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Utah's Sage-Grouse Habitat Mitigation Program

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Do you have sage-grouse on your land? Have you ever wondered how that might be turned into a benefit to you or your property? Or how you can help prevent these birds from declining? Utah's Sage-grouse Compensatory Mitigation Program (CMP) may provide an opportunity for you.

What's the deal with sage-grouse?

Greater sage-grouse are chicken-like birds that depend on the sagebrush landscapes of western North America. They need big, open, connected areas of sagebrush to nest and raise their young. The areas that the bird calls home are referred to as "habitat."

Good habitat for sage-grouse has sagebrush for them to eat and nest under, but also has grasses and other plants around the sagebrush (Connelly et al 2000). This combination of plants provides food as well as protection from predators and harsh weather.



Sage-grouse prefer wide open sagebrush expanses.

If you have sage-grouse on or near your land, you may be able to improve habitat for them, and be paid by companies that have disturbed sage-grouse habitat elsewhere.

Good habitat doesn't have trees in it (Baruch-Mordo et al. 2013), where predatory birds, like ravens, can perch. Sage-grouse also prefer landscapes without development, like oil and gas wells (Holloran 2010) or housing, nearby.

Over the years, because about half of the original sagebrush ecosystem has been lost, sage-grouse populations have declined. In response to these declines, the U.S. Fish and Wildlife Service considered listing the sage-grouse for protection under the Endangered Species Act. Thanks to the unprecedented collaborative efforts of private, local, state, and federal partners, the bird was not listed (USFWS 2015).

However, there is still work to be done to ensure that sage-grouse populations stay healthy and have the habitat they need to survive. This is where Utah's CMP program comes in.

When people or companies have rights to develop land in sage-grouse habitat, they often try to do

their best to avoid impacting the grouse, or at least make the smallest impact possible. Sometimes, though, there may be no way to avoid some disturbance to sage-grouse habitat. When that happens on public lands, the people or companies responsible for the disturbance may be asked to “mitigate” the impact they have. That means they need to make up for the unavoidable damage done to sage-grouse habitat in one place, usually by creating, protecting or improving habitat in another place.

How does this work?

In Utah, if sage-grouse habitat on public lands is disturbed, such as by an oil or gas well, there’s usually a federal or state agency involved in permitting that activity in the first place. If it’s in an area that’s been identified as a Utah sage-grouse management area (SGMA), then the company might be asked to mitigate, or might choose to do so voluntarily.

Habitat mitigation for sage-grouse can take several forms. Often, it involves a developer paying another party, like a private landowner, to create or improve habitat somewhere else sage-grouse will benefit. In other cases, it could mean helping purchase a conservation easement to permanently protect sage-grouse habitat.

Do I have to have sage-grouse on my property to participate and get paid to improve habitat?

No, you don’t need to have sage-grouse actively using your property, but the land does need to be adjacent to areas used by the birds. For example, if there is a lek (strutting ground) near your property and your property has sagebrush on it, you likely qualify for the program. This ensures that projects happen close enough to where the birds live that they can benefit from the work.

What does it mean to improve sage-grouse habitat with this program?

The most common habitat improvement projects involve removing conifer trees (like juniper and

pinyon) that have grown up into sagebrush areas. When trees become scattered throughout sagebrush areas, sage-grouse stop using those locations. Removing the trees makes the areas suitable for grouse again. Landowners can remove trees themselves, or contract with an agency, such as the Natural Resources Conservation Service (NRCS) or the Division of Wildlife Resources (DWR), to help fund and implement projects. Other types of projects might be possible, but should be discussed in advance (as with any project) with a biologist familiar with the mitigation program.



Juniper trees can encroach on sagebrush, making the area undesirable for sage-grouse to live.



Clearing junipers opens up sage-grouse habitat.

Does my land qualify for this program?

First you would need to determine if you have sage-grouse on your land, or close by. If so, you likely qualify. Although not all sage-grouse populations in Utah are inside an [SGMA](#), most are. Second, in order for a project to count, the habitat needs to be able to be improved to the point that it qualifies as “functional habitat.” If your land has sage-grouse habitat already in great condition, you might want to consider a conservation easement

instead. You can get help determining the quality of the sage-grouse habitat, or potential sage-grouse habitat, on your land from a DWR biologist. USU Wildlife Extension (www.utahcbcp.org) may also be able to assist you with this process. They will look for things like percent sagebrush cover, where conifer trees are spreading, and what else is growing around the sagebrush.

For a map of the SGMAs and other information, visit <https://wildlife.utah.gov/greater-sage-grouse.html>

What is “functional habitat”?

“Functional habitat” is sage-grouse habitat created through a credit generation project. It must meet several key requirements, including: it is adjacent to habitat that grouse are currently using, has a live sagebrush canopy of at least 10%, and no more than 1% canopy cover of conifer trees (e.g., junipers) over 0.5 meters (20 inches) in height. Corridors (areas of land that facilitate sage-grouse movement between two or more areas of occupied habitat) can also be improved. These also must meet thresholds, including limits on tree cover, and minimum amounts of other plants that sage grouse need. Corridors must be at least 100 acres in size with a width of at least 2,000 feet. Biologists certified through the Utah Department of Natural Resources (DNR) must be consulted to determine whether these parameters are met.

Debits and credits

The mitigation program uses a system of debits and credits. A debit is 1 acre of disturbance that will last 5 or more years. A credit is 1 acre of improved habitat. Although different regulatory agencies can require different ratios, the state of Utah recommends a 4:1 ratio. That is, for every 1 acre of permanent disturbance, 4 acres of habitat should be improved.



Sage-grouse raise their broods in areas like this, with sagebrush and a healthy understory of grasses and other plants.

How does the payment system work?

The DNR maintains a database, called the Credit Exchange Service (CES) of companies that are looking for mitigation projects to pay for, and private landowners who would like to be paid for projects. That’s how you connect with people interested in buying credits, but it would be up to you to negotiate a price. The state isn’t interested in setting rates or even knowing what compensation you negotiate. They just keep track of the number of acres that are improved and ensure that improvements on private land are maintained so they continue helping sage-grouse for the life of the disturbance that is being offset. Credit owners, who benefit monetarily through this system, are required to pay some fees to use the credit tracking system. More details are available at the program website.

Are private landowners required to use this system?

No. Disturbances to sage-grouse habitat on private land are not regulated. The state of Utah will use this mitigation system to meet its own internal requirements. And federal agencies, such as BLM and the Forest Service, are welcome to use this system when working with development project proponents, and may require mitigation that could be managed through Utah’s system.

Do I need advance approval for projects to qualify?

Yes. Projects to create or protect habitat must be verified by the DNR before they can be turned into credits. For information on pre-approval or other questions, contact Tyler Thompson, DNR's Watershed Program Director, at 801-510-7062, tylerthompson@utah.gov. USU Wildlife Extension professionals can also assist with understanding the program.

My land is in great condition, and sage-grouse use it already. What options do I have to participate?

The Utah Compensatory Mitigation Program, while mostly focused on habitat improvement, also has an option for habitat protection. "Protected habitat" is habitat occupied by sage-grouse that is preserved from permanent disturbance through a conservation easement for at least 20 years and is maintained in sage-grouse habitat (nesting, brood-rearing, wintering, or corridor) for the length of the easement. Landowners with high-quality sage-grouse habitat who are interested in conservation easements may be able to find funding for an easement through the CMP. Anyone interested in this should contact both a qualified local land trust as well as the DNR to discuss their options. There is no guarantee that adequate funds will be available, but there may be other options for easements for interested landowners.

For more information, visit the program's website at <https://watershed.utah.gov/sgmitigation/> or contact tylerthompson@utah.gov or lorien.belton@usu.edu.

References

Baruch-Mordo, S., J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J.M. Kiesecker, M.J. Falkowski, C.A. Hagen, and K.P. Reese. 2013. Saving sage-grouse from the trees: a proactive solution to reducing a key threat to a candidate species. *Biological Conservation* 167:233-241.

Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildlife Society Bulletin* 28:967-985.

Holloran, M.J., R.C. Kaiser, and W.A. Hubert. 2010. Yearling Greater Sage-Grouse Response to Energy Development in Wyoming. *The Journal of Wildlife Management* 74:65-72

USFWS. 2015. Endangered and threatened wildlife and plants; 12-month finding on a petition to list greater sage-grouse (*Centrocercus urophasianus*) as an endangered or threatened species. *Fed. Regist.* 80, 59858-59942

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