish and Wildlife Service

IM – Instruction Memorandum

NRCS – Natural Resources Conservation Service

PPR - Parachute-Piceance-Roan

RFPA – Rangeland Fire Protection Association

SD GFP – South Dakota Department of Game, Fish and Parks

SGI – Sage Grouse Initiative

SGIT – Sage-Grouse Implementation Team

SLB – State Land Board

SWAT – Strategic Watershed Action Team

USFS – U.S. Forest Service

USGS – U.S. Geological Survey

WAFWA – Western Association of Fish and Wildlife Agencies

WDFW – Washington Department of Fish and Wildlife

WFPP – Wildland Fire Protection Program

WGA – Western Governors’ Association

WWTF – Wyoming Wildlife The Foundation

About the Inventory

WGA released its first annual inventory on conservation initiatives for sage-grouse in 2011. The first three years of the inventory focused on state and local government efforts.

In 2014, states and counties were again invited to share their most recent conservation efforts. In addition, WGA contacted federal agencies, conservation districts, tribes, industry (including oil and gas, electric co-ops, and mining) and nonprofits (including agricultural associations, land trusts, and wildlife organizations). Some respondents (industry, nonprofits) had the option

to remain anonymous and have their data aggregated within this report. As a result, the report contains general statements that are not attributed to a particular contributor. A list of contributors appears with this report.

In addition to this report, WGA has published a “2014 Appendix” with detailed information about all the activities reported by states and local governments between 2011 and 2014. All of the previous sage-grouse inventory reports and appendixes are available on the [WGA website](#).



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