

ON THE RANGE, WATER IS LIFE



HELP CONSERVE WET HABITATS IN
SAGEBRUSH COUNTRY TO BENEFIT
WORKING LANDS AND WILDLIFE



BUILD DROUGHT RESILIENCE • BOOST FORAGE PRODUCTIVITY • BENEFIT WILDLIFE



MESIC HABITAT
refers to land with a well-balanced supply of moisture throughout the growing season. It includes streamsid es (riparian areas), wet meadows, springs and seeps, irrigated fields and high-elevation habitats.

Top: Sage grouse chicks become increasingly dependent upon productive mesic areas as summer heat dries out the range. Bottom: Healthy mesic habitats act like sponges helping to capture, store, and slowly release water. Photos by USFWS, Ken Miracle, and Joe Wheaton.

CONSERVING THE WEST'S EMERALD ISLANDS

In the arid American West, water is as good as gold. Wet “mesic” habitats—places where water meets land—comprise less than 2 percent of the entire landscape. Yet neither people nor wildlife can survive without them, as evidenced by the early homesteaders who followed scarce water when they settled the West. Today, most vital water resources are on private lands.

Protecting and restoring these “emerald islands” in the desert benefits livestock ranching and wildlife, including sage grouse. Western ranchers know that the next drought could be just around the corner. Practices that boost riparian, wet meadow, and watershed function provide ranchers with drought insurance by supplying more reliable water and forage production during lean times. Encouraging water to stay on the land longer makes good sense for their bottom line.

As summer heat dries out soils in sagebrush uplands, sage grouse—along with livestock and most wildlife species—follow the green line seeking out wetter, more productive areas. These mesic habitats serve as grocery stores providing the protein-rich forb and insect foods that help newly hatched sage grouse chicks grow and thrive.

Recognizing the importance of mesic habitats in the desert, the Sage Grouse Initiative (led by USDA's Natural Resources Conservation Service) is working with landowners to extend conservation practices beyond sagebrush uplands to include protection, restoration, and enhancement of wet meadows, riparian areas, and other mesic habitats. SGI and our partners provide technical and financial assistance for strategic practices and easements to help landowners scale-up conservation of the West's precious water resources.

WHAT CAN YOU DO?

Through the Sage Grouse Initiative, NRCS and its partners are helping ranchers scale up the following key conservation actions that benefit working lands and wildlife in sagebrush country.

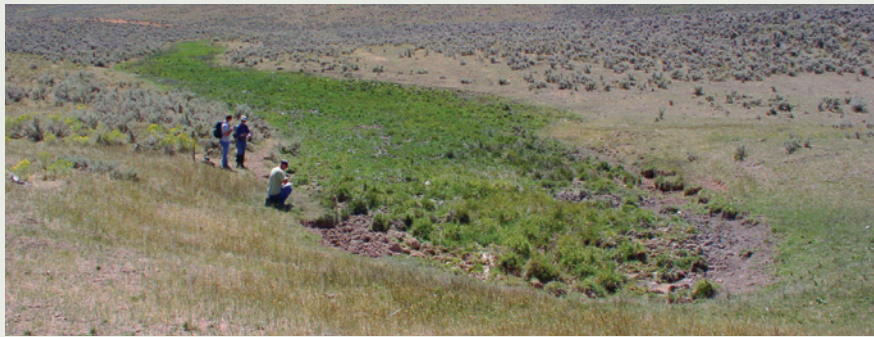
✓ Grazing Management



Riparian recovery with improved grazing management. Photos by BLM Elko District, Nevada.

Because riparian and wet meadow areas stay greener longer into the summer than surrounding uplands, they often require different grazing management strategies. Implementing grazing plans with specific riparian and wet meadow goals can boost the health and productivity of these vital resources.

✓ Spring Protection and Enhancement



Springs and seeps are rare resources in the sagebrush sea, which can make them prone to degradation and in need of management. Photos by Jeremy Maestas and Ed Contreras.

In order to sustain water and forage on the range, it's important to enhance mesic habitat conditions by: considering springs and seeps in grazing management strategies; minimizing impacts when developing new livestock water, and retrofitting or redeveloping existing spring developments.

✓ Low-Tech Restoration



Beaver Dam Analogues (left) and Zeedyk structures (right) are two low-tech approaches for mesic habitat restoration. Photos by Jeremy Maestas and Nate Seward.

Active restoration may be necessary in some instances to enhance degraded riparian areas, meadows, swales, and other mesic areas. A variety of simple, cost-effective restoration structures can be installed by hand, using 'sticks and stones' to boost hydrologic function and productivity.

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WHAT CAN YOU DO? *(continued)*

✓ Conifer Removal



Removing invading juniper and other conifers from productive mesic habitats helps sage grouse access 'green groceries'. Photos by Jeremy Maestas. Targeted conifer removal can provide tree-free movement corridors for sage grouse while improving late-season water availability and forage production.

✓ Mechanical Restoration



Restoring this deeply incised meadow (left) required a pond-and-plug approach (right) to capture sediment, raise the water table, and rehydrate the floodplain. Photos by NRCS Utah.

In limited situations where resource values are high, more costly mechanical restoration techniques may be appropriate to restore down-cut wet meadows to their historic floodplains.

✓ Easements



Protecting open ranchlands benefits families, wildlife, and the Western way of life. Photos by USDA-NRCS and The Pioneers Alliance.

Conservation easements are a tool available to compensate private landowners for permanently protecting the most critical meadows and other mesic areas in sage grouse strongholds, ensuring working lands remain intact and productive for future generations.



Want To Participate?

- > Contact your local USDA Service Center at offices.sc.egov.usda.gov
- > Visualize mesic resources using the SGI Interactive Web App: map.sagegrouseinitiative.com

Sage Grouse Initiative is a partnership-based, science-driven effort that uses voluntary incentives to proactively conserve America's western rangelands, wildlife, and rural way of life. This initiative is part of Working Lands For Wildlife, which is led by USDA's Natural Resources Conservation Service.