

**Upland Wildlife Habitat Management  
Conservation Practice Specification  
for Greater Sage-grouse ESA Predictability**

**NV-645-WLFW- SPEC  
February 2014**

**Natural Resources Conservation Service, Nevada**

An Upland Wildlife Habitat Management Plan will be developed by a certified Working Lands for Wildlife (WLFW) Planner for clients seeking regulatory predictability for a listing of greater sage-grouse under the Endangered Species Act (ESA). These plans are referred to as WLFW Plans. They may stand alone as the sole Conservation Plan, or they may be a portion of a broader Conservation Plan. Only Level 2 WLFW Planners may sign NRCS signature blocks for WLFW Plans. Land must be within the historic range of greater sage-grouse and capable of providing greater sage-grouse habitat to be eligible for development of a WLFW Plan.

**Upland Wildlife Habitat Management** is an umbrella practice used to create and improve sage-grouse breeding, nesting, brood rearing, late brood rearing, and winter habitat, and reduce threats to sage-grouse. To benefit the quality of sage-grouse habitat, Upland Wildlife Habitat Management shall be used to design, implement and install other facilitating practices to ensure sage-grouse habitat is maintained or improved following application. Written practice implementation requirements, schedules and maps shall be prepared for each planning area and each habitat type. Practice Implementation Requirements shall be transmitted to clients using the Upland Wildlife Habitat Management Conservation Practice Documentation worksheet (NV-CPA-645) (minimum), or in a narrative upland wildlife habitat management plan. WLFW Planners are encouraged to incorporate narrative upland wildlife habitat management plans into grazing plans when appropriate. A combination Conservation Practice 645 Upland Wildlife Plan and 528 Prescribed Grazing Plan that meets both Practices Standard and Specifications for the two practices may be used as an appropriate alternative to writing two separate plans.

**Resource Inventory** – The WLFW Planner will visit the client’s property during the growing season to complete the Resource Concern Checklist(s) by Land Use. All required assessment tools indicated on the Checklist(s) will also be completed using information gathered during the field visit.

**Habitat Evaluation** – The WLFW Planner will complete NV-ECS-34 - Species Habitat Evaluation for Greater Sage-grouse in Nevada, the Nevada Sage-grouse Threat Checklist, and Nevada NRCS WLFW ESA Predictability Ranking for all WLFW Plans. A NRCS or partner biologist may assist the Planner in preparing a separate narrative habitat evaluation if the WLFW Planner’s judgment indicates the habitat evaluation does not accurately reflect site-specific conditions.

Habitat Factors with a Benchmark score of  $< 0.5$  are considered limiting. The WLFW Planner will identify the limiting factors in the Benchmark condition. The WLFW Planner will plan facilitating practices or management activities that will raise all Habitat Factors under the client’s control to  $\geq 0.5$  and eliminate or reduce threats over the life of the plan. For Habitat Factors with a Benchmark score of  $\geq 0.75$ , practices or management activities that will preserve, maintain or improve the existing habitat in its present state or toward optimum conditions (score of 1.0) will be planned.

The WLFW Plan will identify the amounts and kinds of habitat types, habitat factors, locations and management actions necessary to achieve a Final Average Habitat Value Rating of  $\geq 0.5$  if sage-grouse habitat is a secondary objective, or  $\geq 0.75$  if sage-grouse habitat is a primary objective. The WLFW Plan will describe the appropriate method, timing and intensity of management and any required facilitating practices needed to produce the desired habitat conditions and sustain them over time.

**Sage-Grouse Habitat Types** - Sage-grouse are a landscape-scale bird found in large interconnected expanses of sagebrush-steppe communities mixed with grasslands, shrubs, upland meadows, and riparian areas. On an annual basis, migratory sage-grouse populations may occupy an area that exceeds 1,000 square miles to meet their seasonal needs. Their existence is tied to functioning sagebrush-steppe habitats and the presence of sagebrush. To assess habitat condition for grouse, an initial inventory of existing ecological sites and plant communities must be made. This baseline inventory is necessary to assist the client with making sound decisions on existing condition and whether or not to transition to a different plant community. As a general rule on a landscape scale, it is desirable, as closely as possible, to mimic the Reference State as defined in the NRCS Ecological Site Descriptions (ESD) for all ecological sites. The planner should evaluate all of the ecological sites in the area of concern to evaluate the potential to meet the seasonal needs (lekking/courtship, nesting, brood-rearing, and winter habitat) of grouse.

**Lekking/Courtship Habitat** - (Approximately late February through May): Leks are usually natural or man-made openings within sagebrush. The sagebrush surrounding the lek site (typically within 0.6 miles) is used for feeding, resting and cover when birds are not on the lek. During this time, adult diets shift from sagebrush to available forbs and insects. The presence of early green-up forbs for improved hen nutrition is beneficial during this pre-laying period for nest initiation, hatching success, and early chick survival.

**Nesting Habitat** - (Approximately April 1<sup>st</sup> through June 15<sup>th</sup>): Sagebrush and perennial understory grass and forb cover are key components of sage-grouse nesting with a majority of hens nesting within 2 to 3 miles of the lek site. Sagebrush canopy cover of 15 to 25 percent with sagebrush that is 12 to 31 inches tall generally provides suitable nesting cover for protection from aerial predators. In addition, residual herbaceous plant cover along with current year live growth of grass and forbs is very important for nesting success and early chick survival. Herbaceous cover helps hide sage-grouse nests from ground-level predators. A minimum height of 7 inches of herbaceous cover is preferred. The average canopy cover of current year's growth of perennial grasses and forbs should be a minimum of 15 percent. It would be ideal for 80 percent of an area thought to be suitable nesting habitat to meet, or exceed (in the case of residual and current year grass and forb growth) the vegetative factors stated above. Areas used for nesting can also provide brood-rearing and winter habitat depending location and conditions.

**Early Brood-Rearing Habitat** - (Approximately mid-April through June): A diverse mosaic of vegetation is needed for early brood-rearing. This habitat type generally occurs within 1 mile of nest sites and is typically interspersed with nesting habitat. Optimum early brood-rearing habitat is similar to that of nesting, but usually has a little lower canopy cover of sagebrush and a greater herbaceous understory of grass and forbs. Patches with 10 to 15 percent canopy cover of sagebrush within the denser sagebrush canopy of nesting habitat contain more forbs and insects and are used for foraging. The denser patches of sagebrush are used for nesting provide protection from predators and weather during early brood-rearing. Almost 90 percent of chick loss occurs prior to their being capable of strong flight around 5 weeks of age. Chick survival is tied to an abundance of insects such as ants, beetles, and grasshoppers, which are associated with more open patches containing a higher amount of herbaceous cover and forbs. Introduced species of sod-forming grasses are undesirable in early brood-rearing habitat. This is because sod is difficult for small chicks to walk through and find the insects they need to eat. Introduced sod-forming grasses also spread aggressively, reducing the diversity of vegetation that in turn attracts a variety of insects. Early brood-rearing habitat need only be found on 40 percent of the area associated with nesting.

**Late Brood-Rearing Habitat** - (Approximately July through August): As the weather becomes warm and dry and herbaceous plants mature, hens usually move their broods to more mesic (wetter) sites where succulent vegetation remains available. The diet of grouse chicks shifts from primarily insects to include more forbs during this period. Examples of late brood-rearing habitats include riparian areas along streams, springs, seeps, wet meadows, and hay/alfalfa fields adjacent to sagebrush habitats. Where available, hens may move their broods to higher elevations to take advantage of more succulent vegetation in mountain sagebrush sites and associated riparian areas. Sagebrush stands closely associated with these foraging areas provide important cover for escape from predators. Productive late brood-rearing habitat in sagebrush communities is similar to that for nesting and early brood-rearing and may be the same as nesting and early brood-rearing where there is enough summer rain to maintain the forbs. Riparian areas and wet meadows located in deep canyons may not be used by grouse. Preferred late brood-rearing habitat in sagebrush includes sagebrush canopy cover of 10 to 25 percent that is 12 to 31 inches tall and a minimum of 15 percent canopy cover of grass and forbs interspersed within the sage. Late brood-rearing habitat need only be found on about 40 percent of the area.

**Winter Habitat** - (Approximately November to February): During the winter, grouse need sagebrush exposed above the snow for food and cover. Winter habitat may be separate and distinct or it may overlap with the other seasonal habitats. Unlike nesting and brood-rearing habitat, the amount of grass and forbs has little significance because the diet of grouse is almost exclusively sagebrush. Sagebrush on flatter land with south to west facing slopes, or windswept ridges commonly provides suitable winter habitat. However, all aspects may be used depending on local conditions. During deep snow periods, steeper drainages and tall sagebrush sites may be the only areas with exposed sagebrush. Exposed sagebrush canopy cover of 10 to 30 percent with heights of 10 to 14 inches above the snow is needed by grouse in the winter.

**Facilitating Practices** – Conservation Practices listed in the *Conference Report for the Natural Resources Conservation Service Sage-grouse Initiative* (Conference Report) may be included in WLFW Plans. These conservation practices may be used to address limiting factors identified during the habitat evaluation or to accomplish other client objectives. All facilitating practices must be implemented and maintained in accordance with Conservation Practice Standards, applicable Specifications, the Conservation Measures in the Conference Report, and the WLFW Partnership Implementation Plan. Requirements summarized below must be used to provide written practice implementation

requirements to the client in the WLFW Plan. Management measures or Herbaceous Weed Control (315) to control invasive species and noxious weeds shall be provided in all WLWF Plans unless the resource inventory documents no potential for invasion by undesirable plants and no practices are planned that will disturb soil or existing vegetation. Prescribed Grazing (528) is a required practice if livestock are present in the planning area.

**Invasive species and noxious weeds** (Practice Code 315) - Evaluate the site's potential for invasion by undesirable plants during practice planning and design. Minimize soil and vegetative disturbances during implementation of conservation practices. Spraying or other control of noxious weeds shall be done on a "spot" basis except when preparing a site invaded by annual grasses for restoration. Invasive species and noxious weed management within 0.6 miles of a lek will occur before March 15 or after May 15 if possible. If not possible, management will occur between the hours of 9:00 am and 6:00 pm. Machinery should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. Minimize or avoid loss of sagebrush while conducting invasive species and noxious weed management.

**Prescribed Grazing and other Management Practices** (Practice Codes 528, 643, 644) - Livestock grazing will be conducted according to a grazing management plan developed using the Prescribed Grazing (528) Specification and addressing critical wildlife p. Management practices will maintain or improve vegetation structure and composition so as to improve sage-grouse habitat.

**Structural Practices** (Practice Codes 382, 410, 441, 500, 516, 533, 561, 574, 614, 642, 734) – Practice installation within 0.6 miles of a lek will occur before March 15 or after May 15 if possible. If not possible, installation will occur between the hours of 9:00 am and 6:00 pm. Machinery should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. Minimize or avoid removal of sagebrush and other existing vegetation during practice installation. For linear practices such as Pipeline (516) where sagebrush must be removed, limit disturbance to a single width of the removal equipment. If access to a linear practice for operation and maintenance is required, limit access to one side of the practice and one vehicle width. Use Planting Practices to reestablish vegetation on disturbed areas if needed to reduce risk of soil erosion or invasion by undesirable plants. Avoid installing new fences and remove, relocate, or mark existing fences in areas the Fence Collision Risk Tool identifies as High or Moderate risk. At a minimum, fence markers must be installed on all existing fences within 1/4 mile from an occupied or historic lek, or in areas where collisions are known to occur. Whenever possible when installing fence, use T-posts or cones on posts to reduce perching opportunities for avian predators. Avoid leaving trash or brush piles that could provide cover for predator species. Power lines should be buried whenever possible or use solar systems to supply required power needs. The Watering Facility (614) practice should only be utilized to install guzzlers in coordination with and with the approval of either the NRCS State Biologist or State Range Management Specialist. All new and existing Watering Facilities shall have escape ramps installed. Range improvement practices such as fencing and livestock water development should result in improved grazing management over the Benchmark condition.

**Planting Practices** (Practice Codes 327, 342, 390, 512, 550, 654) - Vegetation seeded or planted as part of the WLFW Plan will use native species whenever possible with preference to sagebrush and other native shrubs, native bunchgrasses, and forbs preferred by sage-grouse as well as those species that reflect the potential of the specific ecological site to optimize sage-grouse habitat. Refer to the Species Habitat Evaluation for Greater Sage-grouse in Nevada (NV-ECS-34) for a list of preferred forbs. Tree species should not be planted. When non-native species are necessary to stabilize disturbed areas, avoid the use of introduced sod-forming grasses. All seed mixes should be State-certified weed free and specified on the. Timing of site preparation, planting and post-establishment vegetation management within 0.6 miles of a lek will occur before March 15 or after May 15 if possible. If not possible, planting and management activities will occur between the hours of 9:00 am and 6:00 pm. Machinery associated with the practice should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. Newly seeded/planted sites should be rested from livestock grazing for an appropriate period as determined by the WLFW Planner to ensure stand establishment.

**Vegetation Manipulation Practices** - (Practice Codes 314, 384, 394, 472) – Manipulation of existing vegetation within 0.6 miles of a lek will occur before March 15 or after May 15 if possible. If not possible, disturbance and manipulation activities will occur between the hours of 9:00 am and 6:00 pm. Delay manipulation for as much of the general nesting season (April 1 – August 1) as possible to avoid or minimize take of migratory birds. Machinery used to install the practice should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. Conifer removal sites should be rested from livestock grazing for an appropriate period as specified in the Brush Management (314) Practice Specification to ensure recovery of understory vegetation. Minimize or avoid sagebrush removal during practice installation. Use Planting Practices to reestablish vegetation on disturbed areas if needed to reduce soil erosion or

potential for invasion by undesirable plants. Avoid leaving trash or brush piles that could provide cover for predator species. Woody slash shall be treated if significant buildup of fuels occurs (typically in phase II and III juniper treatments). Slash piles shall be burned when wildfire risk is low (usually when soils are frozen or saturated). Follow state laws, when applicable, for treating slash to minimize wildfire risk.

**Crop and Hayland Practices** - (Practice Codes 328, 340, 511) - Manipulation of existing vegetation within 0.6 miles of a lek will occur before March 15 or after May 15 if possible. If not possible, disturbance and manipulation activities will occur between the hours of 9:00 am and 6:00 pm. Haying and other equipment use during the growing season will employ techniques to avoid or minimize mortality, such as flush bars, slower speeds and harvesting patterns that herd wildlife out of the crop or hayland (e.g., from center to outside of field).

**Limited Use Practices** (Practice Codes 314 [non-conifer], 338, 378, 380, 388, 430, 431, 441, 442, 443, 449, 548, 560) - The WLFW Planner shall coordinate with the NRCS State Biologist, State Range Management Specialist, or Partner Biologist to develop and implement site-specific guidelines to determine practice applicability, location, extent, configuration, and timing to reduce risk to sage-grouse and their habitats.

**Practice installation certification** – After the client implements the WLFW Plan, the WLFW Planner will visit the site and certify that practices have been implemented and the Conservation Measures have been followed. Once the practices are certified, the WLFW Planner will update the conservation plan with the applied practice information.

The WLFW Planner then provides the client with the predictability information packet that includes:

1. The form letter from USFWS that explains the predictability provided.
2. WLFW “Frequently Asked Questions” fact sheet.
3. After review by the State office a letter on NRCS letterhead with the WLFW Plan name, contract number (if applicable), farm/tract/field number(s), priority species the practices support, signed by the WLFW Planner providing concurrence that the plan is written to meet the conservation measures in the Conference Report. (The letter also outlines the voluntary tracking options, annual self-verification, and the five-year on-site review process.)
4. The WLFW Plan with supporting practice specifications/job sheets showing practices applied.

**Operation and Maintenance and Evaluation** - The WLFW Plan will state that as required O&M, the client must annually inspect and repair structural or vegetative components. Starting one year after practice installation certification, the client will also receive an annual request from NRCS to voluntarily update information on their conservation activities. The update request will include:

- 1) Are you maintaining or continuing to follow your conservation plan?
- 2) Would you like to request a technical assistance visit from a WLFW Planner?

The NRCS-CPA-13 form may be used to record the annual evaluation. However, it is not to be considered a contract status review because of the voluntary nature of the conservation and reporting. Predictability is based on the continued maintenance of the conservation practices and associated conservation measures. If changes in management are needed to preserve predictability (based on the best professional judgment of the WLFW Planner), those changes must be clearly presented to the client. Discrepancies between what the client and the WLFW Planner believe are warranted to maintain predictability will be resolved by US Fish & Wildlife Service (USFWS) staff. If USFWS is not permitted on site to discuss client actions needed to maintain predictability, NRCS will no longer include the habitat data in annual reports to USFWS and the client can no longer assume predictability is provided.

WLFW Planners will meet with participants as requested/needed and at least once every five years (verbal landowner consent is required) to assess the site using the habitat evaluation tools completed during the Collection and Analysis Phase of planning and observational data. During update visits, the client has the option to add recommended practices to the WLFW Plan. Any additional practices that were covered in the Conference Report are eligible for WLFW predictability if the associated Conservation Measures are followed.